xlegant.com Product Summary This is a brief visual summary of the screens and features of the products offered on xlegant.com, as a companion to the book, <u>Create Elegant Spreadsheets</u> by Doug Bates.

Most formulas are explained in the book. All VBA code is available as a free download.

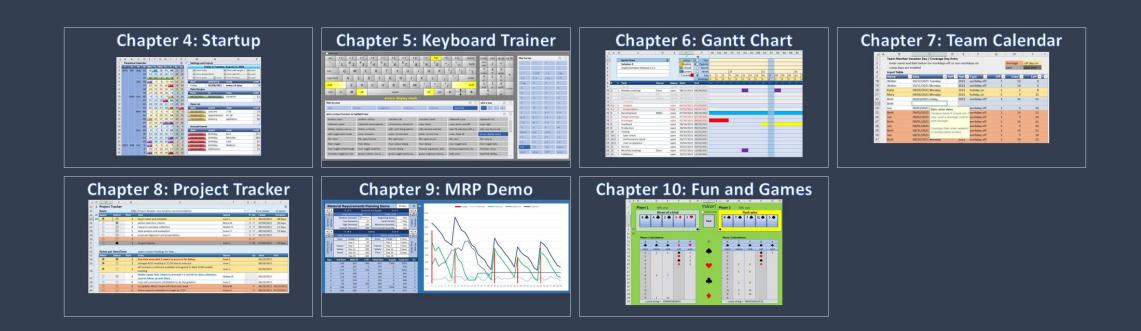
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Create Elegant Spreadsheets

Doug Bates

Design Principles with Excel® Techniques and Applications

Overview



Chapter 4: Startup

	Α	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	P
1	Per	petual	Caler	ndar							1	1	Settings and I	Inputs		
2	Y	Q	М	W	Мо	Tu	We	Th	Fr	Sa	Su		Т	oday is Tuesda	y, August 17, 2021	
3	2021	JAS	Aug	33	16	17	18	19	20	21	22		show today	y	show date ranges	🗸 count
4				34	23	24	25	26	27	28	29		🖌 show annu	al events	✓ show date list	Count
5				35	30	31	1	2	3	4	5		show cycle	s 🔽 count	show holidays	🗸 count
6			Sep	36	6	7	8	9	10	11	12		start	reference	cycle	until
7				37	13	14	15	16	17	18	19		today	01/08/2021	every 14 days	3
8				38	20	21	22	23	24	25	26		Date Ranges		76	
9				39	27	28	29	30	1	2	3		from	to	note	until
10		OND	Oct	40	4	5	6	7	8	9	10		08/30/2021	09/03/2021	vacation	13
11				41	11	12	13	14	15	16	17					
12				42	18	19	20	21	22	23	24		Date List			51.635
13				43	25	26	27	28	29	30	31		date	event	note	until
14			Nov	44	1	2	3	4	5	6	7		10/29/2021	concert	7:30	73
15				45	8	9	10	11	12	13	14		10/08/2021	appointment	Dr. M	52
16				46	15	16	17	18	19	20	21		11/15/2021	delivery	appliance	90
17				47	22	23	24	25	26	27	28					
18				48	29	30	1	2	3	4	5		Annual Event	s		51.52
19			Dec	49	6	7	8	9	10	11	12		date	event	note	until
20				50	13	14	15	16	17	18	19		01/21/2001	birthday	Bert	157
21				51	20	21	22	23	24	25	26		08/08/2020	birthday	Michelle	356
22				52	27	28	29	30	31	1	2		09/17/2020	birthday	Julia	31
23	2022	JFM	Jan	1	3	4	5	6	7	8	9		10/14/1944	birthday	Wallace	58
24				2	10	11	12	13	14	15	16		10/31/2021	Halloween		75
25				3	17	18	19	20	21	22	23					

Startup

ABOUT STARTUP

A personal Startup file is a place to keep all your favorite tools hidden but accessible. This one has several reference sheets, samples and general macros useful in project development.

Calendar: perpetual calendar with different highlights for holidays, special dates, date ranges and annual events. Includes holiday calculation and monthly workday report. **Controls**: compares Form and ActiveX controls with samples and tips.

Symbols: lists ASCII characters in Symbol fonts, sample Unicode symbols, and suggested AutoCorrect symbols. **Themes**: lists the 34 Themes with Font and Color for reference.

Colors: presents colors several different ways with sample macros to read and set colors. Includes VBA navigation between column groups like sheets-within-a-sheet.

Functions: tabulates results of selected single and dual-operand functions.

Combinations: lists members of all four combination variants by selecting up to 4 of up to 9 digits **Outline**: builds and formats an outline, with slicer selection.

Macros: ListNames (see result on Names sheet, can also upload Name comments), ListFormatConditions (only works with formula conditions; see result on FormatConditions sheet), ClearPageBreaks (assigned to Shift+Ctrl+P), RecordColors (records decimal and RGB values for a column of colored cells)

Excel features: Advanced formulas; Name Manager named ranges and formulas; Data Validation rules and messages; Conditional Formatting; Tables linked for input, process and output; Column Groups; Controls; Symbols; Themes; Colors; Functions; Slicers **VBA**: Colors Sheet Module, navigation and formatting; Functions Sheet Module, formatting; General Module, general use macros.

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Startup

USAGE NOTES

This file is provided as a normal Excel Macro-Enabled Workbook, Startup.xlsm. The intent of a startup file is twofold. First, it is to reside in the folder below, from which files are opened automatically when Excel starts:

C:\Users\ (username) \AppData\Roaming\Microsoft\Excel\XLSTART (or similar) Second, the startup file is meant to be hidden normally (Alt-W,H), and only unhidden as needed (Alt-W,U).

You can hide this file and save it in your XLSTART as above, or you can have Excel create a startup for you, and build as you go. Excel provides a default startup file called PERSONAL.xlsb, which will be created in the XLSTART folder for you, with view hidden, in the following condition:

1. you record a macro

- 2. you select "Personal Macro Workbook" in the "Store macro in:" box.
- 3. the next time you shut down Excel, you click "Save" when prompted.

The main purpose is to make it possible to run public macros in other files without the need to copy or import the module. For that purpose you never need to unhide the file. It is always visible in VBA (Alt+F11) and can be edited and saved there.

The second purpose is that since it is always open, it is a convenient place to store notes, cheat sheets, reference information or anything you want to keep accessible. For this purpose, add as many sheets as you want, and either unhide it when needed, or leave it unhidden if it doesn't bother you.

Note: there's nothing special about PERSONAL.xlsb, it's just a shortcut to creating the startup file. The .xlsb format bypasses macro security but behaves like a normal spreadsheet. Thus, you can start with that and add to it as you go, or you can save this one as described above.

Calendar Input

		Α	В	С	D	Е	F	G	Н	1	J	К	L	М	N	0	Р
	1	Per	petua	l Caler	ndar			2				1	A.	Settings and	nputs		
	2	Y	Q	М	W	Мо	Tu	We	Th	Fr	Sa	Su		Т	oday is Tuesda	y, August 17, 2021	
	3	2021	JAS	Aug	33	16	17	18	19	20	21	22		show toda	y	show date ranges	ount
	4				34	23	24	25	26	27	28	29		🖌 show annu	al events	show date list	ount
	5				35	30	31	1	2	3	4	5		show cycle	s 🔽 count	show holidays	ount
	6			Ser	36	6	7	8	9	10	11	12		start	reference	cycle	until
Each col	or				37	13	14	15	16	17	18	19		today	01/08/2021	every 14 days	3
Edunitur	UI				38	20	21	22	23	24	25	26		Date Ranges		A8	
represent	is a)			39	27	28	29	30	1	2	3		from	to	note	until
different c			OND	Oct	40	4	5	6	7	8	9	10		08/30/2021	09/03/2021	vacation	13
					41	11	12	13	14	15	16	17					
type linke	d to	0			42	18	19	20	21	22	23	24		Date List			
input					43	25	26	27	28	29	30	31		date	event	note	until
input				Nov	44	1	2	3	4	5	6	7		10/29/2021	concert	7:30	73
	15				45	8	9	10	11	12	13	14		10/08/2021	appointment	Dr. M	52
	16				46	15	16	17	18	19	20	21		11/15/2021	delivery	appliance	90
	17				47	22	23	24	25	26	27	28					
	18				48	29	30	1	2	3	4	5		Annual Event	S		
	19			Dec	49	6	7	8	9	10	11	12		date	event	note	until
	20				50	13	14	15	16	17	18	19		01/21/2001	birthday	Bert	157
	21				51	20	21	22	23	24	25	26		08/08/2020	birthday	Michelle	356
	22				52	27	28	29	30	31	1	2		09/17/2020	birthday	Julia	31
	23	2022	JFM	Jan	1	3	4	5	6	7	8	9		10/14/1944	birthday	Wallace	58
	24				2	10	11	12	13	14	15	16		10/31/2021	Halloween		75
	25				3	17	18	19	20	21	22	23					

Display and bucket counts are controlled by checkboxes

Stacked input tables allow easy insert and delete of records

Calendar Output

Workday count by Week or Month controlled by "count" checkboxes

Q	R	S	Т	U	V	W	Х	γ	Z	AA	AB	
		М	Bucket C	ounts		A	Calcu	lated	Holidays			
	year	num	bucket	work	cycles		year	rule	name	date	err	
	2021	8	Auø	20	2		2021	1	New Year's Day	01/01/2021		
		-	Sep	18	2			2	ML King Jr Day	01/18/2021		
		10	Oct	19	3			3	Presidents Day	02/15/2021		
		11	Nov	19	2			4	Memorial Day	05/31/2021		
		12	Dec	20	2			5	Independence Day	07/05/2021		
	2022	1	Jan	19	2			6	Labor Day	09/06/2021		
		2	Feb	19	2			7	Thanksgiving	11/25/2021		
		3	Mar	23	2			8	Thanksgiving Friday	11/26/2021		
		4	Apr	21	3			9	Christmas Eve	12/24/2021		
		5	May	21	2			10	Christmas	12/27/2021		
		6	Jun	22	2			11	New Year's Eve	12/31/2021		-
		7	Jul	19	2		2022	1	New Year's Day	01/03/2022		
		8	Aug	23	2			2	ML King Jr Day	01/17/2022		Calculated
		9	Sep	21	3			3	Presidents Day	02/21/2022		holidays
		10	Oct	21	2			4	Memorial Day	05/30/2022		nonaays
		11	Nov	20	2			5	Independence Day	07/04/2022		
		12	Dec	19	2			6	Labor Day	09/05/2022		
	2023	1	Jan	20	2			7	Thanksgiving	11/24/2022		
		2	Feb	19	2			8	Thanksgiving Friday	11/25/2022		
		3	Mar	23	3			9	Christmas Eve	12/23/2022		
		4	Apr	20	2			10	Christmas	12/26/2022		
		5	May	22	2			11	New Year's Eve	12/30/2022		
		6	Jun	22	2		2023	1	New Year's Day	01/02/2023		
		7	Jul	20	2			2	ML King Jr Day	01/16/2023		
		8	Aug	23	2			3	Presidents Day	02/20/2023		

Calendar Configuration

Date format and Work week settings

AC	AD	AE	AF	AG	AH	AI .
1 🛠	Config	uration	_	Work week	lookup ta	able
2	Date se	ettings		Work	Туре	String
	Date fo	rmat settings		Mon-Fri	11	0000011
4	mdy	Date bucket order		Tue-Sat	12	1000001
5	1	Date separator		Wed-Sun	13	1100000
6	Work v	veek settings		Thu-Mon	14	0110000
7	Mon-Fri	Work week		Fri-Tue	15	0011000
8	0001111	Custom week		Sat-Wed	16	0001100
9				Sun-Thu	17	0000110
10				custom	11	0001111
1	Holiday	/ Rules				
12	rule	holiday	month	form	par1	par2
13	1	New Year's Day	1	1	1	3
14	2	ML King Jr Day	1	2	3	1
15	3	Presidents Day	2	10.11	3	1
6	4	Memorial Day	5	2	5	1
7	5	Independence Day	7	1	4	1
8	6	Labor Day	9	2	1	1
9	7	Thanksgiving	11	2	4	4
20	8	Thanksgiving Friday	11	2	4	4.1
21	9	Christmas Eve	12	1	24	2
22	10	Christmas	12	1	25	3
23	11	New Year's Eve	12	1	31	2.
.4						
25	Holiday	/ Input				
26	rule	holiday	date	day	year	err
27	none	Alternate	07/05/2022	Tue	2022	
28					_	
29						1
30						

Rules for holiday calculation

Alternate holiday input

Calendar Processing

AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
Days	Table			show	show	show	show		count	count	count	
Y	М	W	Day	isAnnual	isRange	isList	isHoliday	Highlights	CtRng	CtList	CtHols	OffDays
2021	Sep	35	1		1			1	1			09/01/2021
			2		1			1	1			09/02/2021
			3		1			1	1			09/03/2021
			4									
			5									
		36	6				1	1			1	09/06/2021
			7									
			8									
			9									
			10									
			11									
			12									
		37	13									
			14									
			15									
			16									
			17	1		1		2		1		09/17/2021
			18									
			19									
		38	20									

Hidden processing table

Controls Comparison

	А	В	С	D	E	F	G	Н
1		Summ	ary of Form	and ActiveX Controls	6			
2		type	name	Form example	value	ActiveX example	value	comment
3		Tout	Combo Box	Asia 💌	3	Australia 💌	Australia	Form returns item index; ActiveX returns item
4		Text	List Box	Arctic Atlantic V	3	Arctic Atlantic	Arctic	multi-select requires code to retrieve values
5		Number	Spin Button	▲ (1-10) <u>↓</u>	3	▲ (1-10) ▼ (1-10)	7	ActiveX allows horizontal orientation
6		Number	Scroll Bar	(1-100)	71	(1-100)	53	ActiveX blinks slider when active, enables arrow and page keys
7			Check Box	Check Box	TRUE	Check Box	#N/A	ActiveX adds NA option (with TripleState property)
8		Logia	Ontion Crown	Opton 1	2	Option 1	TRUE	Form returns item index;
9		Logic	Option Group	Option 2	2	C Option 2	FALSE	ActiveX returns item state
10			Option Group notes	Set Cell link per group.		Set GroupName per group LinkedCell per option.	o and	Optionally, use group box for visual clarity.

Form and ActiveX controls for reference

Controls Properties

I.	J	К	L		М	
1	Developer Tab	Form Properties		ActiveX	Properties	
	Controls Section	Design: right-click, Fo	rmat Control	Design Mo	ode: Alt+LDM 🥄	Control
	Review View Developer H	Properties:		Properties	s: Alt+LL	property
	Properties	Format Control	? ×	Properties	8	
	View Code	Size Protection Properties Ait Text	Control	ComboBax1 ComboBax		navigation
	insert Design	pout range: inputDrop1	1	Alphabetic Categorize	1	0
	✓ Mode	Gell link: SESS	1	SpecialEffect	2 - fmSpecialEffectSunken	
		Drop down lines: 8		Style	0 - fmStyleDropDownCombs	
	Form Controls	2-D shading		Value Behavior	Africa	
1	- Form Controls	E. C.		AutoSize	False	
				AutoTeb	False	
		1		AutoWordSelect	True	
	Aa 🗑 abl 📰 📰			HideSelection	True	
				MatchEntry MatchRegured	1 - fmMatchEntryComplete False	
				MaxLength	0	
	ActiveX Controls			SelectionMargin	True	
		1		TextAlign	1 - fmTextAlignLeft	
				🖂 Data		
				BoundColumn ColumnCount	1	
	€ • A 🖂 🗄 ïł			ColumnHeads	False	
			OK Cancel	ColumnWidths	1004	
		Mar and a second		ListRows	1	
				ListStyle	0 - fmLstStylePlain	
				ListWidth	0 pt	
	List Box as Option Group:	List Box as Multi-se	lect Group:	Text TextColumn	Africa	
	a financia a su provincia de sectores		_	TopIndex	-1	
	Ocean	Ocean		Font		
		Ocean		Font	Calibri	
	O Arctic	Arctic	1	🖂 Misc		
	Alctic			(Name)	ComboBox1	
	Atlantic	□ Atlantic		AutoLoad DragBehavior	False 0 - fmDragBehaviorDisabled	
				Enabled	0 - Impragaenaviorpisabled True	
	O Indian	Indian		EnterFieldBehavior	0 - fmEnterFieldBehaviorSel	
				Height	18	
	O Pacific	Pacific		IMEMode	0 - fmJMEModeNoControl	
				Left LinkedCell	295.2 GS	
	O Southern	Southern		ListFilRange	InputDrop1	
				Locked	True	
		1		MouseIcon	(None)	
	Selection: Atlantic	Selection requires c	oding	MousePointer	0 - fmMousePointerDefault	
	Selection. Additite	sciection requires c	oung	Placement	2	
				PrintObject Shadow	True Faise	
				Top	81	
				Visible	True	
				width	112.2	
					*	
_						

Symbol Fonts

			_						10
-	A	В	С	D	E	F	G	H	
1		ASCII ch	naracters i	n stand	ard font an	d five symbo	ol fonts		
2		Enter the	e character	from key	vboard (Bo <mark>d</mark> y	column, 32-1	26), or press /	Alt w <mark>hi</mark> le typin	g the 4-digit
3		code on	the numbe	r pad (12	7-255), or us	e =CHAR(Code	e). Set the fon	t of the cell o	r <mark>char</mark> acter.
4		To displa	ay certain sy	ymbols w	ithout chang	ing font, try U	nicode.		
5		10							
6		Code	Entry	Body	Symbol	Webdings	Wingdings	Wingdings 2	Wingdings 3
94		119	by key	w	ω	I	٠	0	\triangleright
95		120	by key	х	ξ	\odot	X	0	N
96		121	by key	У	Ψ	θ		6	4
97		122	by key	z	ζ	8	ж	0	
98		123	by key	{	{	*	9	0	٦
99		124	by key	I	1	Ĩ	0	8	4
100		125	by key	}	}		"	Ø	•
101		126	by key	~	~	×	"	O	
102		127	Alt+0127	0		۵	0	D	۵
103		128	Alt+0128	€		i	0	\odot	-
104		129	Alt+0129			ŧ	1	0	A
105		130	Alt+0130	,		ŧ	0	D	¥
106		131	Alt+0131	f		ī	3	C	4
107		132	Alt+0132	"		ð	4	¢	•
108		122	Al++0122		П		6	+	4

Symbol Methods

Ρ

With

4

 \uparrow

 \rightarrow \downarrow \leftrightarrow \$ 00 ~ ŧ 5 2 ± ÷ × 0 ٠

N 0 K M Sample Unicode symbols AutoCorrect Copy the character or use Suggested shortcuts: set =UNICHAR(Unicode). In Word, in Alt-F,T,P, Alt+A. Ctrl+Z enter the hex code, then Alt+X. to revert as typed.

