

OMG! Excel eBook 2020

27+ Wow Tricks to make you Faster-Smarter-Better

By Rishabh Pugalia

ex-KPMG, ex-J.P. Morgan | Chartered Accountant

Taught 20k+ participants across PwC, EY and Deloitte over last 11 years



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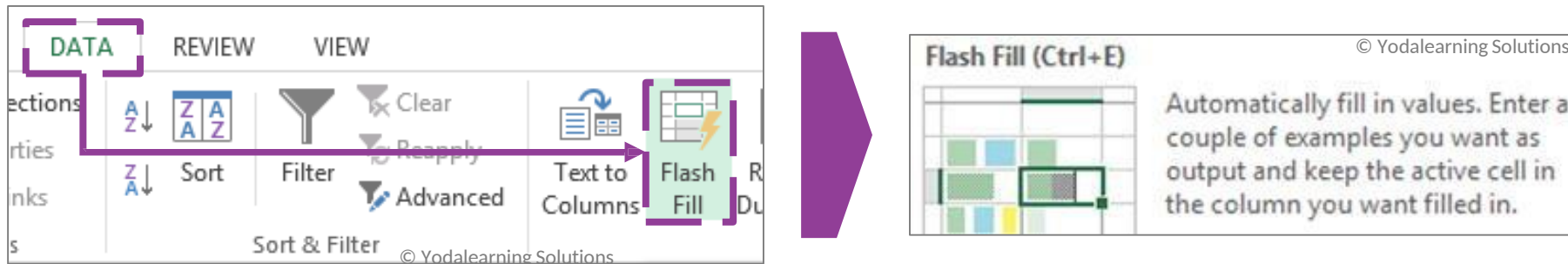
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#1: Flash Fill

Clean data in a flash

Flash Fill (Ctrl + E)

- Flash Fill feature is a new feature introduced in Excel 2013. You can find The **Flash Fill** Option under the **Data** Tab, right besides **Text to Column**.



- Flash Fill requires the user to define the pattern in the adjoining / connected cell of the same row with 1-3 output samples.