Symbol	Unicode	Hex	Replace
+	8592	2190	<<
\uparrow	8593	2191	~~
\rightarrow	8594	2192	>>
\downarrow	8595	2193	vv
\leftrightarrow	8596	2194	<->
\$	8597	2195	۸v
R	8598	2196	~
л	8599	2197	~=
И	8600	2198	\=
Ľ	8601	2199	\<=
1	8616	21A8	\>=
∞	8734	221E	+-
*	8776	2248	V
¥	8800	2260	١x
=	8801	2261	\#
5	8804	2264	\0
≥	8805	2265	*

Unicode

examples

Autocorrect examples

Symbols List

Symbol

<u>Symbols</u>

Font: Calibri

Special Characters

 \sim

S<u>u</u>bset: Greek Exte 🗸

?

×

Font: Ca	Indi						~																																							Su	oset:	Greek Exte
"Ω "	Ω	Ω	Ω	ά	ά	ś	έ	ή	ή	ì	ί	ò	ó	Ù	ú	ω	ω	ą	ą	ą	ą	ą	ą	ą	ą	Ą	Ą	Ą	Ą	Ą	Ą	Ą	Ą	ń	'n	'n	'n	ň	ň	ñ	ĥ	Ή	Ή	"Ħ	۲ ۳	"Ӊ	″Ӊ	ĨӉ ^
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			8) 8		0 00	J.	<u></u>	_	_	-	1	_	1	,	,	1	"	"	,,	"	+	‡	•			1			6	3		‰	1	"	<i></i>		<	>	!!	P	-	1	1		0	i	4	5
6	7	8	9	+	-	=	()	n	0	1	2	3	4	5	6	7	8	9	+	_	=	()	a	e	0	x	ə	Æ	¢	G	£	£	m	₩	Pts	Rs	₩	D	đ	€	ĸ	¥	Dp	8	₽	¢
A	£	¢	T	₹	老	ц,	Ψ	₽	¢	₿	\cap	%	6 0	2	P	17	тм	Ω	e	Н	₽∕s	н	1/3	2/3	1/5	2/5	3/5	4/5	1/6	5/6	1/8	3/8	5/8	7/8	1/	С	С	4	\uparrow	\rightarrow	\checkmark	\leftrightarrow	1	R	7	Ń		1
10 mm		Π	Σ	1000	1		٧	~	-	\cap	1	~	≠	Ξ	≤	2		-	ſ	T	1	(2)	3	-	0	6	$\overline{7}$		9	0	(11)	0			(15)	16		(18)	(19)	12		11		B	14	15		17
18				-	I	Г	٦	L	L		•	0	0	0	0	•	0	1	2	3	4	5	1	1		9		-	ţ	ł	Ð	R	à	t	Щ	h	Ķ	k k	ζ	<u> </u>	M	V	D	2	F	F	-	e.
2	0	Е	-	۷	ş	ζ	Ľ	y	ŋ	δ	η	m	b	m	ſ	þ	m	-	13	u	u	ч	h	1	g	щ	ф	+	n	ч	y	þ		-	m	5		-	n	Sec. 1	2 C	Ч	5 8	сħ	2	z	"	В
	d D I G K X J Z F J A V H P I A V I A V I																																															
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	and the	φ	Q,	q	Q2	Q	3	2	2	2	V	y/	W	w	3	3	Þ	Þ	Þ	þ	V	v	3	3	f	f	9	9	9	d,		m,	-	r	R ₄	ť	8	σ	9	F	r	δ	2	2	1		+	p
r	- 35	T T	م	4	4	Ņ	ŋ	€	£	G	h,	-	<u>р</u>	f,	f	B	a	۹ Ð	Ð	₽ ધ	า ย	6	g	K	k	۲.	P	R	F	8	≁ S	Ĥ	3	g	4	K	T	_	Ħ	œ	ч ш	all annual	3 8		ī		- F2	<u>н</u> Ж
e		e	f	g	ر ا	*	•	m	-	ŋ	D	ø	ø	0e		æ		Ø	20	R	r	r	ь г	r	7	ъ	ſ	u	ע	ü	m	u	χ	χ	X	x	0	x	х	У	×					Syn		
8 8			, ffl		ւ Մե	2	П.			u	v U	ע ע	א	Т	קס ה		בי ל		יי ר	ת	·	י ש	<u>ن</u>	1	U	אַ	נ אָ	א	۵ آ	يت ډ	 न	۲ آ	۸ ۱	⊼ ۲	۸ ن		<u>^</u>	»ر د	<u>^</u>	י מ	3							
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<u>R</u> ecently	used	symb	ols:																																								U	nic	DO	le s	set	
	•	٠	*	Δ	٠		3	2	(1)	4	•		•	0					Σ	\leftrightarrow	7	6	5	0	±	←	\rightarrow	þ	\checkmark	\uparrow		6)																
Unicode Greek Ca			Omeg	ga Wit	h Psili	And O:	xia																																		<u>C</u> hara	acter c	ode: 1	F6C	fı	iro <u>m</u> : L	Jnicod	e (hex)
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																																													Inser	/t		Cancel

Theme Fonts

Current and listed theme fonts

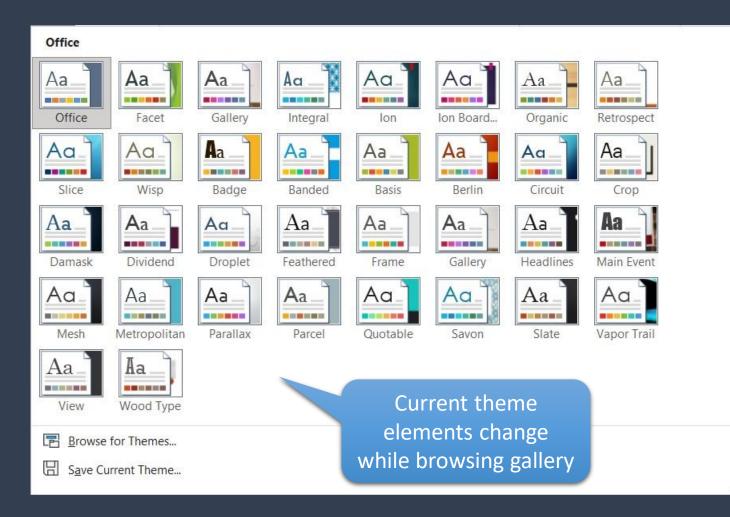
	В	С	D	E
ĺ	<<<	head	lings font >>>	<<<
	cu	rrent theme	<<< listed	theme >>>
I	1	Theme	Headings fixed	Body fixed
	1	Office	Calibri Light	Calibri
	2	Facet	Trebuchet MS	Trebuchet MS
	3	Gallery	Gill Sans MT	Gill Sans MT
	4	Integral	Tw Cen MT Condensed	Tw Cen MT
	5	lon	Century Gothic	Century Gothic
	6	Ion Boardroom	Century Gothic	Century Gothic
	7	Organic	Garamond	Garamond
	8	Retrospect	Calibri Light	Calibri
	9	Slice	Century Gothic	Century Gothic
	10	Wisp	Century Gothic	Century Gothic
	11	Badge	Impact	Gill Sans MT
	12	Banded	Corbel	Corbel
	13	Basis	Corbel	Corbel
	14	Berlin	Trebuchet MS	Trebuchet MS
	15	Circuit	Tw Cen MT	Tw Cen MT

Themes Colors

F	G	Н	1	J	К	L	М	N	0	Р	Q	R	S	Т	U
		body fo	nt			>>>			<<<		fixed Ca	libri fon	t	>>>	
	<<<		currer	it theme	÷	>>>			<<<		listed	theme		>>>	
Bkgd 2	Text 2 d	Acc 1 d	Acc 2 d	Acc 3 d	Acc 4 d	Acc 5 d	Acc 6 d	Bkgd 2	Text 2 f	Acc 1 fx	Acc 2 fx	Acc 3 fx	Acc 4 fx	Acc 5 fx	Acc 6 fx
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	7E+06	1E+07	3E+06	1E+07	49407	1E+07	5E+06
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	4E+06	3E+06	2E+06	2E+06	2E+06	2E+06	6E+06
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	1E+07	5E+06	4E+06	9E+06	2E+07	1E+07	1E+07	1E+07
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	8E+06	1E+07	1E+07	1E+07	1E+07	5E+06	1E+07
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	6E+06	1E+06	1E+06	3E+06	9E+06	1E+07	1E+07
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	6E+06	7E+06	7E+06	4E+06	4E+06	2E+07	1E+07
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	1E+07	2E+06	3E+06	7E+06	1E+07	3E+06	3E+06	4E+06
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	5E+06	1E+06	3E+06	4E+06	6E+06	8E+06	9E+06
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	1E+07	6E+06	9E+06	8E+06	2E+06	4E+06	2E+06
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	1E+07	6E+06	1E+06	2E+06	5E+06	5E+06	5E+06	1E+07
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	6698	2E+06	6E+06	1E+07	8E+06	7E+06	8E+06
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	1E+07	49407	3E+06	8E+06	1E+07	9E+06	2E+06
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	1E+07	5E+06	3E+06	3E+06	40702	1E+07	5E+06	9E+06
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	931485	1E+06	7E+06	8E+06	1E+07	2E+07	6E+06
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	7E+06	5E+06	4E+06	4E+06	1E+07	1E+07	1E+07
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	1E+07	924441	9E+06	7E+06	6E+06	9E+06	1E+07	1E+07
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	8E+06	5E+06	1E+07	1E+07	1E+07	7E+06	4E+06
Bkgd 2	Text 2	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	2E+07	4E+06	3E+06	7E+06	5E+06	1E+07	1E+07	1E+07
2.255								45.07			45.07				

Current and listed theme colors

Themes Gallery



Colors Overview

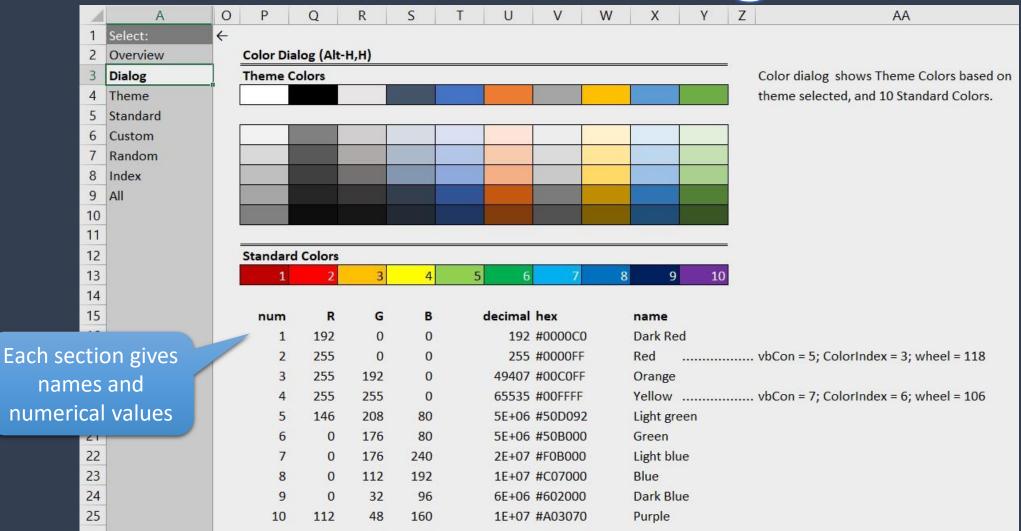
	21	A	В	С	D	E	F	G	Н	1	J	К	L	M
	1	Select:	1											
	2	Overview		Overview of	Colors									
	3	Dialog	_	Colors are de	fined severa	l ways.	In eac	h sect	ion the colors	are indexed for r	eferenc	e only, n	ot relate	d
	4	Theme		to ColorInde:	x. Then the f	ollowir	ng com	pariso	ns are made to	show intersecti	ons.			
	5	Standard		tab	colors	descr	iption			path				
	6	Custom		Overview	8	vb co	lor cor	stants		VBA				
	7	Random		Dialog	10	stand	lard co	lors		Alt-H,H				
	8	Index		Theme	60	them	e color	ſS		Alt-H,H				
	9	All		Standard	143	hexag	gonal "	wheel	н	Alt-H,H,M, Stan	dard			
	10			Custom	16777215	RGB s	selectio	on		Alt-H,H,M, Cust	om			
	11			Random		demo	o color	genera	ator	VBA				
_				Index	56	Color	Index	proper	ty	VBA				
umn g	gr	oups												
s she	Δt	·c_		The 8 vb cold	or constants a	are all i	membe	ers of t	he standard h	exagon picker an	d comp	rise the fi	irst 8	
				members of	the ColorInd	ex list (in diffe	erent o	order).					
thin-	sh	eet		name		R	G	В	hexadecimal	decimal	std10	theme	wheel	index
	17			vbBlack		0	0	0	#000000	0		2	144	1
	18			vbBlue		0	0	<mark>25</mark> 5	#0000FF	16711680			13	5
	19			vbGreen		0	255	0	#00FF00	65280			48	4
	20			vbCyan		0	255	255	#00FFFF	16776960			28	8
	21			vbRed		255	0	0	#FF0000	255	2		118	3
	22			vbMagenta		255	0	255	#FF00FF	16711935			68	7
	23			vbYellow		255	255	0	#FFFF00	65535	4		106	6
	24			vbWhite		255	255	255	#FFFFFF	16777215		1	64	2
	25													

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Colors Dialog



Colors Theme

1	А	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL A	M	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE
1	Select:	÷																												
2	Overview		Offic	e Them	e Color	s (TC) and Shades (TS) an	d Contra	sting Font	t Color	(Alt-P	P,T,H to	o set C	Office T	heme, then	Alt-H,H)			-	Theme	Colors	6								
3	Dialog		nun	n TC TC	CName	Office Theme tooltip	TS T	SName	font	R	G	B he	ĸ	decimal	vbCon	std1() wheel	index	¢	Color	1	2	3	4	5	6	7	8	9	10
4	Theme			1 1 Da	ark1	White, Background 1	0%		2	255	255 2	55 #FF	FFFF	16777215	8		64	. 2	2	Тор	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5	Standard			2 2 Li	ght1	Black, Text 1	0%		1	0	0	0 #00	00000	0	1		144	1		Shade1	-5%	50%	-10%	80%	80%	80%	80%	80%	80%	80%
6	Custom			3 3 Da	ark2	Light Gray, Background 2	0%		2	231	230 23	30 #E7	7E6E6	15132391	a					Shade2	-15%	35%	-25%	60%	60%	60%	60%	60%	60%	60%
7	Random			4 4 Li	ght2	Blue-Gray, Text 2	0%		1	68	84 10	.06 #44	4546A	6968388						Shade3	-25%	25%	-50%	40%	40%	40%	40%	40%	40%	40%
8	Index			5 5 Ao	ccent1	Blue, Accent1	0%		1	68	114 19	.96 #44	472C4	12874308						Shade4	-35%	15%	-75%	-25%	-25%	-25%	-25%	-25%	-25%	-25%
9	All			6 6 Ac	ccent2	Orange, Accent2	0%			237	125 🧳	49 #EI	D7D31	3243501						Shade5	-50%	5%	-90%	-50%	-50%	-50%	-50%	-50%	-50%	-50%
10				7 7 Ac	ccent3	Gray, Accent3	0%		1	165	165 1	.65 #A5	5A5A5	10855845	1															
11	Set Theme Colors			8 8 Ad	cent4	Gold, Accent4	0%		1	255	192	0 #FF	C000	49407			3			Push bu	utton t	o activ	/ate t	his co	de:					
12				99Ac	ccent5	Blue, Accent5	0%		1	91	155 2	13 #58	B9BD5	13998939																
13						reen, Accent6	0%		1	112	173	71 #70	DAD47	4697456				j		Public S	ub Set	ColorT	heme	e()						
14		Se	ectio	ons v	with	hite, Backgroun <mark>d</mark> 1	-5% D	arker 5%	2	242	242 24	42 #F2	2F2F2	15921906						Dim tbl	As List	Object	, dbr	As Rar	ige, n /	As Inte	ger			
15		C	odo	hav		ick, Text 1	50% Li	ghter 50%	61	128	128 1	.28 #80	08080	8421504	8		135	16	5	Dim tc /	As Lon	g, ts As	Long	, fc As	Long					
16			Jue	Παν	e a	ht Gray, Background 2	-10% D	arker 10%	62	208	206 20	06 #D	OCECE	13553360	}					On Erro	r Resu	me Ne	xt							
17			bι	uttor	ו	Je-Gray, Text 2	80% Li	ghter 80%	6 2	214	220 23	28 #D	6DCE4	14998742						Set tbl =	Activ	eSheet	.ListC	bjects	("Tabl	leThen	ne")			
18						Jue, Accent1	80% Li	ghter 80%	6 2	217	225 24	42 #D	9E1F2	15917529						tc = tbl.	ListCo	lumns("TC")	.index						
19			1	6 6 Ac	ccent2	Orange, Accent2	80% Li	ghter 80%	62	252	228 2	14 #FC	CE4D6	14083324	5					ts = tbl.	ListCo	umns("TS").	index						
20			1	7 7 Ad	ccent3	Gray, Accent3	80% Li	ghter 80%	6 2	237	237 23	37 #E	DEDED	15592941	5					fc = tbl.	ListCo	l <mark>umns(</mark>	"font	").inde	x					
21			18	8 8 Ac	cent4	Gold, Accent4	80% Li	ghter 80%	62	255	242 20	04 #FF	F2CC	13431551						Set dbr	= tbl.D	ataBo	dyRar	nge						
22			19	9 9 Ad	ccent5	Blue, Accent5	80% Li	ghter 80%	6 2	221	235 24	47 #DI	DEBF7	16247773						With [co	olorthe	emegri	d]							
23			20	0 10 Ad	ccent6	Green, Accent6	80% Li	ghter 80%	6 2	226	239 2	18 #E2	2EFDA	14348258						For n	= 1 To	.Cells.	Coun	t						
24			2	1 1 Da	ark1	White, Background 1	-15% D	arker 15%	62	217	217 2	17 #D	9D9D9	Code		onia	a d	-		Wit	h App	icatior	n.Unio	on <mark>(.It</mark> e	m(n), t	t <mark>bl. List</mark>	Rows	(n).Ra	nge)	
25			2	2 2 Li	ght1	Black, Text 1	35% Li	ghter 35%	61	89	89	89 #59	95959	Coue	e is c	opie	eu				Interio	r.Then	neCol	or = II	f([sett	heme]	, <mark>dbr(</mark> r	n, tc), :	1)	
26			2	3 3 Da	ark2	Light Gray, Background 2	-25% D	arker 25%	62	174	170 1	70 #A	EAAAA	to	shee [.]	t foi	r				Interio	r.TintA	ndSh	ade =	If([set	ttheme	e], dbr	(n, ts)	, 0)	
27			24	4 4 Li	ght2	Blue-Gray, Text 2	60% Li	ghter 60%	62	172	185 20	02 #A	CB9CA								Font.T	hemeC	olor :	= IIf([s	etther	ne], dł	or <mark>(n, f</mark> a	c), 2)		
28			2	5 5 Ac	ccent1	Blue, Accent1	60% Li	ghter 60%	6 2	180	198 23	31 #B4	4C6E7	re	ferer	nce					Font.T	intAnd	Shade	e = 0						
29			20	6 6 A	ccent2	Orange, Accent2	60% Li	ghter 60%	62	248	203 1	73 #F8	BCBAD	11389944	-					Enc	l With									
30			2	7 7 Ac	ccent3	Gray, Accent3	60% Li	ghter 60%	6 2	219	219 2	19 #DI	BDBDB	14408667	i.					Next	n									
31			28	8 8 Ac	ccent4	Gold, Accent4	60% Li	ghter 60%	62	255	230 1	.53 #FF	E699	10086143	(End Wit	h									
32			29	9 9 Ad	ccent5	Blue, Accent5	60% Li	ghter 60%	6 2	189	215 23	38 #BI	DD7EE	15652797						End Sub										
33			3(0 10 Ad	ccent6	Green. Accent6	60% Li	ghter 60%	6 2	198	224 18	80 #C6	6E0B4	11854022																

Colors Standard

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BJ BK BL BM BS BT BU BV BW BX BY BZ CA CB CC CD CE CF CG CH BH BI BN BO BP BQ BR

Select:	÷											
Overview		Standa	rd Col	or W	heel	(see	Alt-H,H,M	(or Ctrl+1 ->	Fill $\rightarrow A$	lt+M) -	→ Stand	ard)
Dialog		num	font	R	G	B	hex	decimal	vbCon	std10	theme	index
Theme		1	1	0	51	102	#003366	6697728	á.			49
Standard		2	1	51	102	153	#336699	10053171				
Custom		3	1	51	102	204	#3366CC	13395507				
Random		4	1	0	51	153	#003399	10040064				
Index		5	1	0	0	153	#000099	10027008				
All		6	1	0	0	204	#0000CC	13369344				
		7	1	0	0	102	#000066	6684672	ē.			
Set Standard Colors		8	1	0	102	102	#006666	6710784				
		9	1	0	102	153	#006699	10053120				
		10	1	0	153	204	#0099CC	13408512				
		11	1	0	102	204	#0066CC	13395456				23
		12	1	0	51	204	#0033CC	13382400				
		13	1	0	0	255	#0000FF	16711680	2			5
		14	1	51	51	255	#3333FF	16724787				
		15	1	51	51	153	#333399	10040115				55
		16	1	0	128	128	#008080	8421376				14
		17	1	0	153	153	#009999	10066176				
		18	0	51	204	204	#33CCCC	13421619				42
		19	0	0	204	255	#00CCFF	16763904				33
5		20	1	0	153	255	#0099FF	16750848				
		21	1	0	102	255	#0066FF	16737792				
		22	1	51	102	255	#3366FF	16737843				41
		23	1	51	51	204	#3333CC	13382451				

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Т 5

Standard Color Wheel

		1	2	3	4	5	6	7			
	8	9	10	11	12	13	14	15			
	16	17	18	19	20	21	22	23	24		
25	26	27	28	29	30	31	32	33	34		
35	36	37	38	39	40	41	42	43	44	45	
47	48	49	50	51	52	53	54	55	56	57	
59	60	61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80	81	82
83	84	85	86	87	88	89	90	91	92	93	
	94	95	96	97	98	99	100	101	102	103	
	104	105	106	107	108	109	110	111	112		
		113	114	115	116	117	118	119	120		
		121	122	123	124	125	126	127			

128 129 131 133 135 137 139 141 143 130 132 134 136 138 140 142 144 User interface is replicated and tabulated

On Error Resume Next Set tbl = ActiveSheet.ListObjects("TableStandard") Set dbr = tbl.DataBodyRange ic = tbl.ListColumns("decimal").index fc = tbl.ListColumns("font").index For Each c In [colorstandard].Cells n = c.ValueIf n > 0 Then With Application. Union(c, tbl.ListRows(n).Range) .Interior.Color = IIf([setstandard], _ dbr(n, ic), vbWhite) .Font.Color = IIf([setstandard] And _ dbr(n, fc) = 1, vbWhite, vbBlack) End With End If

Dim tbl As ListObject, clr As Long, n As Integer

CI

Push button to activate this code:

Public Sub SetColorStandard()

Dim c As Range, dbr As Range

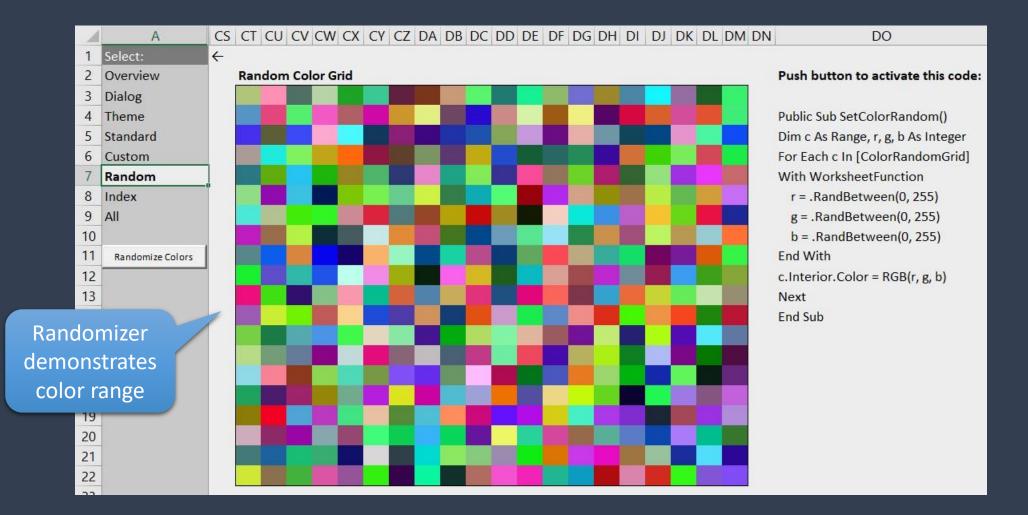
Dim ic As Long, fc As Long

Next End Sub

Colors Custom

1	A A	(СК	CL	CM	CN	СО СР	CQ
1	Select:	(÷					
2	Overview			Custom Col	ors (see Alt-H,	H,M (or Ctrl+1	\rightarrow Fill \rightarrow Alt+M) \rightarrow Custom)	Use scroll bars or set RGB cells to activate this code:
3	Dialog			Use scrollba	rs or type in R	GB values 0 to	255.	Sub SetColorCustom()
4	Theme			e.				Dim DecVal As Long, HexVal As String
5	Standard							On Error Resume Next
6	Custom							With ActiveSheet
7	Random							DecVal = RGB([Red], [Green], [Blue])
8	Index							HexVal = _
9	All			in	put or VBA \downarrow	\downarrow calculated		Right("0" & Hex([Red]), 2) & _
10				Element	Value	Result	Formula	Right("0" & Hex([Green]), 2) & _
11	•		\rightarrow	Red	239	239	=MOD(ColorNum,16^2)	Right("0" & Hex([Blue]), 2)
12	•		→	Green	160	160	=INT(MOD(ColorNum,16^4)/16^2)	.[ColorRange].Interior.Color = DecVal
13	•		\rightarrow	Blue	223	223	=INT(ColorNum/16^4)	.[ColorNum] = DecVal
14				Standard	Yellow	(no standard)	← pick color from dialog Standard row	.[ColorHex] = HexVal
15				Constant	vbMagenta	(no constant)	\leftarrow pick color constant from list	End With
				Hex Value	EFAODF	EFAODF	=DEC2HEX(Red*16^4 + Green*16^2 + Blue,6)	End Sub
Cont	rols and			Decimal	14655727	14655727	=Blue*16^4 + Green*16^2 + Red	
input	s enable			Theme		(none)	=IFNA(MATCH(ColorNum,ColorTheme[decimal],0),"(none)")	Select Standard or Constant cells to activate this code:
	learning			Wheel		(none)	=IFNA(MATCH(ColorNum,ColorStandard[decimal],0),"(none)")	Private Sub Worksheet_Change(ByVal Target As Range)
sen-	learning			ColorIndex		(none)	=IFNA(MATCH(ColorNum,ColorIndex[decimal],0),"(none)")	With ActiveSheet
21				The hex cold	or is expressed	as six digits wi	here each 2-digit pair ranges from 00 to FF, read left to	If Target.Address = [customconstantpick].Address Or _
22				right as #RR	GGBB, total fro	om #000000 (b	lack) to #FFFFFF (white). Conversely, the decimal color	Target.Address = [customstandardpick].Address Then
23				value revers	es the significa		ors, as shown in the formulas:	.Scenarios(Target.Value).Show
24					Hex		reen*16 ² + Blue	.[ColorRange].Interior.Color = [ColorNum]
25					Decimal	$=$ Blue $*16^4$ + G	Green*16 ² + Red	End If
26								End With
27								End Sub

Colors Random



Colors Index

1	A	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC E	D EE	EF E	G EH	I EI	EJ EK	EL
1	Select:	←																	-	
2	Overview		Standa	rd Pa	lette	and C	ontrast	ting Fon	nt Color (VB	A prope	rty)			c	Color In	ndex G	rid			Push button to activate this code:
3	Dialog		num	font	R	G	B he	X	decimal	vbCon	std10	theme	wheel		1 2	3	4	5 6	7	
4	Theme		1	2	0	0	0 #0	00000	0	1		2	144		89	10	11 1	2 13	14	Public Sub SetColorIndex()
5	Standard		2	1	255	255	255 #F	FFFFF	16777215	8		1	64		15 16	17	18 19	9 20	21	Dim c As Range, dbr As Range
6	Custom		3	2	255	0	0 #F	F0000	255	5	2		118		22 23	24	25 2	6 27	28	Dim tbl As ListObject, n As Integer, fc As Long
7	Random		4	1	0	255	0 #0	OFFOO	65280	3			48		29 30	31	32 3	3 34	35	On Error Resume Next
8	Index		5	2	0	0	255 #0	000FF	16711680	2			13		36 37	38	39 40	0 41	42	Set tbl = ActiveSheet.ListObjects("TableIndex")
9	All	1	6	1	255	255	0 #F	FFF00	65535	7	4		106		43 44	45	46 4	7 48	49	Set dbr = tbl.DataBodyRange
10			7	1	255	0	255 #F	FOOFF	16711935	6			68		50 51	52	53 54	4 55	56	fc = tbl.ListColumns("font").index
11	Set Color Index		8	1	0	255	255 #0	OFFFF	16776960	4			28							For Each c In [ColorIndexGrid].Cells
12			9	2	128	0	0 #8	00000	128				126							n = c.Value
13			10	2	0	128	0 #0	08000	32768				59	(6	Colo	rlno			With Application.Union(c, tbl.ListRows(n).Range)
14			11	2	0	0	128 #0	08000	8388608											.Interior.ColorIndex = IIf([setindex], n, 0)
15			12	2	128	128	0 #8	08000	32896				104		re	efere	ence	e for		.Font.ColorIndex = IIf([setindex], dbr(n, fc), 1)
16			13	2	128	0	128 #8	08000	8388736				82			<u> </u>	der	c		End With
17			14	2	0	128	128 #0	08080	8421376				16			20	uer	5		Next
18			15	1	192	192	192 #0	00000	12632256				132							End Sub
10			100	-	100	100	4.30 10	00000	0404504			4.2	4.95							

Functions

Select *f(x)* and *f(x,y)* and input multipliers

1	A	В	С	D	E	F	G	Н	1	J	
1	Selection of Si	ngle f(x) a	nd Dual f	(x,y) Oper	and Func	tions			1		
2	Function(X)	mult(x) \downarrow	mult(y) \downarrow	Function	(X,Y)	LOG10(X)	= Returns th	e base-10 log	garithm of a nu	mber	
3	LOG10	1	1	PERMUT	ATIONA	PERMUTA	TIONA(X,Y)	= Returns the	number of per	mutations for a	giv
1	F(X)	$\downarrow X \rightarrow Y$	1	2	3	4	5	6	7	8	
5	0	1	1	1	1	1	1	1	1	1	
6	0.301029996	2	2	4	8	16	32	64	128	256	
7	0.477121255	3	3	9	27	81	243	729	2187	6561	
8	0.602059991	4	4	16	64	256	1024	4096	16384	65536	
9	0.698970004				125	625	3125	15625	78125	390625	
10	0.77815125	7 <mark>815125</mark> 6636		36	216	1296	7776	46656	279936	1679616	
11	0.84509804	7	7	49	343	2401	16807	117649	823543	5764801	
12	0.903089987	8	8	64	512	4096	32768	262144	2097152	16777216	
13	0.954242509	9	9	81	729	6561	59049	531441	4782969	43046721	
14	1	10	10	100	1000	10000	100000	1000000	10000000	10000000	
15	1.041392685	11	11	121	1331	14641	161051	1771561	19487171	214358881	
16	1.079181246	12	12	144	1728	20736	248832	2985984	35831808	429981696	
17	1.113943352	13	13	169	2197	28561	371293	4826809	62748517	815730721	1
18	1.146128036	14	14	196	2744	38416	537824	7529536	105413504	1475789056	2
19	1.176091259	15	15	225	3375	50625	759375	11390625	170859375	2562890625	3
20	1.204119983	16	16	256	4096	65536	1048576	16777216	268435456	4294967296	6
21	1.230448921	17	17	289	4913	83521	1419857	24137569	410338673	6975757441	
22	1.255272505	18	18	324	5832	104976	1889568	34012224	612220032	11019960576	
23	1.278753601	19	19	361	6859	130321	2476099	47045881	893871739	16983563041	
24	1.301029996	20	20	400	8000	160000	3200000	64000000	1280000000	2560000000	
25		1								10	1

Combinations Header

Reference for Permutations and Combinations

1	A	В			С	D	E	
1	note	Permu	tati	on	s	Combi	nations	
2	order matters	TRUE			TRUE	FALSE	FALSE	
3	repeats allowed	TRUE			FALSE	TRUE	FALSE	
4	function	PERMUTATIONA		P	PERMUT	COMBINA	COMBIN	
5	process	all possible	r	em	ove repeats	remove duplicates	remove both	
	general formula	N^r		_	N!	(N+r-1)!	<u>N!</u>	
6				((N-r)!	r!(N-1)!	r!(N-r)!	
7	population N	5	•	•	select or typ	pe population to choo	ose from, 1 to 9	
8	selection r	3	•	•	select or typ	be number to choose,	, 1 to 4	
9	function	125			60	35	10	
10	column count	125	60			35	10	
11	index	PERMUTATIONA		P	PERMUT	COMBINA	COMBIN	1
12	1	111				111		

Combinations Table

10	column count	125	60	35	10	digits	value counts	type
11	index	PERMUTATIONA	PERMUT	COMBINA	COMBIN	D4 D3 D2 D1 Dall	V9 V8 V7 V6 V5 V4 V3 V2 V1 Val	repeat duplic
12	1	111		111		1 1 1 111	0 0 0 0 3 0000	3 rep
13	2	112		112		1 1 2 112	0 0 0 1 2 0001	2 rep
14	3	113		113		1 1 3 113	0 0 1 0 2 0010	2 rep
15	4	114		114		1 1 4 114	0 1 0 0 2 0100	2 rep
16	5	115		115		1 1 5 115	1 0 0 0 2 1000	2 rep
17	6	121				1 2 1 121	0 0 0 1 2 0001	2 rep dup
18	7	122		122		1 2 2 122	0 0 0 2 1 0002	1 rep
19	8	123	123	123	123	1 2 3 123	0 0 1 1 1 0011	1
20	9	124	124	124	124	1 2 4 124	0 1 0 1 1 0101	1
21	10	125	125	125	125	1 2 5 125	1 0 0 1 1 1001	1
22	11	131				1 3 1 131	0 0 1 0 2 0010	2 rep dup
23	12	132	132			1 3 2 132	0 0 1 1 1 0011	1 dup
24	13	133		133		1 3 3 133	0 0 2 0 1 0020	1 rep
25	14	134	134	134	134	1 3 4 134	0 1 1 0 1 0110	1
26	15	135	135	135	135	1 3 5 135	1 0 1 0 1 1010	1
27	16	141				1 4 1 141	0 1 0 0 2 0100	2 rep dup
28	17	142	142			1 4 2 142	0 1 0 1 1 0101	1 dup
29	18	143	143			1 4 3 143	0 1 1 0 1 0110	1 dup
30	19	144		144		1 4 4 144	0 2 0 0 1 0200	1 rep
31	20	145	145	145	145	1 4 5 145	1 1 0 0 1 1100	1
32	21	151				1 5 1 151	1 0 0 0 2 1000	2 rep dup