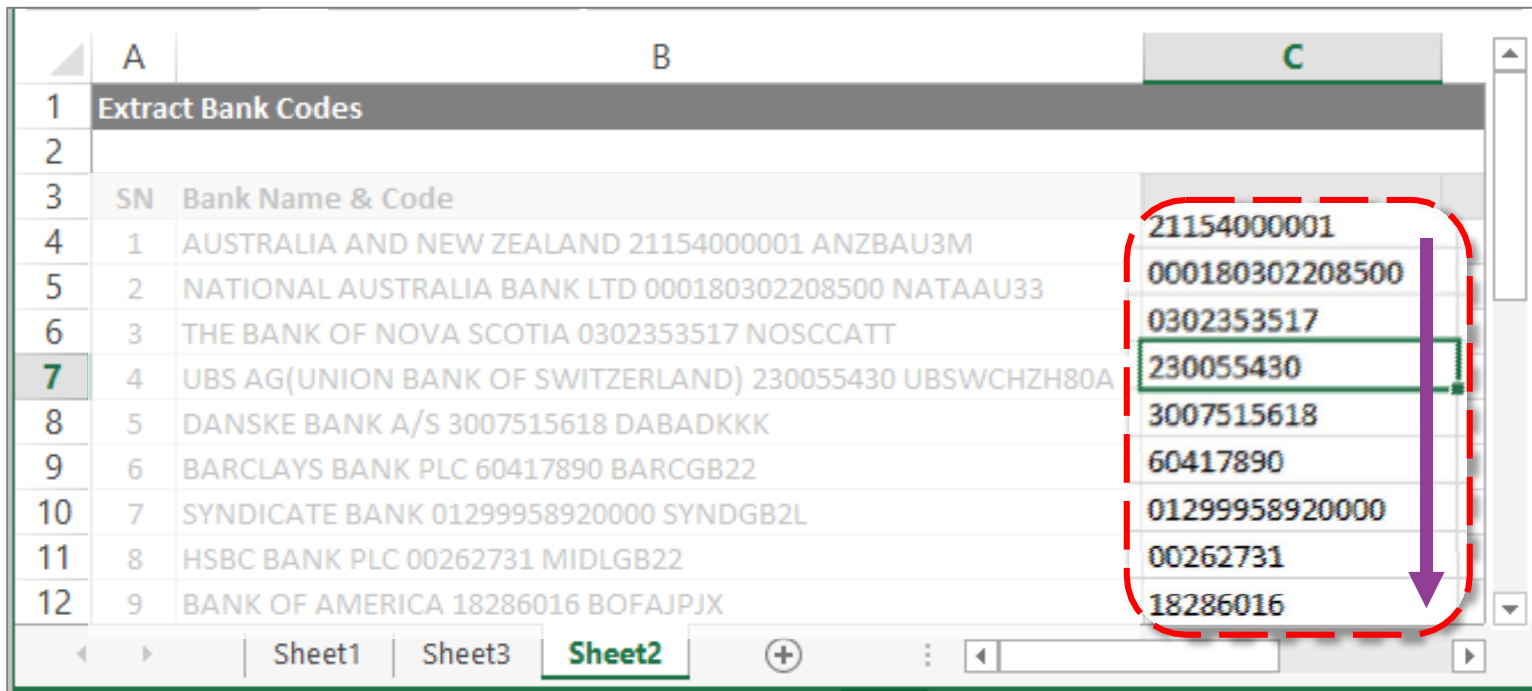


You can keep the Flash Fill option ON by default. Go to the **File** > **Options**. Click on the **Advanced** menu option and ensure that the **"Automatically Flash Fill"** box is checked On.

- **Situation:** Your data set has the (1) Bank Name, (2) Bank Account No. of different lengths, and (3) Addl. ID code.
- **Complexity:** You want to extract the Bank Account No. individually in the adjacent column. The relevant string has been shaded in Yellow. **Text to Columns** will not help as the data set is unstructured with a proper delimiter.

	A	B	C
1	Extract Bank Codes		
2			
3	SN	Bank Name & Code	
4	1	AUSTRALIA AND NEW ZEALAND 21154000001 ANZBAU3M	21154000001
5	2	NATIONAL AUSTRALIA BANK LTD 000180302208500 NATAAU33	
6	3	THE BANK OF NOVA SCOTIA 0302353517 NOSCCATT	
7	4	UBS AG(UNION BANK OF SWITZERLAND) 230055430 UBSWCHZH80A	
8	5	DANSKE BANK A/S 3007515618 DABADKKK	
9	6	BARCLAYS BANK PLC 60417890 BARCGB22	
10	7	SYNDICATE BANK 01299958920000 SYNDGB2L	
11	8	HSBC BANK PLC 00262731 MIDLGB22	
12	9	BANK OF AMERICA 18286016 BOFAJPJX	

- **Solution:** Flash Fill Feature needs few output samples. Steps include:
1. Copy the **Bank A/c No. 21154000001** from Column B
 2. Go to the adjoining cell and paste the Bank A/c No. 21154000001 there with a preceding apostrophe
 3. Press Enter
 4. Now press **Ctrl + E** to activate Flash Fill
 5. Flash Fill Technique will recognize the pattern and automatically fill the desired data in the blank cells below



	A	B	C
1	Extract Bank Codes		
2			
3	SN	Bank Name & Code	
4	1	AUSTRALIA AND NEW ZEALAND 21154000001 ANZBAU3M	21154000001
5	2	NATIONAL AUSTRALIA BANK LTD 000180302208500 NATAAU33	000180302208500
6	3	THE BANK OF NOVA SCOTIA 0302353517 NOSCCATT	0302353517
7	4	UBS AG(UNION BANK OF SWITZERLAND) 230055430 UBSWCHZH80A	230055430
8	5	DANSKE BANK A/S 3007515618 DABADKKK	3007515618
9	6	BARCLAYS BANK PLC 60417890 BARCGB22	60417890
10	7	SYNDICATE BANK 01299958920000 SYNDGB2L	01299958920000
11	8	HSBC BANK PLC 00262731 MIDLGB22	00262731
12	9	BANK OF AMERICA 18286016 BOFAJPJX	18286016



How to train Flash Fill?