Member list aids learning

Outline

1	А	В	С	D
	item 🏾 🎉 🏹	level		VE 🏹
1	01 design	1	2	3 4
1.	02 rough cutting			
2	03 part processing	Cabine	et buil	ld outline
3	04 carcass assembly	item	level	description
4	05 drawer assembly	1.0	1	design
5	06 doors and drawer	1.1	2	. measures
6	The second se	1.11	3	finished dimensions
7	07 finishing	1.12	3	drafting
8	08 hardware	1.13	3	net dimensions all parts
9	09 mounting	1.14	3	nominal board size optimizing
10	10 final assembly	1.141	4	hardwood 1x stock
11		1.142	4	plywood
12		1.2	2	. shopping list
13		1.21	3	check inventory quality
14		1.22	3	net boards to buy
15		2.0	1	rough cutting
16		2.1	2	. rips and crosscuts
		2.2	2	. miters and tapers
Ite	em number	3.0	1	part processing
ca	lculated by	31	2	beveling and rounding
64	· · · · ·			
	level			

Chapter 5: Keyboard Trainer

Show He	elp																					
esc	F 1	F 2	F 3	F 4	F 5	F 6	F 7	F 8	F 9	F10	F11	F12	delete	home	end	pg up	pg dn	filt	ter by key	1		¥≡ <
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Lab	Q	VV	E		R				C	D P			. /	home	\uparrow	pg up	+		+ =	1 end	2↓	3 pg
caps lo	ck	A	S	D	F	G	Н	J	К	L	;	"	enter	4 ←	5	6 →		4	4 ←	6→	7 ho	8 个
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		-	~				•••		,	•				end	0	pg dn	enter	ſ	D	E	F	G
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clipboa	rd: paste		2		special		ons: refresh	all	copy: dov	vn		opy: down ar		copy: ri				*	* 8	@ 2	^ 6	\uparrow
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	ggle point		enter: a			Ŷ	rrent date			rent time		nter: flash fil		errors:				d	lelete	end	enter	F 1
		moue	6			÷								-		песк	- 1	F	2	F 3	F 4	F 5
2	: close file: open browse file: open new								file: open			le: save		file: sav				F	6	F7	F8	F 9
filter: to	er: toggle find: dialog find: replace dialog								font: dialo	og	fc	ont: toggle bo	bld	font: to	ggle ital	ic			10	F11	F12	home
font: to	toggle strikethrough font: toggle underline format: dialog								formula a	rguments: dia	al fo	ormula argun	nents: list	formula	s: show						100000	
formula	as: toggle b	oar size	group: c	olumn, r	ow or	group: to	ggle outline	bu	group: un	group columr	n, he	elp: pane		hyperlin	k: dialo	g		p	og dn	pg up	shift	space
-			0			6 //								1								

Keyboard Trainer

ABOUT KEYBOARD TRAINER

Becoming a keyboard expert requires first knowing what shortcuts can do, which usually means searching and reading long lists with many key combinations. Then, most people can only memorize a few at a time; many will never know what they're missing, leaving keyboard productivity as an underused opportunity.

Keyboard Trainer is an on-screen keyboard simulation flanked by Slicer banks of functions and keys. As Slicer buttons are clicked, the keyboard lights up to assist memorization. Slicers are by function group, function and key and include 193 shortcuts.

A second sheet is focused on Ribbon KeyTips. This sheet simulates the Ribbon tabs and groups with horizontal Slicers, and the KeyTip "spelling" with vertical, single-character Slicers.

Excel features: Advanced Formatting; Conditional Formatting; Name Manager named ranges and formulas; Column Groups; Tables; PivotTables; Slicers **VBA**: none

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Keyboard Trainer

USAGE NOTES

The keyboard simulator is most effective with maximum screen space. Headings are hidden (Alt-W,V,H). Additional space can be gained by:

Ctrl+F1 to hide the ribbon

Shift+Ctrl+F1 to hide the ribbon, toolbar and status bar

Slicer navigation by keyboard:

- 1. Ctrl+Alt+5 to select the first Slicer. The Slicer bank will have an extra border indicating it is selected.
- 2. Tab twice to place the focus on the buttons.
- 3. Arrow around, Space or Enter to select a button.

When using multiple Slicers together such as Area \rightarrow Function or Area \rightarrow Key or Function \rightarrow Way, reset the lower Slicer by clicking the "Clear Filter" button before selecting another item in the higher Slicer. If the Slicer is selected (has extra border), "Clear Filter" can be done by Alt+C.

To view the pivot or table:

- 1. Click the Show Help checkbox
- 2. Select the heading P or T
- 3. Follow the tips to unprotect the sheet and open the group

Keyboard Slicers

esc F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12 delete home end pg up pg dn num /
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
shift Z X C Realistic alt ctrl 1 2 3 alt pgdn enter D E F G ctrl fn II alt ctrl <
ctrl fn II alt ctrl filter by area ins del ins del pick a way ins ins pick a unique function to highlight keys borders: clear borders: outline calculate: all calculate: sheet clipboard: copy clipboard: cut D E F G H I I I I I I I I I I I I I I I I I </td
ctri in ait ctri ins del ins d
filter by area index filter by area index filter by area index
edit format navigation reference selection sheet/file 1 2 3 4 pick a unique function to highlight keys
pick a unique function to highlight keys Z ! 1 # 3 \$ 4 borders: clear borders: outline calculate: all calculate: sheet clipboard: copy clipboard: cut ^ *8 @ 2 0 0
borders: clear borders: outline calculate: all calculate: sheet clipboard: copy clipboard: cut ^ *8 @ 2
borders: clear borders: outline calculate: all calculate: sheet clipboard: copy clipboard: cut
clipboard: paste clipboard: paste special connections: refresh all copy: down copy: down and edit copy: right
$\frac{1}{2} = \frac{1}{2} = \frac{1}$
edit: toggle point mode enter: autosum enter: current date enter: current time Slice by area errors: display check delete end enter F1
and function E2 E3 E4 E5
filter: toggle find: dialog find: replace dialog font: dialog Or by key font: toggle italic F0 F7 F8 F9
font: toggle strikethrough font: toggle underline format: dialog formula arguments: dial formula arguments: list formulas: show
formulas: toggle bar size group: column, row or group: toggle outline bu group: ungroup column, help: pane hyperlink: dialog

Keyboard Highlighting

Show Help																					
esc	F1 F2 F3 F4				F 5				F 9 F10 F1		F11	1 F12 delete		home	end	pg up	pg dn	filter by ke	Y		¥∃ 🖓
~ 、	[!] 1	[@] 2	[#] 3	\$ 4	[%] 5	[^] 6	& 7	* 8	(9) 0		+ =	back	num lock	1	*	-	-	11 1	*	1
tab	Q	W				түи			ΙΟΡ		۲ ۱	}	}, ,		7 8 9			:;		~ `	+
														home	1	pg up	+	+ =	1 end	2↓	3 pg
caps loo	ck	A	S D F			G H J			K L ;			" enter		4 ←	$\begin{array}{c cccc} 4 & 5 & 6 \\ \leftarrow & \rightarrow \end{array}$			4 ←	6→	7 ho	8 个
shift	shift Z			С	V	В	N	M	<	>	?,		shift	1	2	3		9 pg	А	В	С
- Section -									, . ,					end ↓ pg dn 0 .	enter	D	E	F	G		
ctrl	rrl fn 🏽 🕮 alt					space alt ctrl				+	$\begin{array}{c c c c c c c c c c c c c c c c c c c $				Н	1	К	L			
			errors: display check										N	0	Р	Q					
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borders	· cle	high	nlighted			calculate: all			calculate: sheet			clipboard: copy			clipboard: cut			% 5	& 7	(9) 0
	rd: paste	5	clipboard: paste special			connections: refresh all			copy: down			copy: down and edit						* 8	@ 2	^ 6	\uparrow
	25												copy: right edit: new line in cell				\rightarrow	\downarrow	÷	alt	
-	column, ro		delete: contents			edit: cycle fixing options			edit: dynamic pick list			dit: fill select	+				delete	end	enter	F 1	
	gle point	mode	enter: autosum			enter: current date			enter: current time			nter: flash fi	errors: display check				F 2	F3	F4	F 5	
file: close			file: open browse			file: open new			file: open recent		fil	file: save		file: save as							
filter: toggle			find: dialog			find: replace dialog			font: dialog			ont: toggle b	font: toggle italic				F 6	F7	F8	F 9	
font: toggle strikethrough			font: toggle underline			format: dialog			formula arguments: dial			ormula argur	formulas: show				F10	F11	F12	home	
formula	s: toggle b	oar size	group: column, row or			group: toggle outline bu			group: ungroup column,		in, he	help: pane		hyperlink: dialog				pg dn	pg up	shift	space
																	- ×				

Keyboard Help



Keyboard Table

	Т						
		Mod1 💌	Mod2 💌	Key 🔽	Function	💌 Area 📃 💌 Way	/ 💌 Numlock 💌
	I	Ctrl	Shift	1 <u>1</u> 17	borders: clear	format	1
		Ctrl	Alt	1 <u>00</u> 077	navigation: zoom out	navigation	1
Hidden static		Ctrl	Shift	& 7	borders: outline	format	1
				F 9	calculate: all	sheet/file	1
table lists every		Shift		F 9	calculate: sheet	sheet/file	1
shortcut		Ctrl		С	clipboard: copy	edit	1
		Ctrl		X	clipboard: cut	edit	1
		Ctrl		v	clipboard: paste	edit	1
		Ctrl	Alt	v	clipboard: paste special dialog	edit	1

Keyboard Pivot

About										Р						
F12	delete	home	end	pg up	pg dn	filter by ke	ŀγ		i se		Function		i Way 👻 Mod 👻	Mod 👻	Key 🖓	T Num T Area
+ =	back	num lock	1	*	-	•		*	1		enter: autosum		1 Alt	(blank)	+ =	(blank) edit
r } ₁	1	7	8	9		:;		~ `	+							
	1	home	\uparrow	pg up	+	+ =	1 end	2 🗸	3 pg		insert: column, row	v or dialog	1 Ctrl	Shift	+ =	(blank) edit
"	enter	4 ←	5	6 →		4 ←	6 →	7 ho	8 个		navigation: zoom i	n	1 Ctrl	Alt	+ =	(blank) navigation
	shift	1	2	3		9 pg	А	В	С			~				
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													to slicers to d select ke			

for highlighting

KeyTips

	-	-	bon by sel		000020:									
1 [F]ile		2 [H]	ome	3 I[N]:	sert	4 [JI] Draw	5 [P]age Layout	6 For[M]ulas	7 D[A]ta	8 [R]eview	9 Vie[W]	a Deve[L]oper		
then choo	ose a Se	ection.	OR, lear	n KeyTips	by select	ing from the 4 slic	er columns below, from	m left to right					3	注 5
. Clipboard	ł	2 For	nt	3 Align	ment	4 Number	5 Styles	6 Cells	7 Editing	1 Code	1 Function Li	1 Get & Trans	1 Proofing	
t 😨	2nd	∇	3rd 😽	4th	Tab) 🔽 Se	ection	💌 Item		•	КеуТір	🕶 OR 💌	HotKey	
						ome Ec	diting	AutoSum Fu	Inction Menu		Alt-H,U	Alt-M,U		
	E							AutoSum			Alt-H,U,S	Alt-M,U,S	Alt+ =	
	F		С	F				Fill Range M	12502.00		Alt-H,F,I			
	s		D	G				Clear Range	And the Article House of the		Alt-H,E			
	-		-			Learn KeyT	ïp ribbon 🦳	Sort & Filte	10 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -		Alt-H,S			
	U		F	Р		navigatio		Sort Ascend			Alt-H,S,S			
	1		1	R		_		Sort Descer Custom Sor			Alt-H,S,O Alt-H,S,U			
1	2		0	s		correspo	onding	Filter Toggle			Alt-H,S,F	Alt-A,T	Ctrl+Shift+L	
	-	_				hotk		Clear Filter	-		Alt-H,S,C	Alt-A,C	CUT+SHITC+L	
N	3		S				cys	Reapply Filt	er		Alt-H,S,Y	Alt-A,Y,1	Ctrl+Alt+L	
	5		U	E				Find & Sele			Alt-H,F,D			
2	-	-1	Y	11				Find Dialog	2012-10/0-02-02-000		Alt-H,F,D,F		Ctrl+F	
	6		ľ	U				Replace Dia	25		Alt-H,F,D,R		Ctrl+H	
V	А		1					Go To Dialo	g		Alt-H,F,D,G		Ctrl+G	
	В		2					Go To Spec	ial Dialog		Alt-H,F,D,S		Ctrl+G, Alt+S	
	1.2							Selection Pa	ane		Alt-H,F,D,P		Alt+F10	

Chapter 6: Gantt Chart

	А	В	С	D	E	F		Р	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	
1						and a	*																
2			Gantt Chart	()		status	\rightarrow	Year															
3			Solution X			timeline	→ 🗌 0)uarter															
4			Implementation Release 9.1.1			4 closed	\circ	Month				~											
5						4 current	\circ	Week				32					33					34	
6						3 overdue	۲	Day	4	5	6	9	10	11	12	13	16	17	18	19	20	23	2
7					*	Ma	W	eekday	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2
8	#	L	Task	Owner	Status	Start	End		26	27	28	29	30	31	32	33	34	35	36	37	38	39	4
9	1	1	Charter		closed	06/16/2021	06/29	/2021															
10	2	1	Weekly meetings	Dave	open	08/11/2021	09/29	/2021						4-									
11	3	1	Preparation	Bill	closed	06/09/2021	06/29	/2021															
12	4	1	Data collection	Carlos	closed	06/16/2021																	
13	4.1	2	Sourcing		closed	06/16/2021	06/29	/2021															
14	4.2	2	Analysis		open	06/30/2021	07/20	/2021															
15	4.3	2	Presentation		hold	07/22/2021	08/04	/2021															
16	5	1	Development	Millie	open	07/19/2021	09/14	/2021															
17	6	1	Design and spec		open	07/19/2021	07/25	/2021															
18		_	Prototype		open	07/26/2021																	
19	8	1	Feedback		open	08/16/2021		-															
20	9	1	Production		open	08/30/2021		-															
			Testing		open	09/20/2021																	
22	10.1	2	Spec check		open	09/20/2021	09/26	/2021															
23	10.2	2	Performance check		open	09/27/2021		<u></u>															
24	10.3	2	User acceptance		open	10/04/2021																	
25	11	1	Go-live		open	10/21/2021	21 1	y															
26	12	1	Monthly meeting	Dave	open	07/07/2021	12/08	/2021															
27	13	1	Validation		open	10/21/2021	11/24	/2021															

Gantt Chart

ABOUT GANTT CHART

A Gantt chart is a common project management tool for linking and scheduling interdependent activities. Informal Gantts often lack key features.

Capacity is a critical constraint on the project schedule. When a project spans peak holiday or vacation periods, the manager might mentally adjust due dates, or even overlook the constraint. Here the manager can reflect the constraint with custom weekends, holidays and special down days, or define a part-time project with custom workdays.

The horizontal time scale has four options for different audiences; calendar days, workdays, weeks and months. Constraint periods are shaded. Activities appear as colored bars. There are no activity realtionships, but there can be up to seven sequential stages or discrete events on a single row.

Excel features: Advanced Boolean, Date and Lookup formulas; Name Manager named ranges and formulas; Data Validation rules and messages; Conditional Formatting; Tables linked for input, process and output; Controls; **VBA**: none

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Gantt Chart

USAGE NOTES

Configure:

<u>Plan sheet, Stages legend (8 colored cells)</u>: up to 4 characters acronym to identify stages <u>Plan sheet, Capacity thresholds (6 colored cells)</u>: enter days to shade as reduced capacity <u>Calendar sheet</u>: configure work week, holidays, other dates, set count boxes to count as downtime

Setup: Fill white cells in header, and white columns:

Fill columns per guidance message in column heading

Event type is continuous (duration=stage length) or discrete (separated by stage length)

Duration type is workdays or calendar days

Stages S2-S7 are optional: use as sequential stages, discrete instances, or to change task color

Monitor and maintain:

<u>Show all days</u>: while Day bucket is displayed, shows all calendar days with down days shaded <u>Use all days</u>: shows schedule with no downtime (earliest completion scenario) <u>Date bucket</u>: select Month, Week or Day to expand or collapse horizon <u>Status (explicit)</u>: set hold to pause or closed on task completion <u>Status (implicit)</u>: current tasks start in past and end in future; overdue tasks end in past Select pencil icon (cell F1) to expand or collapse column group for space

Gantt Chart

TEMPLATE NOTES

Gantt Chart is most useful as a template. This allows you to save a blank version of the file which remains intact as you use it to create new files. Thus, you don't need to retrieve your last file and remove all the data to start a new one, just open the template and it will save as a workbook.

Gantt Chart is provided as both Excel Template (Gantt Chart.xltx) and Excel Workbook (Gantt Chart.xlsx). This is so that you can see a filled example to learn how it works, and have the template for your own use. To use the template, first make it accessible.

Option 1: save the template file in your template folder, which you can find in Options, Alt-F,T,S, something like C:\Users\ (username) \OneDrive\Documents\Office\Templates.

Option 2: open the template, you'll see "Gantt Chart1" as the filename. Hit F12 (Save-As), remove the "1" in the name, and in "Save as type:", select Excel Template. This selects your template folder automatically. To use the template, File-New and navigate to personal templates, Alt-F,N,Y,3, it should be there. You can pin it to the top to make it easier to find next time.

To change the template, follow Option 2 above; open, edit, then Save-As and overwrite the current one. For example, you might want to save it with some data that is standard or similar across projects.

Dashboard

	Α	В	С	D	E	F	G	Н	1	1	К	1	М	N	0		Р	Q	R
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6						3 overdue							Thres	holds		0	Day	28	5
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9	1	1	Charter		closed	06/16/2021	CW	10							14	06/2	9/2021		
10	2	1	Weekly meetings	Dave	open	08/11/2021	dc	7	7	7	7	7	7	7	50	09/2	9/2021		
11	3	1	Preparation	Bill	closed	06/09/2021	CW	15							21	06/2	9/2021		
12	4	1	Data collection	Carlos	closed	06/16/2021	CW	35							49	08/0	3/2021		
13	4.1	2	Sourcing		closed	06/16/2021	CW	10							14	06/2	9/2021		
14	4.2	2	Analysis		open	06/30/2021	CW		15						21	07/2	0/2021		
15	4.3	2	Presentation		hold	07/22/2021	CW			10					14	08/0	4/2021		
16	5	1	Development	Millie	open	07/19/2021	cw	40							58	09/1	4/2021		
17	5.1	2	Design and spec		open	07/19/2021	CW	5					~			-	5/2021		
18	1	Ba	sic Gantt with	1	open	07/26/2021	CW		10					\checkmark	••	<u>~~ /~</u>	0/2024		
19	!				open	08/16/2021	CW			10						u	se up	to	7
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Flexible horizon in months, weeks or days

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Days

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5			62.	columr	ר (4 current	O Weel	c			32					33		00000			34	
6						3 overdue	O Day	4	5	6	9	10	11	12	13	16	17	18	15	20	23	2
7				group			Weekday	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2
8	#	L	Task	Owner	Status	Start	End	26	27	28	29	30	31	32	33	34	35	36	37	38	39	4
9	1	1	Charter		closed	06/16/2021	06/29/2021															
10	2	1	Weekly meetings	Dave	open	08/11/2021	09/29/2021															
11	3	1	Preparation	Bill	closed	06/09/2021	06/29/2021															
12	4	1	Data collection	Carlos	closed	06/16/2021	08/03/2021															
13	4.1	2	Sourcing		closed	06/16/2021																
14	4.2	2	Analysis		open	06/30/2021																
	4.3	2	Presentation		hold	07/22/2021																
16		_	Development	Millie	open	07/19/2021																
17		1	Design and spec		open	07/19/2021					_											
18		_	Prototype		open	07/26/2021										_						
19		_	Feedback		open	08/16/2021		1														
	9	_	Production		open	08/30/2021																
			Testing		open	09/20/2021		ver	due													
	10.1		Spec check		open	09/20/2021	09/2															
	10.2		Performance check		open	09/27/2021		ISKS	are	-												
	10.3	-	User acceptance		open	10/04/2021		JOP	d rec													
		_	Go-live		open	10/21/2021	10, 21															
		-	Monthly meeting	Dave	open	07/07/2021		-					4									
27	13	1	Validation		open	10/21/2021	11/24/2021															

Months

1	Α	В	C	D	E	F		Р	Q	R	S	Т	U	V	W
1						. S. P.	*								
2			Gantt Chart	()		status	→□	Year	21						2
3	8		Solution X			timeline	→□	Quarter	AMJ	JAS			OND		J
4			Implementation Release 9.1.1			4 closed	۲	Month	6	7	8	9	10	11	12 1
5						4 current	\circ	Week	22	26	30	35	39	44	48 5
6						3 overdu <mark>e</mark>	\circ	Day	1	1	1	1	1	1	1 1
7							W	orkdays	22	22	22	20	21	20	13
8	#	L	Task	Owner	Status	Start	End		1	2	3	4	5	6	7 8
9	1	1	Charter		closed	06/16/2021	06/2	9/2021							
10	2	1	Weekly meetings	Dave	open	08/11/2021	09/2	9/2021							
11	3	1	Preparation	Bill	closed	06/09/2021	06/2	9/2021							
12	4	1	Data collection	Carlos	closed	06/16/2021	08/0	3/2021							
13	4.1	2	Sourcing		closed	06/16/2021									
14	4.2	2	Analysis		open	06/30/2021	07/2	0/2021							
15	4.3	2	Presentation		hold	07/22/2021									
16	5	1	Development	Millie	open	07/19/2021		and some second second second							
17	5.1	2	Design and spec		open	07/19/2021	07/2	5/2021							
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19	5.3	2	Feedback		open	08/16/2021	Include an								
20	5.4	2	Production		open	08/30/2021	A Sector Contractor	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
21	6	1	Testing		open	09/20/2021									
22	6.1	2	Spec check		open	09/20/2021	09/2	6/2021							
23	6.2	2	Performance check		open	09/27/2021	the state of the state								
24	6.3	2	User acceptance		open	10/04/2021	10/3	1/2021							
25	7	1	00 1170		open	10/21/2021	175-00-145-00X	1105 4100 0000 0000							
26	8	1	Monthly meeting	Dave	open	07/07/2021	12/0	8/2021							
27	9	1	Validation		open	10/21/2021	11/2	4/2021							

Month bucket for big picture

Chapter 7: Team Calendar

	Α	В	0		D	E	F	G	Н	I	J
1		Team Member Va	acation Day /	Coverage D	ay Entry	/					
2		enter name and	date below fo	or workdays	off or no	on-work	days on		shortage	off day on	
3		comp days are e	nabled						past	past year	2
4		Input Table									
5		Name 🔹	Date		Half 💌	Year	Туре 💌	Off 💌	Used 💌	Left 💌	E 💌
18		Walter	10/12/2021	Fuesday		2021	workday off	1	10	0	
19		Walter	10/11/2021	Monday		2021	workday off	1	10	0	
20		Katie	09/06/2021	Monday		2021	holiday on	-1	2	8	
21		Mary	09/06/2021	Monday		2021	holiday on	-1	4	11	
22		Beth	09/03/2021	Friday		2021	workday off	1	14	11	
23		Beth									
24		Joe	09/03/2021	Date: enter	dates		workday off	1	5	10	
25		Beth	09/02/2021			urns red,	t workday off	1	14	11	
26		Joe	09/02/2021				workday off	1	5	10	
27		Beth	09/01/2021	with manage	er.		workday off	1	14	11	
28		Joe	09/01/2021	Courses de			workday off	1	5	10	
29		Beth	08/31/2021	Coverage da or holiday d			workday off	1	14	11	
30		Joe	08/31/2021	or nonday a	ates worr		workday off	1	5	10	
31		Beth	08/30/2021	Vionday		2021	workday off	1	14	11	
22		12		31		1000	2017 (A.1.)		22	1.1	

Team Calendar

ABOUT TEAM CALENDAR

In a business environment, team members and managers need to record and track days off, special staffing requirements, and risks such as understaffing and end-of-year vacations.

Team Calendar takes members' entry of name and date, normally a day off but may also be used to record a day worked on a weekend or holiday. A policy setting can then return a comp day, or not. A day off that will result in a shortage is flagged, to be confirmed with the manager. Each entry updates the individual's days used and remaining for the current year.

The manager maintains the policy and the team roster with hire date, which determines days due. They can then maintain special peak dates, shutdowns, or weekend and holiday coverage needed. A calendar is included that highlights all date entries, and even birthdays and milestone anniversaries.

Excel features: Advanced Boolean, Date and Lookup formulas; Name Manager named ranges and formulas; Data Validation rules and messages; Conditional Formatting; Tables linked for input, process and output; PivotTables and PivotCharts; Column Groups; Camera tool; **VBA**: none

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Team Calendar

USAGE NOTES

Input: name and date; name must exist in Team table on Settings sheet. Input response: <u>shortage</u> is highlighted red when a workday off is entered which will cause a staff shortage <u>coverage</u> day is highlighted yellow when a non-workday is entered <u>vacation</u> days used and left are updated including comp days if enabled <u>calendar</u>: set or clear checkboxes to customize display (calendar is linked image of Report calendar)

Report: review Report table, input Special table <u>Start</u>: select Today (default), or Jan 1 of this year or Jan 1 of next year <u>Report Flag column</u>: review short and over flags <u>Report Used column</u>: review aggregate vacation risk based on Alert start and level in Settings <u>Special table</u>: enter date and ± staff required or 0 for shutdown <u>Calendar</u>: set or clear checkboxes to customize display

Analysis: review vacation usage by team member and overall. Pivots refresh upon opening.

Settings: select icons in row 1 to expand/collapse column groups <u>Date settings</u>: format, work week and holiday rules and/or manual holiday dates <u>Team settings</u>: controls, vacation policy (include milestone years), team member list

Maintenance:

Input table: keep dates in past until new year starts and all carry-overs have been recorded Special table: dates in past can be deleted

Team table: enter new hire placeholder for vacation planning purposes, maintain dates

Team Calendar

TEMPLATE NOTES

Team Calendar can be used as a template to set up multiple teams, or once for a single team. There is no need to create a new file for each year. Once a team is set up, the file can be maintained as an ongoing Calendar from year to year. Past years can be deleted or kept, the input and analysis is always for the current year.

To use the template as a single file, follow Option 2 below, except Save-As Excel Workbook instead of Excel Template. To use the template as a template, first make it accessible.

Option 1: save the template file in your template folder, which you can find in Options, Alt-F,T,S, something like C:\Users\ (username) \OneDrive\Documents\Office\Templates.

Option 2: open the template, you'll see "Team Calendar1" as the filename. Hit F12 (Save-As), remove the "1" in the name, and in "Save as type:", select Excel Template. This selects your template folder automatically.

To apply the template, File-New and navigate to personal templates, Alt-F,N,Y,3, it should be there. You can pin it to the top to make it easier to find next time.

To change the template, follow Option 2 above; open, edit, then Save-As and overwrite the current one. For example, you might want to save it with some data that is standard or similar across teams.

Team Settings

eam Settin	igs			S	1	U	V	W	X	Y	Z	AA	AB	AC	AD	AE
						0		2			204			-04		
-			new	future	leaving											
Controls		Team Milesto	nes and Vacat	ion Days		Milesto	one	Nov	N		2021		2022	2023	2024	202
Point	Value	Name	Birthday	Hire	Retire	Anniv	Next	Service	Days	Add	Yr0	Left	Yr1	Yr2	Yr3	Y
lert start	Jun	new hire		03/01/23				-2 y	0 d		0 d	0 d	0 d	5 d	10 d	10
lert level	30%	new hire		11/01/21		11/01/21	0 у	0 у	5 d		5 d	5 d	10 d	10 d	10 d	10
Comp days		Beth	01/13/77	08/03/01		08/03/26	25 y	20 y	25 d		25 d	10 d	25 d	25 d	25 d	25
/in staff	85%	Bob	02/14/95	06/11/20		06/11/25	5 y	1 y	10 d	_	10 d	6 d	10 d	10 d	10 d	10
		Jane	08/20/80	06/14/04		06/14/24	20 y	17 y	20 d		20 d	13 d	20 d	20 d	25 d	25
acation Po	olicy	Joe	03/15/85	03/05/10		03/05/25	15 y	11 y	15 d	_	15 d	10 d	15 d	15 d	15 d	20
Service	Days	Juanita	09/21/97	10/01/17		10/01/22	5 y	4 y	10 d		10 d	9 d	10 d	10 d	10 d	10
0 у	5 d	Katie	05/17/95	05/09/18		05/09/23	5 y	3 у	10 d		10 d	8 d	10 d	10 d	10 d	10
1 y	10 d	Mary	04/16/90	06/17/11		06/17/26	15 y	10 y	15 d		15 d	11 d	15 d	15 d	15 d	15
5 y	10 d	Paul	06/18/66	07/01/90	12/31/21	07/01/25	35 y	31 y	30 d	5 d	35 d	19 d	0 d	0 d	0 d	(
10 y	15 d	Walter	07/19/90	09/03/13		09/03/23	10 y	8 y	10 d		10 d	0 d	10 d	15 d	15 d	15
15 y	20 d	Total									155 d	91 d	125 d	135 d	145 d	150
20 y	25 d															
25 y	30 d			Inpu	it 🔰				Ent	er ca	rryov	er				
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tion po	шсу			key da	tes				a	djustr	nents	5				
es davs	grant	ed														
	oint lert start lert level comp days fin staff /acation Pc Service 0 y 1 y 5 y 10 y 15 y 20 y 25 y	oint Value lert start Jun lert level 30% iomp days ✓ /in staff 85% /acation Policy Service Days 0 y 5 d 1 y 10 d 5 y 10 d 10 y 15 d 15 y 20 d 20 y 25 d 25 y 30 d	vointValuelert startJunlert startJunlert level30%comp days✓in staff85%Min staff85%JaneJaneJoeServiceDays0 y5 d1 y10 d5 y10 d10 y15 d15 y20 d20 y25 d25 y30 d	voint Value lert start Jun lert start Jun lert level 30% comp days iomp days Min staff 85% Vacation Policy Beth 01/13/77 Bob 02/14/95 Jane 08/20/80 Joe 03/15/85 Juanita 09/21/97 Katie 05/17/95 Mary 04/16/90 Paul 06/18/66 Walter 07/19/90 15 y 20 d 25 y 30 d	Value Name Birthday Hire Ilert start Jun new hire 03/01/23 Ilert level 30% new hire 11/01/21 iomp days Image: Start Sta	Name Birthday Hire Retire Idert start Jun new hire 03/01/23 Idert level 30% new hire 11/01/21 Service Days Min staff 85% Service Days Jane 08/20/80 06/14/04 Joe 03/15/85 03/05/10 Jane 09/21/97 10/01/17 Service Days Juanita 09/21/97 10/01/17 Katie 05/17/95 05/09/18 1 y 10 d Service Days Mary 04/16/90 06/17/11 Paul 06/18/66 07/01/90 12/31/21 Walter 07/19/90 09/03/13 15 y 20 d 25 y 30 d Input 10 y 15 d Input names and 20 y 25 d Input names and 20 y 25 d 30 d Input	Name Birthday Hire Retire Anniv Idert start Jun new hire 03/01/23 03/01/23 03/01/23 Idert level 30% new hire 11/01/21 11/01/21 11/01/21 Instaff 85% Beth 01/13/77 08/03/01 08/03/26 Bob 02/14/95 06/11/20 06/11/25 06/11/25 Jane 08/20/80 06/14/04 06/14/24 Joe 03/15/85 03/05/10 03/05/25 Juanita 09/21/97 10/01/17 10/01/22 Xatie 05/17/95 05/09/18 05/09/23 Mary 04/16/90 06/17/11 06/17/26 Paul 06/18/66 07/01/90 12/31/21 07/01/25 Walter 07/19/90 09/03/13 09/03/23 09/03/23 Total Input names names and	Name Birthday Hire Retire Anniv Next lert start Jun new hire 03/01/23 new hire 03/01/23 new hire 03/01/23 new hire 03/01/23 new hire 01/13/77 08/03/01 08/03/26 25 y 0 y 0 y 0 y 0 y 0 y 0 y 0 y 0 y 11/01/21 0 y 0 y 0 y 0 y 0 y 0 y 11/01/25 5 y 0 y 0 y 1 y 0 y 0 y 0 y 1 y 0 y 0 y 1	Oint Value Name Birthday Hire Retire Anniv Next Service lert start Jun new hire 03/01/23 -2 y new hire 11/01/21 11/01/21 0 y 0 y omp days ✓ new hire 01/13/77 08/03/01 08/03/26 25 y 20 y Beth 01/13/77 08/03/01 08/03/26 25 y 20 y Beth 01/13/77 08/03/01 08/03/26 25 y 20 y Bob 02/14/95 06/11/20 06/11/25 5 y 1 y Jane 08/20/80 06/14/04 06/14/24 20 y 17 y Jane 08/20/80 06/14/04 06/14/24 20 y 17 y Joe 03/15/85 03/05/10 03/05/25 15 y 11 y Juanita 09/21/97 10/01/17 10/01/22 5 y 3 y Mary 04/16/90 06/17/11 06/17/26 15 y 10 y Paul	Name Birthday Hire Retire Anniv Next Service Days lert start Jun new hire 03/01/23 -2 y 0 d new hire 11/01/21 11/01/21 0 y 0 y 5 d omp days Image: Comp days Image: Comp days 0 0 y 5 d Min staff 85% Beth 01/13/77 08/03/01 08/03/26 25 y 20 y 25 d Bob 02/14/95 06/11/20 06/11/25 5 y 1 y 10 d Jane 08/20/80 06/14/04 06/14/24 20 y 17 y 20 d Joe 03/15/85 03/05/10 03/05/25 15 y 11 y 15 d Juanita 09/21/97 10/01/17 10/01/22 5 y 4 y 10 d Mary 04/16/90 06/17/11 06/17/26 15 y 10 y 15 d Paul 06/18/66 07/01/90 12/31/21 07/01/25 35 y 31 y	Value Name Birthday Hire Retire Anniv Next Service Days Add lert start Jun new hire 03/01/23 -2 y 0 d lert start Jun new hire 03/01/23 -2 y 0 d lert level 30% mew hire 11/01/21 11/01/21 0 y 0 y 5 d in staff 85% Beth 01/13/77 08/03/01 08/03/26 25 y 20 y 25 d Jane 08/20/80 06/11/20 06/11/25 5 y 1 y 10 d Jane 08/20/80 06/14/04 06/14/24 20 y 17 y 20 d Joe 03/15/85 03/05/10 03/05/25 15 y 11 y 15 d Juanita 09/21/97 10/01/17 10/01/22 5 y 4 y 10 d Mary 04/16/90 06/17/11 06/17/26 15 y 10 y 15 d Sy 10 d 15 y 2	Value Name Birthday Hire Retire Anniv Next Service Days Add Yr0 lert start Jun new hire 03/01/23 -2 y 0 d 0 d 0 d lert start Jun new hire 11/01/21 11/01/21 0 y 0 y 5 d 5 d omp days Image: Comp days Comp days Image: Comp days	Value Name Birthday Hire Retire Anniv Next Service Days Add Yr0 Left lert start Jun new hire 03/01/23 -2 y 0 d	Value Name Birthday Hire Retire Anniv Next Service Days Add Yr0 Left Yr1 lert start Jun new hire 03/01/23 -2y 0d 10d 10d	value Name Birthday Hire Retire Anniv Next Service Days Add Yr0 Left Yr1 Yr2 lert start Jun new hire 03/01/23 -2 y 0 d 0 d 0 d 0 d 0 d 5 d lert level 30% mew hire 11/01/21 11/01/21 0 y 0 y 5 d 5 d 5 d 10 d 10 d 10 d 10 d 25 d 20 d	Name Birthday Hire Retire Anniv Next Service Days Add Yr0 Left Yr1 Yr2 Yr2 Yr3 lert start Jun new hire 03/01/23 -2 y 0 d 0 d 0 d 0 d 5 d 10 d

determines days grante and milestone years

Date Settings

1	Α	В	С	D	E	F	G	Н	I	J	K
1	1	Date S	ettings					1			
2		Pick	Date bucket order	mdy	Work week		Mon-Fri				
3		each	Date separator	1	Custom wee	k	0011010	1			
4					d.						