- Take more samples
- Take tough samples
- No blank columns in between
- Use Apostrophe for numbers with preceding zeroes

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#2A: Find & Replace with asterisk

Remove unwanted data quickly

- **Situation:** The data set reflects readings of electricity units consumed (kwh). These have been measured on different dates and time.
- **Complexity:** You want to find the total electricity units consumed. To do so, the numbers highlighted in Yellow should be extracted. E.g. 0.384, 1.201 etc.



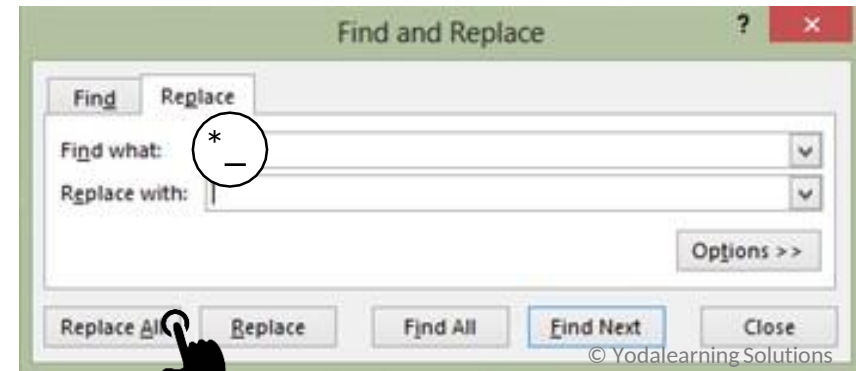
	A
1	Raw Data - Source: Modeloff Questions
2	3 PM Mon 24th-Mar-2014__0.384 kwh
3	5AM 15-Aug-2014__1.201 kwh
4	__8PM Thu 20-Mar-2014__1.523 kwh
5	6PM 23rd-Apr-2014__0.424 kwh
6	_1AM Friday 19th-Dec-2014__0.209 kwh
7	_5AM Tue 19th-Aug-2014__1.228 kwh
8	12PM Mon 7th-Jul-2014__1.296 kwh



Flash Fill can also be used.

□ Solution:

1. Choose column A (data set)
2. Press **Ctrl + H** for **Find & Replace**
3. Type “*_” (asterisk followed by underscore)
4. Click on **Replace All**



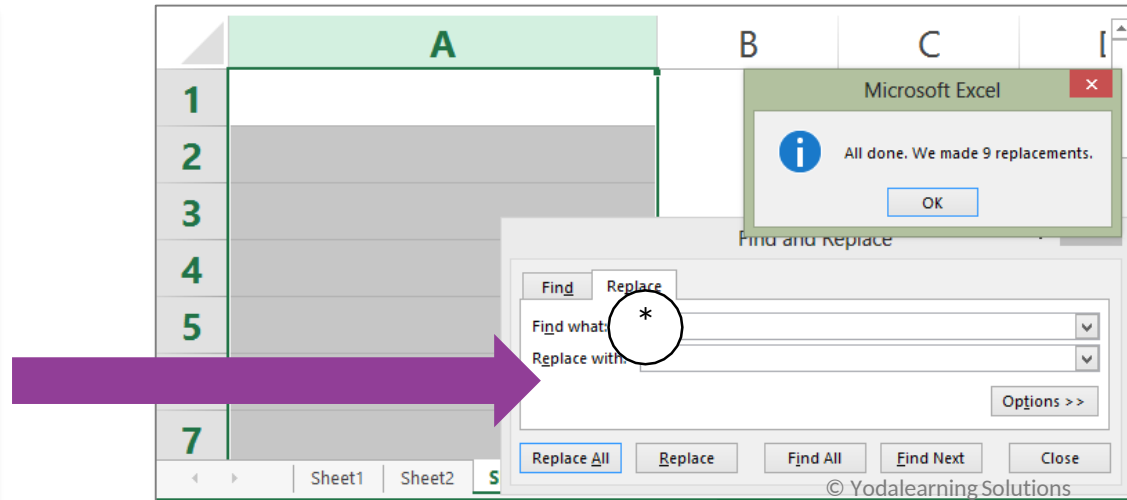
5. “*_” implies that all data set till the last occurrence of underscore will be removed