Holiday Rules

Rule	Holiday	Month	Form	Par1	Par2
1	New Year's Day	1	1	1	3
2	ML King Jr Day	1	2	3	1
3	Presidents Day	2	2	3	1
4	Memorial Day	5	2	5	1
5	Independence Day	7	1	4	1
6	Labor Day	9	2	1	1
7	Thanksgiving	11	2	4	4
8	Thanksgiving Friday	11	2	4	4.1
9	Christmas Eve	12	1	24	2
10	Christmas	12	1	25	3
11	New Year's Eve	12	1	31	2

WEEK LOU	wab	
Work	Туре	String
Mon-Fri	11	0000011
Tue-Sat	12	1000001
Wed-Sun	13	1100000
Thu-Mon	14	0110000
Fri-Tue	15	0011000
Sat-Wed	16	0001100
Sun-Thu	17	0000110
custom	11	0011010

Week Lookup

To enter holidays manually, scroll down below the calculated table.

Calculated Holidays

Rule Name	Date	Day	Year	Err
1 New Year's Day	01/01/21	Fri	2021	
2 ML King Jr Day	01/18/21	Mon		
3 Presidents Day	02/15/21	Mon		
	or las las	1000		

Set up date format, work week and holidays

Input Name

	A	B C	l.	D	E	F	G	Н	Î	J
1	Team M	lember Vacation Day / Co	verage Da	ay Entry						
2	enter r	name and date below for w	vorkdays o	off or no	n-worl	kdays on	5	shortage	off day on	
3	comp	days are enabled					;	past	past year	
4	Input Ta	able								
5	Name	🗾 Date	÷1	Half 💌	Year	Туре 💌	Off 💌	Used 💌	Left 💌	E
18	Walter	10/12/2021 Tue	esday		2021	workday off	1	10	0	
19	Walter	10/11/2021 Mo	nday		2021	workday off	1	10	0	
20	Katie	09/06/2021 Mo	nday		2021	holiday on	-1	2	8	
21	Mary	09/06/2021 Mo	nday		2021	holiday on	-1	4	11	
22	Beth	09/03/2021 Frid	lay		2021	workday off	1	14	11	
23	Joe	/03/2021 Frid	lay	_	2021	workday off	1	5	10	
24	Beth	Name: enter or select	sday		2021	workday off	1	14	11	
25	Joe	To insert a row, select a	sday	1	2021	workday off	1	5	10	
26	Beth	cell from second row down	Inesday		2021	workday off	1	14	11	
27	Joe	and hit Ctrl+	Inesday		2021	workday off	1	5	10	
Mambaripput	P		day		2021	workday off	1	14	11	
Member input	Joe	08/31/2021 Tue	esday		2021	workday off	1	5	10	
table gives in-	Beth	08/30/2021 Mo	nday		2021	workday off	1	14	11	
	Joe	08/30/2021 Mo	nday		2021	workday off	1	5	10	
cell instructions	Beth	08/27/2021 Frid	lay		2021	workday off	1	14	11	
33	Beth	08/26/2021 Thu	irsday		2021	workday off	1	14	11	

Short-staff days highlighted red

Input Date

1	A	B Team Member Va	(acation Day /	Coverage Da			F	G	Н	I.	J	
2		enter name and comp days are e	date below fo		a the second second	orkda	ays on		shortage	off day on		
4		Input Table							past	past year		
5		Name 🔹	Date	4	Half 💌 Yea	r 🔽 1	Гуре 💌	Off 💌	Used 💌	Left 🔻	E -	
18		Walter	10/12/2021	Tuesday	202	1 v	workday off	1	10	0		
19		Walter	10/11/2021	Monday	202	1 v	workday off	1	10	0		
20		Katie	09/06/2021	Monday	202	1 h	noliday on	-1	2	8		
21		Mary	09/06/2021	Monday	202	1 h	noliday on	-1	4	11		Non-workdays
22		Beth	09/03/2021	Friday	202	1 v	workday off	1	14	11		
23		Beth										highlighted
24		Joe	09/03/2021	Date: enter d	lates	V	workday off	1	5	10		yellow
25		Beth	09/02/2021		es: If it turns re	ed, it V	workday off	1	14	11		yenett
26 27		Dates can b			shortage; con			1	5	10		
27			J21	with manage	er.	N	workday off	1	14	11		
28	V	acation (off) or 2021	Courses de	to: optor:	N	workday off	1	5	10		
29		coverage (o	n) ²⁰²¹	or holiday da	te: enter week	v	workday off	1	14	11		
30			2021	or nonday da	nes monted	N	workday off	1	5	10		
31		Beth	08/30/2021	Monday	202	1 v	workday off	1	14	11		
22		2		201 B	100 C 100 C	2						

Report

	1	Α	В	С	D	E	F	G	Н	1	J	К	L
	1		Mana	ageme	ent T	racking		sta	ff	vacatio	n days	short	tages
Report can	2			Pick s	tart:	Today	*	full:	9	total:	155	days:	5
				read	colui	mn header	s for help	min:	8	used:	64	next:	13
start Jan 1	+		Repo	rt							comp o	days on	
this year or	5		Year	Мо	Wk	Date	Туре	Min	Extra	Have		Flag	Used
	8					29 Sun	weekend	0	0	0	0		27%
next, or today	19				35		workday	8	0	7		short	28%
	20					31 Tue	workday	8	0	7		short	30%
	21			Sep		01 Wed	workday	8	0	7		short	31%
	22					02 Thu	workday	8	0	7		short	32%
	23					03 Fri	workday	8	-3	7	~~~~~	over	34%
	24					04 Sat	weekend	0	0	0	0		34%
	25					05 Sun	weekend	0	0	0	0		34%
	26				36	A CONTRACTOR OF A CONTRACTOR O	holiday	0	0	2		over	32%
	27					07 Tue	workday	8	0	9	0	_	32%
	28					08 Wed	workday	8	0	9	0		32%
	29					09 Thu	workday	8	0	9		-	32%
	30					10 Fri	workday	8	0	9			32%
	31					11 Sat	weekend	0	0	0			32%
	32					12 Sun	weekend	<u> </u>	Shc	ort-sta	aff a	nd	32%
	33				37	13 Mon	workday	i i i		er-sta			32%
												-	
									а	re fla	ggec		

Low vacation usage is flagged

Calendar

				100	220	1.200					-
N	0	Р	Q	R	S	Т	U	V	W	Х	
		~	holi	day		~	toda	iy	_		
		~	shut	tdow	n	~	birth	nday			
		~	spec	cial n	eed	~	mile	ston	e		
Caler	dar				sh	orta	ge				
Y	Q	М	W	Мо	Tu	We	Th	Fr	Sa	Su	
2021	JAS	Aug	33	16	17	18	19	20	21	22	
			34	23	24	25	26	27	28	29	
			35	30	31	1	2	3	4	5	
		Sep	36	6	7	8	9	10	11	12	
			37	13	14	15	16	17	18	10	
			38	20	21	22	23	24	25	26	
			39	27	28	29	30	1	2	3	
	OND	Oct	40	4	5	6	7	8	9	10	
			41	11	12	13	14	15	16	17	
			42	18	19	20	21	22	23	24	
			43	25	26	27	28	29	30	31	
		Nov	44	1	2	3	4	5	6	7	
		7.55.55	45	8	9	10	11	12	13	14	
			46	15	16	17	18	19	20	21	
			47	22	23	24	25	26	27	28	
			77	22	25	24	25	20	~~/	20	

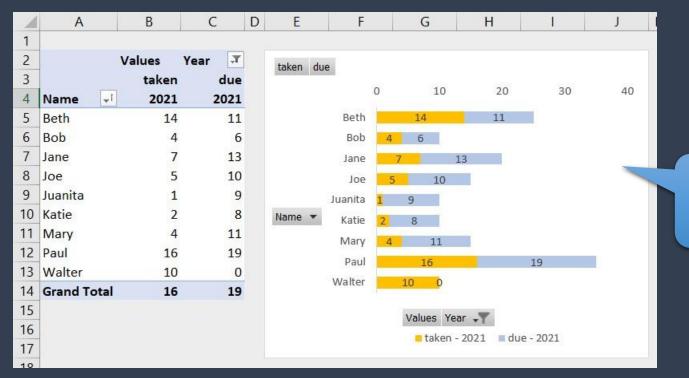
Calendar can highlight six date types plus shortage

Special Dates

Special Dates	± staff	ing needs; shaded	=past or no net	
Date	Need	Comment	Туре	Net
08/13/2021 Fri	+2		± help	
09/03/2021 Fri	-3	pre-holiday	± help	-2
11/24/2021 Wed	0	pre-holiday	shutdown	-8
12/05/2021 Sun	+2		weekend	2
12/28/2021 Tue	-5	reduce staff	± help	-6
12/29/2021 Wed	-5		± help	-6
12/30/2021 Thu	-5		± help	-6

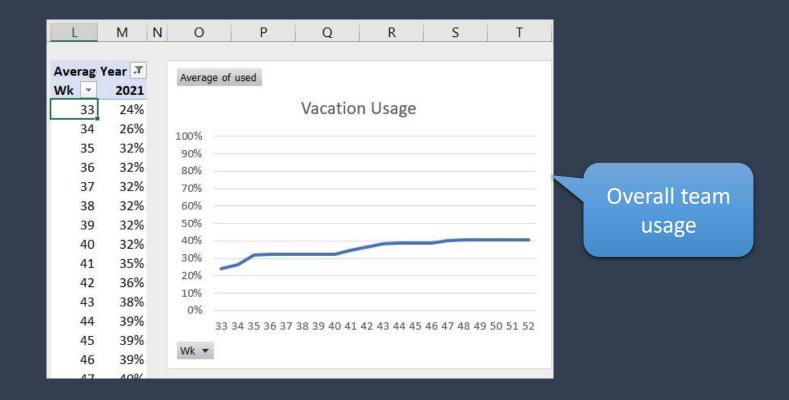
Special dates can be entered

Analysis by Member



Pivot and chart highlight members' days taken and remaining

Analysis by Team



Chapter 8: Project Tracker

	А	В	С	D	E	F	G	Н	1	J
22	\$	Project T	racker							(j)
23		Items		Title:	Project Xanadu: new location recommendation			6	to review	to latest
24		Select	Status	ltem	Text	Name	Ν	Up	Latest	Duration
25	10	۲	·	2	team roster and schedule	Jose C.	3	S.	06/23/2021	28 days
26		0		3	define selection criteria	Mary M.	4	3	07/04/2021	39 days
27		0	·	4	research and data collection	Walter R.	4	G,	06/16/2021	21 days
28		0	·	5	data analysis and evaluation	Grace Y.	2	3	06/16/2021	14 days
29		0	·	6	proposal alignment and presentation	Jose C.	1	B	06/23/2021	
30		0		7			0	æ		
31		0		1	Project Charter	Jose C.	4	\otimes	07/04/2021	39 days 🔒
51										
52		Notes per	Item/Dat	e	select column headings for help					
53		Select	Status	Item	Note	Name	_	Up	Start	End
54		۲		2	due date extended 2 weeks to account for delays	Jose C.			06/23/2021	
55		۲		2	changed 6/23 meeting to 11:00 due to webcast	Jose C.			06/16/2021	
56		۲		2	all members confirmed available and agreed to Wed 10:00 weekly meeting	Jose C.			05/26/2021	
57		0	D	4	Walter needs final criteria to proceed + 1 month for data collection; Jose to follow up with Mary	Walter R.			06/16/2021	
58		0		6	Jose will commission InfoDabble to do the graphics	Jose C.			06/23/2021	
59		0		3	no update; Mary's team will meet next week	Mary M.		œ	06/16/2021	06/23/2021
60		0		5	Grace expects evaluation to begin by 7/23	Grace Y.		F	06/16/2021	07/22/2021

Project Tracker

ABOUT PROJECT TRACKER

Managers of long projects with regular status meetings often use Excel to take notes, only to find that it becomes more and more unmanageable with each meeting. With many weekly updates on each of many items, it's a three-dimensional problem stuck in a two-dimensional sheet. Actions, owners and dates get lost in the text as updates accumulate in a single cell per item.

Project Tracker keeps Items and Notes in two similar Tables that are linked and stacked vertically in a split screen. Double-click events are used to select the related records, insert new records, and set status indicators. Right-click events set urgency and sort the tables. "Faux control" symbols and Conditional Formatting reflect status conditions including overdue, escalation, and closure, and show what remains to be updated.

Calendar is included for reference, as a manual lookup for setting due dates considering holidays and other downtime.

Excel features: stacked and linked Tables; Split Window; "Faux Control" Symbols; Conditional Formatting; Row Group; Data Validation rules and messages; **VBA**: Worksheet event triggers; automated Window Split, Table Sort, Table Add rows, Conditional Formatting and more; contextual logic to perform different actions based on Target cell address.

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Project Tracker

USAGE NOTES

Settings: Enter project title; double-click vertical double arrow to open the header row group to enter more project information, to view color and symbol legends, and to set date format and duration basis.

Items

<u>Insert</u>: double-click in Text column to insert new Item with next number; enter Text and Name <u>Select</u>: double-click in Select column to select Item and related Notes <u>Delete</u>: Ctrl- to delete table row; orphan Notes are flagged

Notes

<u>Insert</u>: double-click Items[Item] to create new Note with Name and today's date <u>Status</u>: right-click Status to cycle Lo-Hi-None level; double-click Status to close or reopen Note Delete: Ctrl- to delete table row

Monitor and maintain:

Insert new Note as above; this selects all Notes attached to the Item While Item is selected, review and update Status and End of existing Notes Set Status as above to escalate or close a Note Right-click a column header to sort the table

Project Tracker

TEMPLATE NOTES

Project Tracker is most useful as a template. This allows you to save a blank version of the file which remains intact as you use it to create new files. Thus, you don't need to retrieve your last file and remove all the data to start a new one, just open the template and it will save as a workbook.

Project Tracker is provided as both Excel Macro-Enabled Template (Project Tracker.xltm) and Excel Macro-Enabled Workbook (Project Tracker.xlsm). This is so that you can see a filled example to learn how it works, and have the template for your own use. To use the template, first make it accessible.

Option 1: save the template file in your template folder, which you can find in Options, Alt-F,T,S, something like C:\Users\ (username) \OneDrive\Documents\Office\Templates.

Option 2: open the template, you'll see "Project Tracker1" as the filename. Hit F12 (Save-As), remove the "1" in the name, and in "Save as type:", select Excel Macro-Enabled Template. This selects your template folder automatically.

To use the template, File-New and navigate to personal templates, Alt-F,N,Y,3, it should be there. You can pin it to the top to make it easier to find next time.

To change the template, follow Option 2 above; open, edit, then Save-As and overwrite the current one. For example, you might want to save it with some data that is standard or similar across projects.

Usage and Legend

1	А	В	C	D		E	F	G	Н	ľ	J	К
1	\$	Project Tr	racker						Setti	ngs		
2		click action	n target		result		response		Date	order	mdy	
3		double	Items[Tex	t]	insert new Item (auto-increments r	number)	next number insert		Date	separator	/	
4		double	Items[Sele	ect]	● select or ○ unselect an Item and	d sort both tables	see Legend		Dura	tion basis	to latest	
5		(none)	Items[Stat	tus]	🗖 no Note 🗈 no Note done 🔳 son	ne Notes done 🔳 all Notes done	(calculated)					
6		double	Items[Iter	n]	insert new Note for Item, with Nar	ne=Item[@Name], Start=today	✓ = today's note		Lege	nd		
7		double	Notes[Ite	m]	insert new Note for Item, with Star	t=today	✓ = today's note		CF	Items	Notes	
8		double	Notes[Sta	tus]	■ close or □ re-open a Note		⊗ = done			has no note	note is due	
9		right	Notes[Sta	tus]	cycle 🗆 None 🗉 Lo (bold blue) 🔳 H	Hi (bold red) level format	🖸 Lo 🔳 Hi			updated	note today	
10		(none)	Notes[End	d]	track overdue Notes		☞ = to do			selected	selected	
11		left	all header	s	column help		message box			completed	completed	
12		right	all header	s	sort column		custom sort			(none)	orphan	
13		(none)	both table	es	Ctrl+ to insert row, Ctrl- to delete r	ow	insert/delete			is formula	is formula	
14		double	box left o	f Items	🗹 set or 🗆 unset screen split		split/unsplit					
15		double	\$		open/close header group	Usage notes explain	open/close group					
16						mouse click effects					Conditio	bnal
17		Project inf	ormation: (insert rows	below as needed)					E E	ormat le	ogano
18				~.		by target					ornatie	genu
19												
20												
21												
22	\$	Project 1	Fracker								0	
23	R	ow Group		Title:	Project Xanadu: new location reco	mmendation			6	to review	to latest	
24	1	Double-click	me to us	ltem	Text		Name	N	Up	Latest	Duration	
-	. cl	how or hide	the	-						00/00/0000	0.0.1	

Tracking

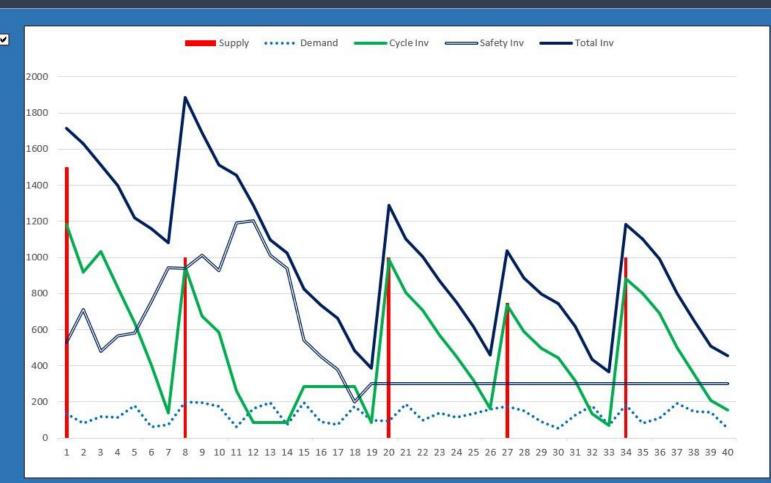
	Α	В	С	D	E	F	G	Н	1	J	
22	\$	Project	Tracker				_			1	
23		Items		Title:	Project Xanadu: new location recommendation			6	to review	to latest	
24		Select	Status	ltem	Text	Name	Ν	Up	Latest	Duration	
25	10	۲	·	2	team roster and schedule	Jose C.	3	9	06/23/2021	28 days	
26		0		3	define selection criteria	Mary M.	4	G,	07/04/2021	39 days	
27		0	Ō	4	research and data collection	Walter R.	4	G	06/16/2021	21 days	
28		0	·	5	data analysis and evaluation	Grace Y.	2	3	06/16/2021	14 days	
29		0	o	6	proposal alignment and presentation	Jose C.	1	B	06/23/2021		
30		0		7			0	æ			
31		0		1	Project Charter	Jose C.	4	\otimes	07/04/2021	39 days	
51									Sp	olit screer	n with
52		Notes pe	r Item/Da	te	select column headings for help				lir	nked Item	ns and
53		Select	-								
54			Status	ltem	Note	Name	_	Up	Start		
	-	۲	Status	ltem 2	Note due date extended 2 weeks to account for delays	Name Jose C.		Up	Start	Notes tal	
55			and the second second second	C C C C C C C C C C C C C C C C C C C			_	Up	Start		
55 56				2	due date extended 2 weeks to account for delays	Jose C.		Up	Start 06/23		
		۲		2 2	due date extended 2 weeks to account for delayschanged 6/23 meeting to 11:00 due to webcastall members confirmed available and agreed to Wed 10:00 weekly	Jose C. Jose C.		Up	Start 06/23 06/16/2021		
56		•		2 2 2	due date extended 2 weeks to account for delays changed 6/23 meeting to 11:00 due to webcast all members confirmed available and agreed to Wed 10:00 weekly meeting Walter needs final criteria to proceed + 1 month for data collection;	Jose C. Jose C. Jose C.		Up	Start 06/23 06/16/2021 05/26/2021		
56 57	-	● ● ○		2 2 2 4	due date extended 2 weeks to account for delays changed 6/23 meeting to 11:00 due to webcast all members confirmed available and agreed to Wed 10:00 weekly meeting Walter needs final criteria to proceed + 1 month for data collection; Jose to follow up with Mary	Jose C. Jose C. Jose C. Walter R.		Up CP	Start 06/23 06/16/2021 05/26/2021 06/16/2021	Notes tal	
56 57 58		● ● ○		2 2 2 4 6	due date extended 2 weeks to account for delays changed 6/23 meeting to 11:00 due to webcast all members confirmed available and agreed to Wed 10:00 weekly meeting Walter needs final criteria to proceed + 1 month for data collection; Jose to follow up with Mary Jose will commission InfoDabble to do the graphics	Jose C. Jose C. Jose C. Walter R. Jose C.			Start 06/23 06/16/2021 05/26/2021 06/16/2021 06/16/2021 06/23/2021	Notes tal	

Updating

1	Α	В	С	D	E	F	G	Н	1	J
22	\$	Project 7	Fracker							(i)
23		Items		Title:	Project Xanadu: new location recommendation			5	5 to review	to latest
24		Select	Status	ltem	Text	Name	N	Up	Latest	Duration
25	10	۲		2	team roster and schedule	Jose C.	4	~	08/17/2021	83 days
26		0		3	Thine selection criteria	Mary M.	4	3	07/04/2021	39 days
27		0	·	4	rese and data collection	Walter R.	4	F	06/16/2021	21 days
28		0	·	5	data	Grace Y.	2	3°	06/16/2021	14 days
29		0	·	6	Double-click Item	Jose C.	1	3	06/23/2021	
30		0		7	adds Note with		0	9		
31		0		1	P	Jose C.	4	\otimes	07/04/2021	39 days
51					Name and Date					
52		Notes per	r Item/Dat	te	select column headings for					
53		Select	Status	ltem	Note	Name		Up	Start	End
54		۲		2	due date extended 2 weeks to account for delays	Jose C.			06/23/2021	
55		۲		2	enter today's update	Jose C.		~	08/17/2021	
56		۲		2	changed 6/23 meeting to 11:00 due to webcast	Jose C.			06/16/2021	
57		۲		2	all members confirmed available and agreed to Wed 10:00 weekly meeting	Jose C.			05/26/2021	
58		0	·	4	Walter needs final criteria to proceed + 1 month for data collection; Jose to follow up with Mary	Walter R.			06/16/2021	

Chapter 9: MRP Demo

Ma	aterial Re	quireme	ents Plan	nning De	emo	40 days	١
• •	5	of 5	Demand a	and Supply	5 of	5	4 >
$+\Delta$	X larg	ge demand ra	ange		7 day cycle		$+\Delta x$
	Rando	m Demand	Random	Begin	ning Stock	350	
Demand	D LO	w Demand	45	Су	cle Period	7 day	Supply Settings
Der Der	Hig	h Demand	200	Minimun	n Quantity	500	Sup
		lt Demand	200	Incrementa	l Quantity	250	07
4	4	of 4	Saf	ety	3 of	4	4 >
$+\Delta$	K static ar	nd future safe	ety stock	fut	ure safety ti	me	$+\Delta x$
	Static	Initial	300	Static	Initial	0 days	
Safety Stock Settings	18	Day 3	50		Day 3	<mark>3 d</mark> ays	s a
ifety Stoc Settings	Future	Day 7	150	Future	Day 7	4 days	Safety Time Settings
fet) Sett	Safety	Day 11	400	Safety	Day 11	5 days	feth Sett
Sa	Stock	Day 15	200	Time	Day 15	6 days	Sa
		Day 19	300		Day 19		
Day	Ind Dem	With ST	± SS	Total Dem	Supply	Cycle Inv	То
1	-136	-367	-300	-667	1500	1183	1
2	-84	-263	0	-263	0	920	2
3	-117	-137	250	113	0	1033	1
4	-114	-198	0	-198	0	835	1
5	-179	-195	0	-195	0	640	2
6	-61	-236	0	-236	0	404	3
7	-76	-164	-100	-264	0	140	3
8	-198	-194	0	-194	1000	946	4
9	-195	-269	0	-269	0	677	5



MRP Demo

ABOUT MRP DEMO

MRP, or Material Requirements Planning, is in essence a simple ledger of future inventory debits and credits. However, due to a variety of dynamic variables, results can be difficult to predict and visualize. This sheet gives the common tabular display of the future plan, and a chart of demand, supply and inventory.

The Demo is an instructional tool using VBA-controlled Scenarios to present sets of inputs and their effect on output. Several illustrative Scenarios are preset and can be scrolled. The user can enter their own values, and can save, change or delete Scenarios.

Variables include demand randomized within a high/low range, or constant; beginning inventory, minimum and incremental order quantities, and cycle time; safety stock and safety time, both static and time-phased.

This project uses complex formulas made readable with line breaks, indents and help text.

Excel features: Advanced formulas with Name references; Conditional Formatting; Table; Chart; clean screen; **VBA**: Formatting, Scenario Management

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MRP Demo

USAGE NOTES

The demo is most effective with maximum screen space. Headings are hidden (Alt-W,V,H). Additional space can be gained by:

Ctrl+F1 to hide the ribbon

Shift+Ctrl+F1 to hide the ribbon, toolbar and status bar

The five grouped buttons in each section are used to select, add, change and delete scenarios, with prompts to guide the user.

- < and > spinbuttons cycle through existing scenarios
- + button creates a new scenario with the current values in the section
- Δ button changes the values and/or description of the current scenario
- X button deletes the current scenario and renumbers any scenarios above it

All white cells are editable for ad-hoc demo or to set up new scenarios. Scenarios can also be manually managed via Scenario Manager, Alt-A,W,S.

Table formulas can be read by expanding the formula bar, Shift+Ctrl+U.

A hidden sheet stores values generated by VBA macros.

Input



Table

	Day	Ind Dem	With ST	± SS	Total Dem	Supply	Cycle Inv	То	STDays	STQty	SSQty	Safety Inv	Total Inv	Demand
=N	("SUPPL	Y (from inputs)F2 or Ctr	+Shift+U	to read")+		1360	1	0	-268	-300	568	1928	172
N('if (net	t demand, rou	ndup (max o	f (netted	cycle demand a	and min	1110	2	0	-463	-300	763	1873	55
qty	/), divide	d by inc qty) ti	imes inc qty,	else 0)	")+		1000	1	3	-728	-50	778	1778	95
IF(MIN(IF([@Day]=1,N(St	tock),OFFSET	r([@[Cycl	e Inv]],-1,0))+		854	1	3	-701	-50	751	1605	173
[@	[Total D	0em]] ,0),					706	2	3	-654	-50	704	1410	195
R	OUNDU	IP <mark>(</mark>					405	3	3	-786	-50	836	1241	169
	MAX(138					12	1050	191
	-SUM	(OFFSET([@[T	otal Dem]] ,(),0,MAX <mark>(</mark> C	ycle,1)))-			Fo	rmulas	are wr	itten v	vith	904	146
	IF([@	@Day]=1,N(Sto	ock),OFFSET	([@[Cycle	Inv]] ,-1,0)),		50-	st	ructure	ed refer	ences	on	1506	148
	MinQt	ty)/					401						1378	128
Ν	AAX(Inco	Qty,1),0)*					467	mu	ltiple li	nes anc	with	selt-	1705	173
I	AAX(Inc	Qty ,1) ,					370		cont	ained n	otes		1538	167
0)							370			.unicu n			1436	102
	14	-80	0	0	0	0	370	9	5	-586	-400	986	1356	80
	15	-197	0	200	200	0	570	9	6	-389	-200	589	1159	197
	16	-108	0	0	0	0	570	10	6	-281	-200	481	1051	108
	17	-184	0	0	0	0	570	11	6	-97	-200	297	867	184
	18	-97	0	0	0	0	570	12	6	0	-200	200	770	97

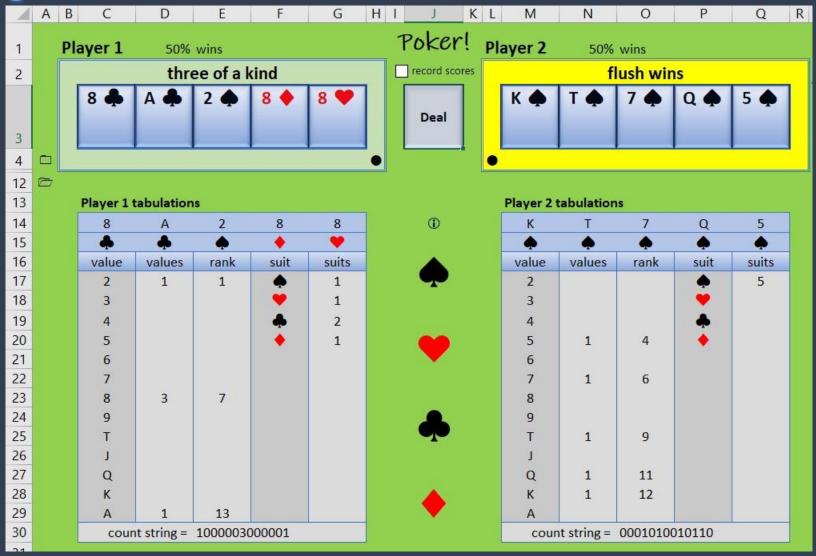
Chart



Scenarios

Ma	ate	terial Requirements Planning Demo 40 days											
• •		5	of 5	Demand a	and Sup	5 of	5	+ >					
$+\Delta$	x	larg	ge demand ra	ange		7	7 day cycle						
n or		Randor	m Demand	🖌 Random		Beginnin	350	5					
ing	0	Lov	w Demand	45	Cycle P		e Period	7 day	ting				
Demand Settings		Hig	h Demand	200	Mi	nimum C	uantity	500	Setting				
		Defau	<mark>lt Demand</mark>	200	Increi	mental C	uantity	250					
4		4	of 4	Sat	fety	Delete S	cenario		X				
$+\Delta$	x	static ar	nd future saf	ety stock									
		Static	Initial	300	Sta								
s ck	,		Day 3	50		2	Delete sc	enario SUPPLY	5?				
Sto	0	Future	Dov 7	150	Fut	-							
Safety Stock Settings		Safet S	cenario	controls									
Sat	200	Stoc	state the	action	Ti		01	7					
			and re	auire			OK	Cancel					
Dav		Ind I	confirm	-	Total		10						

Chapter 10: Fun and Games



Fun and Games

ABOUT FUN AND GAMES

Games are great for demonstrating interactive and random number techniques. Fun features encourage repetition, which accelerates learning. This file has four sheets for single player practice, including two games with simulated competition.

Poker: cards are dealt to two players, with click to hold for up to three deals before the winner is revealed.
Counting and scoring processes are displayed. Uses symbols and array functions.
Dice: two pairs of dice are rolled and the result scored. A game can be up to 100 rolls. Dice are designed in a symbol font with various dot options, using array constants to put the dots on the face.
Snake: uses four directional arrows to trace the cursor around a play zone, demonstrating how selection works. Uses the Worksheet_SelectionChange event. Pick one of two simple games, or just practice.
Palindrome: fun word-play; enter a phrase and it is separated by letter and reflected to see if a palindrome can be made. Adjust spacing and punctuation, and record results. Uses array and text functions.

Excel features: Advanced formulas; Logical, Text, Array Functions; Name Manager named ranges and formulas; Conditional Formatting; Data Validation rules and messages; Table processing; Controls; **VBA**: each sheet contains its own macros for game play, selection and navigation.

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Fun and Games

USAGE NOTES

Poker

<u>Play</u>: click Deal button; click cards to hold. Hold at least one card to replace others <u>Settings</u>: click icons to navigate or hide elements; click deck image to view deck <u>Record</u>: click checkbox to record hand results, click hash mark icon to view or delete history

Dice

<u>Play</u>: click the 3D die to roll <u>Settings</u>: select Pip; enter doubles multiplier; enter rolls per game; click folder for more info

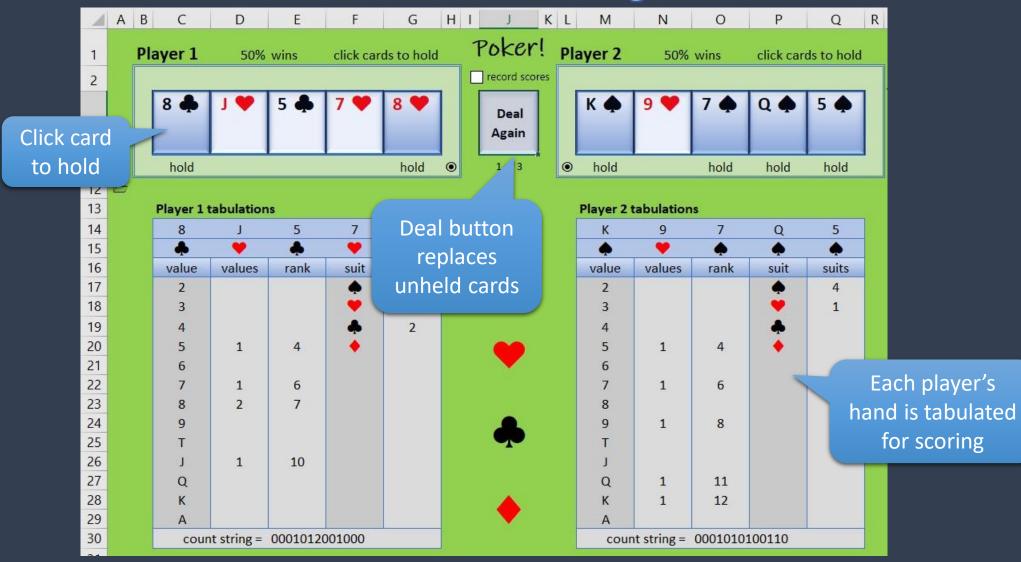
Snake

<u>Play</u>: practice with arrows or mouse in play zone; click a game icon to turn game on/off <u>Snake</u>: select as many cells as you can one at a time before hitting a filled one <u>Balance</u>: arrow or mouse to fill the zone and balance the four symbols <u>Settings</u>: click trash can to clear zone; click switch to disable tracking; change tracking symbols

Palindrome

<u>Start</u>: click clear buttons to clear input areas; click demo buttons for example <u>Input</u>: enter first half of palindrome; select pivot point 0 or 1 <u>Edit</u>: enter spacing adjustments, punctuation and capitalization as instructed <u>Record</u>: click button to record palindrome or to review saved palindromes <u>Demo</u>: enter seconds per step to view automated demos