#2B: Find & Replace the asterisk

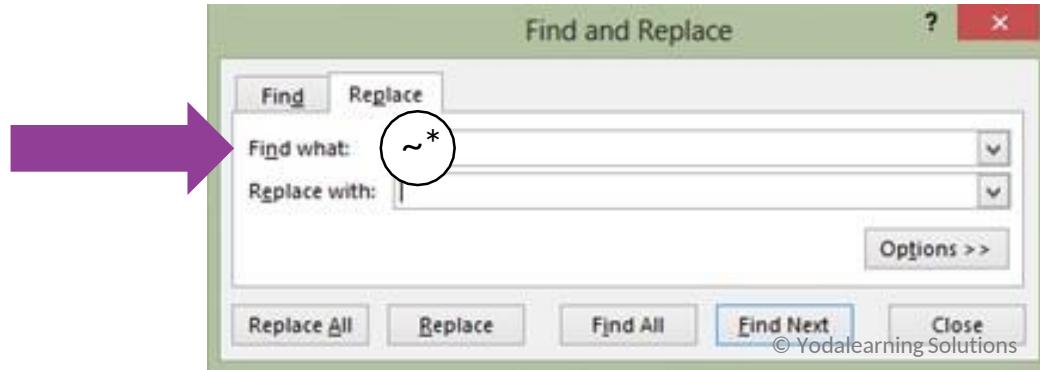
An asterisk is a wildcard character

- **Situation:** The names list contain unnecessary asterisk signs.
- **Complexity:** Using **Find and Replace** with asterisk will remove ALL the characters including the names.

	A
1	Ismael Abdusalaam
2	Jeff Abney*****
3	Jennife**r Adams
4	Cindy Alligood
5	Darryl*****Andrews
6	Maryalice Applegate
7	Lynn****Ashcraft



- **Solution:** Use tilde sign (~) before the asterisk sign (*) to neutralize the power of asterisk. This will only remove the asterisk signs.



#2C: Find & Replace in MS Word

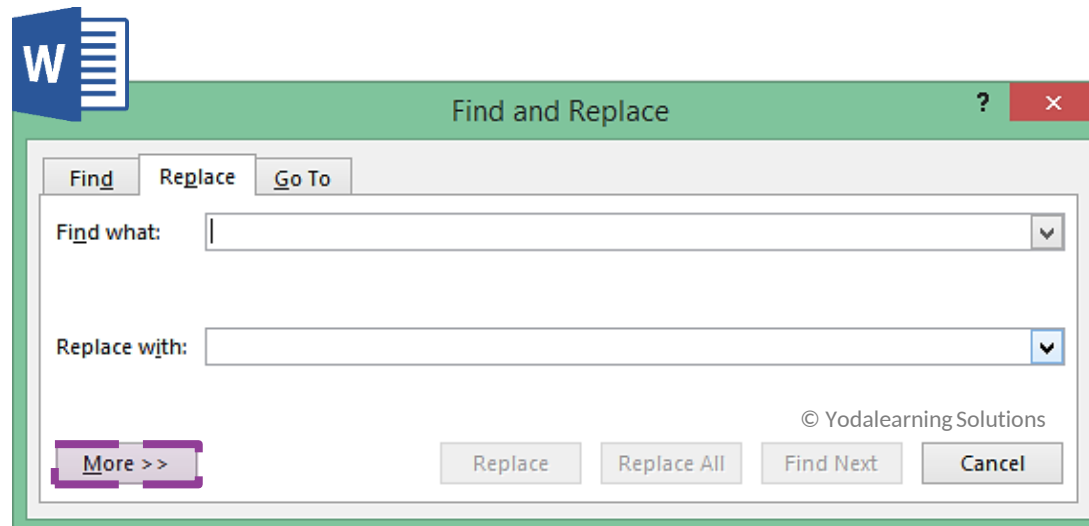
Target all digits, letters

- **Situation:** The data set is composed of names and transaction IDs (nos. of different lengths)
- **Complexity:** You want to split names and numbers in two different columns. Text to Columns will not help as the data is not structured enough.



Name & No.		© Yodalearning Solutions
Bradshaw, Tammy	219	?
Mrus, Sally	32456	
Ponder, Tracy	00817	
Wyckoff, Sandiskie	G. 9954	
Walker, Pansy J.	12887	
Evans, Kristen	0034	
Sharpe, Jonathan	75552	