Poker Play

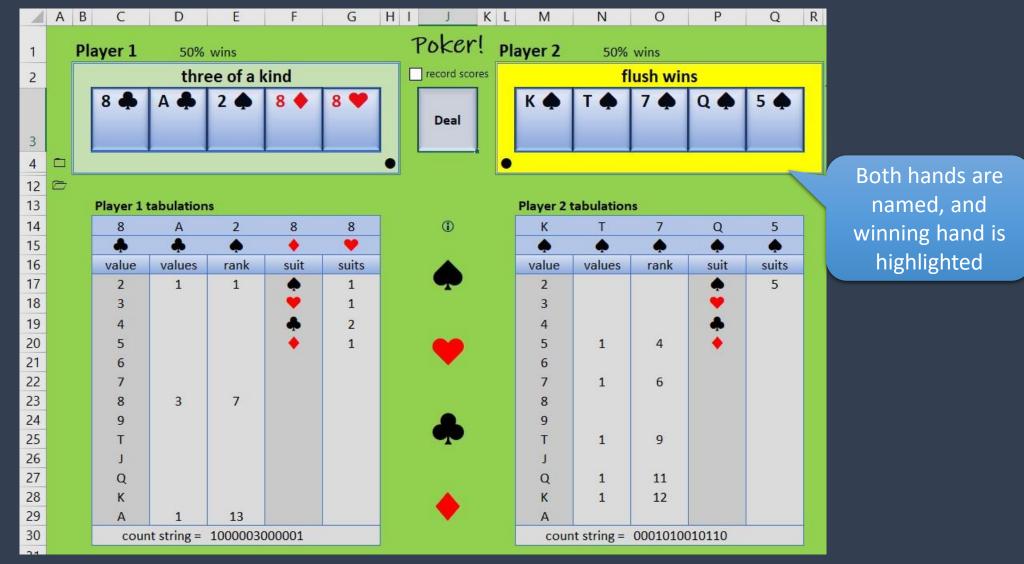


Poker Scoring

Player hands are scored and ranked for tiebreaking

Scoring calculations													
	Winner		2		Tiebrea	k 1	0						
	Show winner		TRUE		Tiebrea	k 2	0						
	High hand	2		Tiebrea	k 3	0							
index	hand	win	player1	player2	tie1.1	tie1.2	tie2.1	tie2.2 tie3.1		tie3.2			
1	royal flush						C A						
2	straight flush												
3	four of a kind						С						
4	full house												
5	flush			1		12		11		9			
6	straight	10%											
7	three of a kind	30%	1		7								
8	two pair												
9	pair 60%												
10	card												
		10											

Poker Win



Poker Deck



Deck this filters Pack for cards not in Dealt =FILTER(Pack,ISNA(MATCH(Pack,Dealt[Dealt],0))) NextCard this picks a card at random from Deck =INDEX(Deck#,RANDBETWEEN(1,COUNTA(Deck#)))

Deck grid this transposes and filters Deck by suit (4 cells with same formula) =IFERROR(TRANSPOSE(FILTER(Deck#,RIGHT(Deck#,1)=DeckSuit)),"") this transposes and filters Dealt by suit (4 cells with same formula) Dealt grid

image copy to play area

=IFERROR(TRANSPOSE(FILTER(Dealt[Dealt],RIGHT(Dealt[Dealt],1)=DeckSuit)),"")

Dealt cards are copied to Dealt table by macro, and removed from remaining Deck by FILTER

104

105

106

107

108

109

110

111

112 113 114

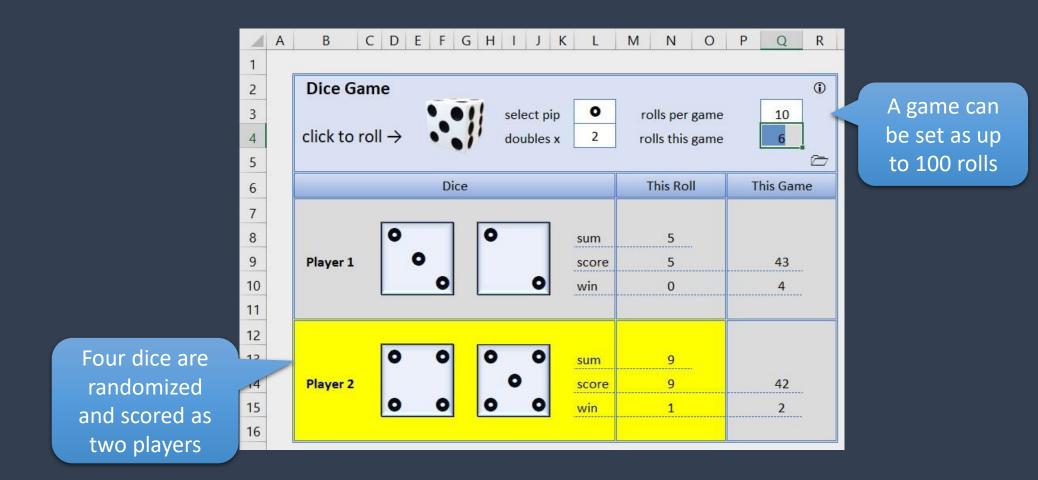
	ext unloc ealt list b	
	xt card:	к
Pack	Dealt	D
2 🌩	8 🐥	3
3 🌩	К 🌩	4
4 🏟	J 💙	8
5 🄶	9 💙	9
6 🌩	5 🐥	А
7 🌲	7 🌲	2
8 🌩	7 🎔	3
9 🄶	Q 🌩	4
Т 🌩	8 🧡	6
J 🔶	5 🄶	7
Q 🌩	6 秦	9
К 🏟	J 🄶	J
Α 🔶	8 🔶	Q
2 🐥	Т 🐥	К
3 🐥	Α 🐥	2
4 🐥	2 🄶	3
5 🐥	Т 🄶	4
6 🐥		5

Poker Recording

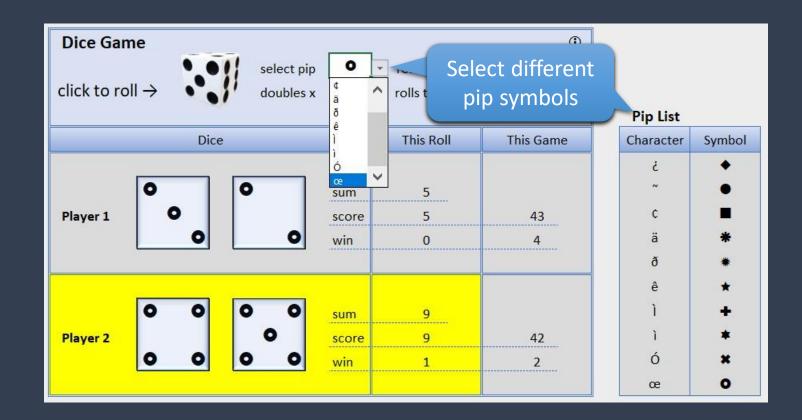
	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	СР	CQ	CR	CS	CT	CU	CV	CW	CX	CY
87																				
88		Scores		-			Cł	nart i	•		to delete histor	y, delete	all table	rows bu	t one, in	that one	delete o	nly the w	hite cells	
89	39 This hand			Player 1				50%	% Player 2				50% An			Ana	nalysis			
90		8/17/21 7:47	11	2	three of a kind	8 🐥	Α 🐥	2 秦	8 🔶	8 🧡	flush	к 🌩	Т 🌲	7 秦	Q 🌩	5 🌲	W	ins	P1-	P2
91		When	Game	Winner	Hand1	Card11	Card12	Card13	Card14	Card15	Hand2	Card21	Card22	Card23	Card24	Card25	P1	P2	Games	%
92		8/2/21 11:20	10	1	pair	к 🐥	3 🐥	Q 🌩	A 🌩	К 🔶	card	6 🌩	A 🔶	4 🐥	8 🐥	К 🎔	5	5	0	0
93		8/2/21 11:19	9	1	pair	Q 🔶	3 🌲	4 🏟	6 🐥	Q 🎔	pair	Q 🐥	5 🔶	5 🌩	8 🌩	К 🐥	4	5	-1	-11
94		8/2/21 11:18	8	1	pair	8 🔶	3 🔶	7 秦	Α 🔶	A 🐥	pair	6 🧡	к 🔶	A 🌩	6 🔶	Q 🎔	3	5	-2	-25
95		8/2/21 11:17	7	2	pair	9 🐥	2 🎔	J 🐥	7 🐥	9 🔶	pair	6 🌲	4 🎔	A 🐥	А 🎔	8 🎔	2	5	-3	-43
96		8/2/21 11:14	6	1	three of a kind	2 🌲	2 💙	2 🐥	7 🎔	Т 🎔	two pair	5 🐥	8 🄶	A 🌩	Α 🐥	8 🔶	2	4	-2	-33
97		8/2/21 11:14	5	2	card	9 🧡	Т 🐥	Q 🔶	8 🔶	2 🔶	pair	3 秦	А 🐥	6 🐥	A 🔶	Q 🧡	1	4	-3	-60
98		8/2/21 11:13	4	2	two pair	Α 🎔	2 🐥	Α 🌩	2 🔶	8 🧡	straight	9 秦	7 🌲	6 秦	5 🐥	8 秦	1	3	-2	-50
99		8/2/21 10:16	3	1	three of a kind	3 🎔	5 秦	6 🐥	6 🎔	6 🔶	two pair	A 🎔	т 🎔	2 🐥	т 🐥	2 🏟	1	2	-1	-33
100		8/2/21 10:14	2	2	card	7 🐥	J 🎔	К 🏟	8 🐥	9 🎔	three of a kind	Q 🔶	Т 🔶	8 🔶	т 🐥	Т 🎔	0	2	-2	-100
101		8/2/21 10:13	1	2	pair	8 🔶	2 🐥	Q 🌩	3 🌲	2 🌩	pair	5 🐥	6 🧡	5 🌩	J 🐥	2 🔶	0	1	-1	-100

Game results are optionally stored for analysis

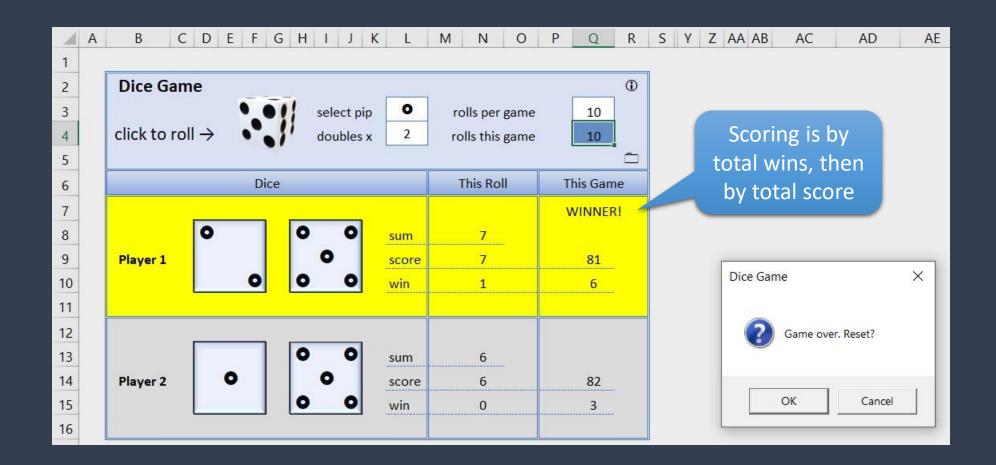
Dice Play



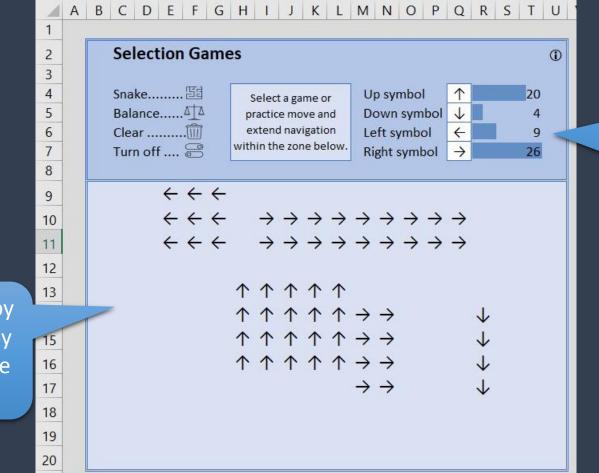
Dice Pip



Dice Win



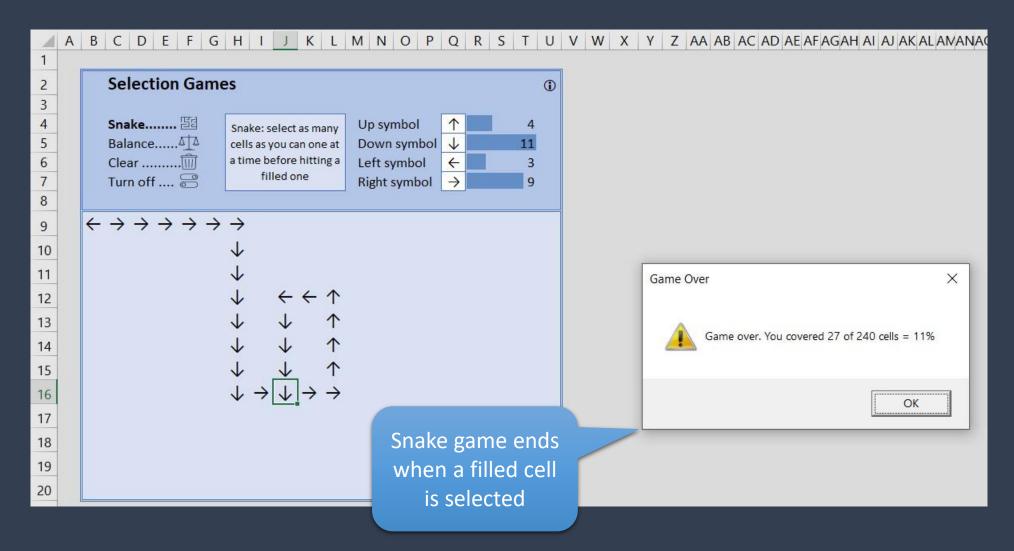
Snake Practice



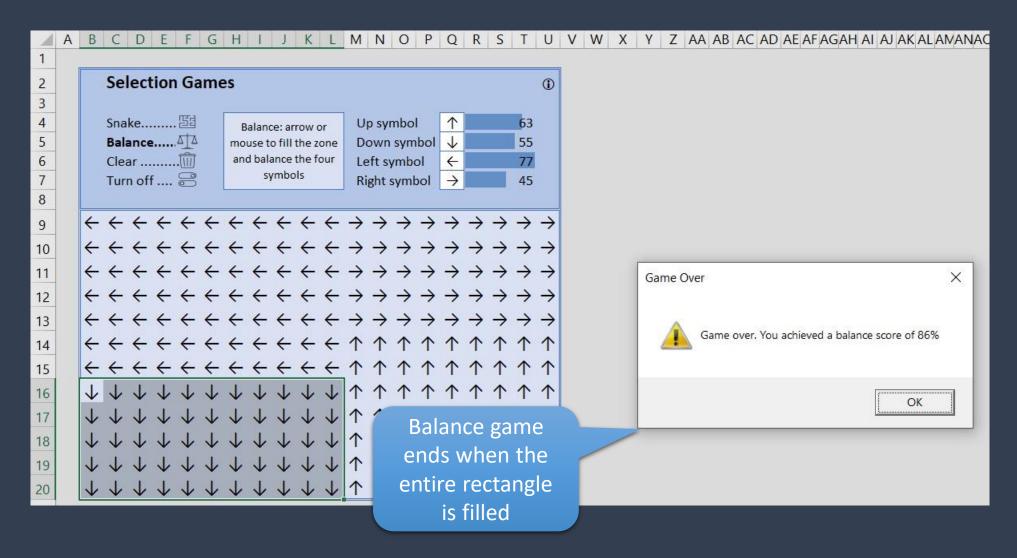
Count of each symbol is tracked; symbols can be changed

The play zone is filled by any selection change by arrows or mouse, alone or with shift/drag

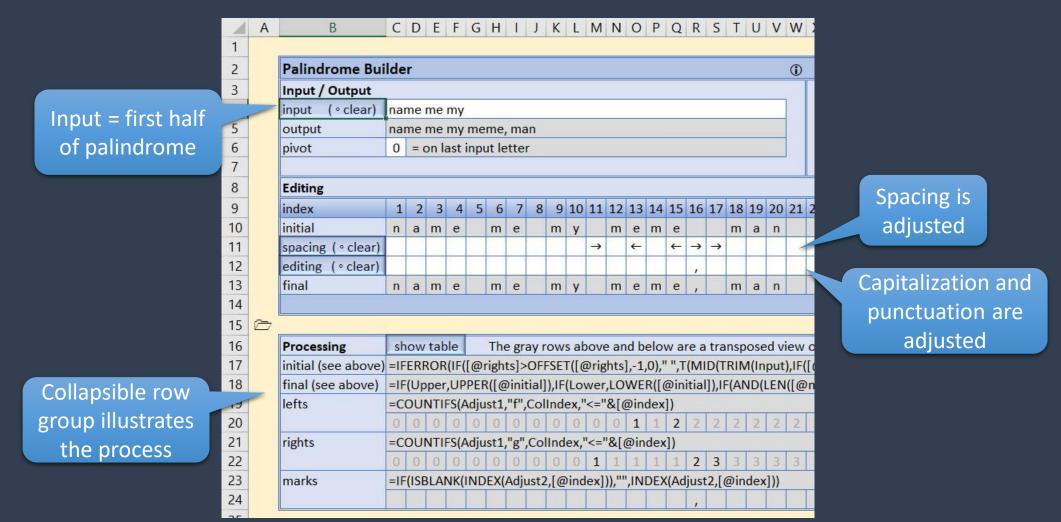
Snake Game



Snake Balance



Palindrome



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