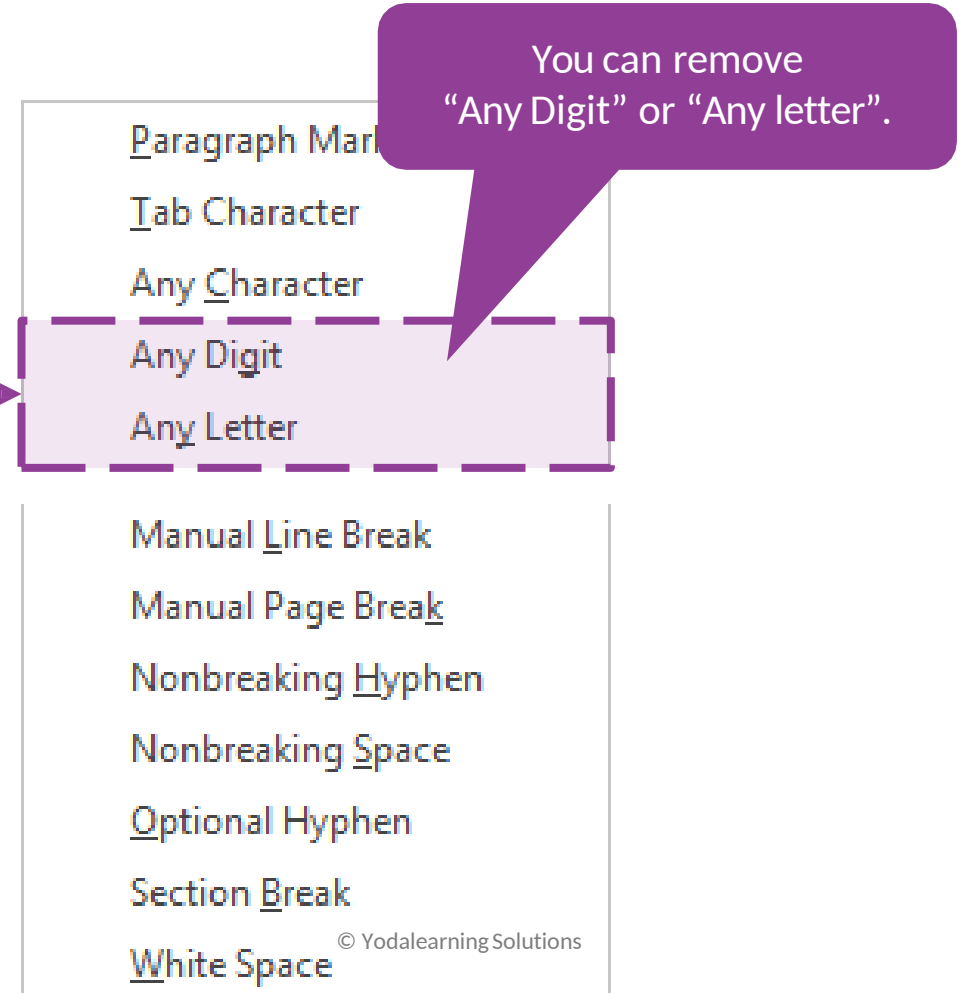
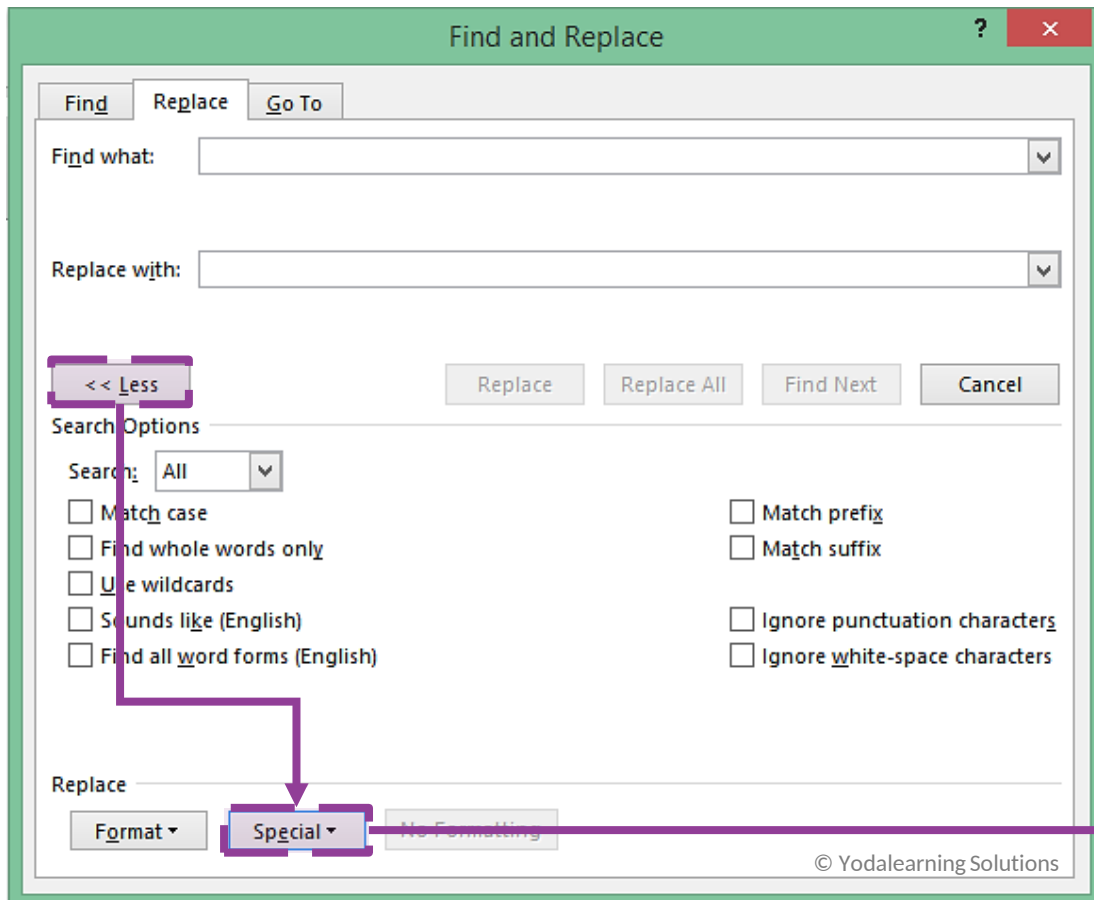
- **Solution:** Use the **Find & Replace of MS Word**. It has advanced options under “More” > “Special”



Flash Fill can also be used.

... cont'd

- The data can be pasted to MS Word twice. On the first, the digits can be removed and on the other, the letters can be removed.



#3A: *Go To (Special)*

to fill blank cells with Ctrl + Enter

- **Situation:** The data set is composed of supplier names along with a series of transactions on the right side.
- **Complexity:** You cannot apply Filter, Sort, and Pivot Tables correctly as the cells in between two supplier names are blank. The list can run in to 1000s of names. How do you fill the blanks?



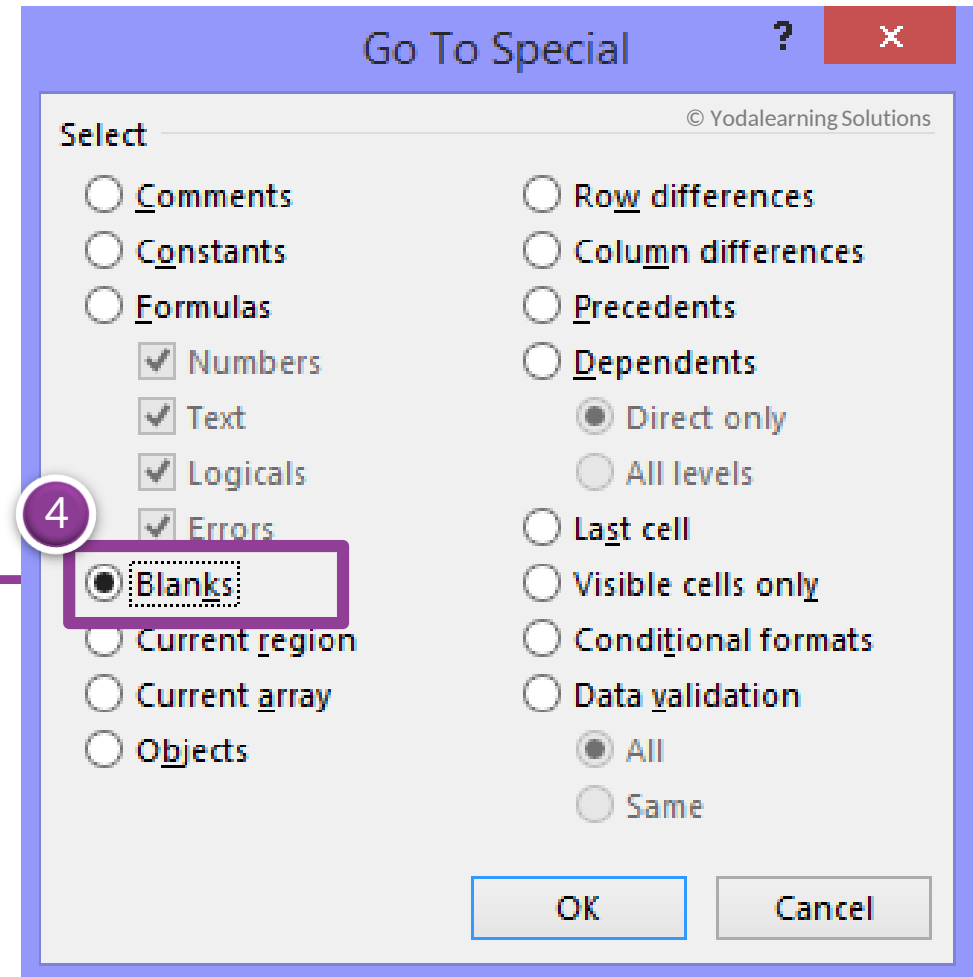
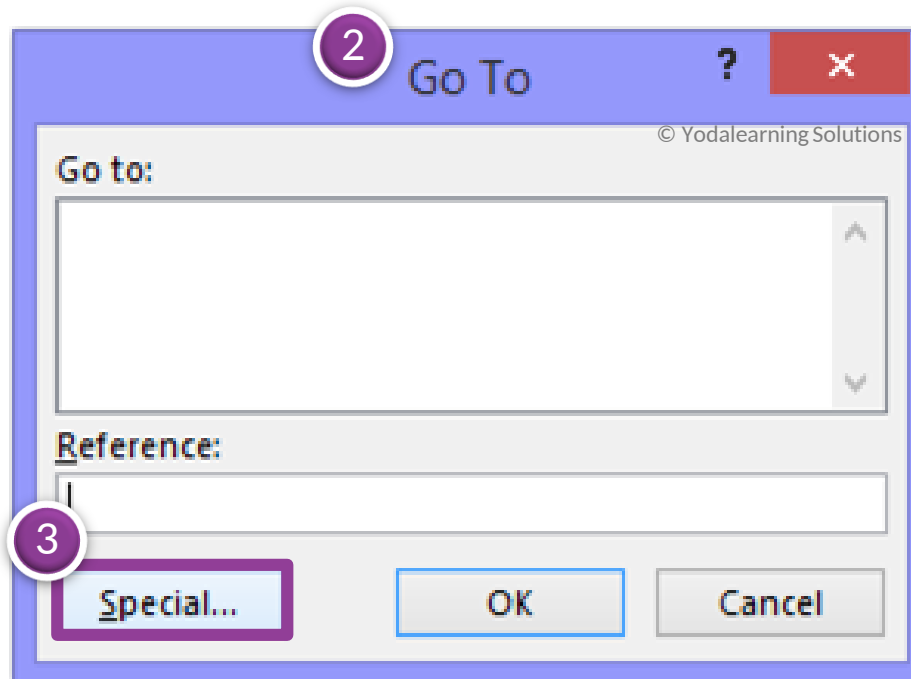
□ **Solution:**

	A	B	C
1	#1: Find Top 3 Supplier names by transaction volume		
2			
3	Supplier No.	Supplier Name	Transaction Amt. Rs.
4	707256	D.C. Power System	125,279
5		?	32,090
6			136,529
7			45,305
8	712157	ATMA Tele Power Limited	108,411
9		?	171,781
10			156,918
11	712158	ANZ Tele Power Ltd	74,676

	A	B	C
1	#1: Find Top 3 Supplier names by transaction volume		
2			
3	Supplier No.	Supplier Name	Transaction Amt. Rs.
4	707256	D.C. Power System	125,279
5			32,090
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7			45,305
8	712157	ATMA Tele Power Limited	108,411
9			171,781
10			156,918
11	712158	ANZ Tele Power Ltd	74,676

1. Choose the relevant data set (portion of Col A & B)

2. Press **Ctrl + G** to activate Go To Special box
3. Click on **“Special”**
4. Choose **“Blanks”** from the options and press **Enter**



5. Press **equal to sign (=)** and choose the cell above
6. Press **Ctrl + Enter**

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	A	B
1	#1: Find Top 3 Supplier names by transactio	
2		
3	Supplier No.	Supplier Name
4	707256	D.C. Power System
5	=A4	
6		
7		
8	712157	ATMA Tele Power Limited
9		
10		
11	712158	ANZ Tele Power Ltd



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	A	B
1	#1: Find Top 3 Supplier names by transactio	
2		
3	Supplier No.	Supplier Name
4	707256	D.C. Power System
5	707256	D.C. Power System
6	707256	D.C. Power System
7	707256	D.C. Power System
8	712157	ATMA Tele Power Limited
9	712157	ATMA Tele Power Limited
10	712157	ATMA Tele Power Limited
11	712158	ANZ Tele Power Ltd



With multiple cells selected, **Ctrl + Enter** will enter the same data / formula logic in all the selected cells at once.

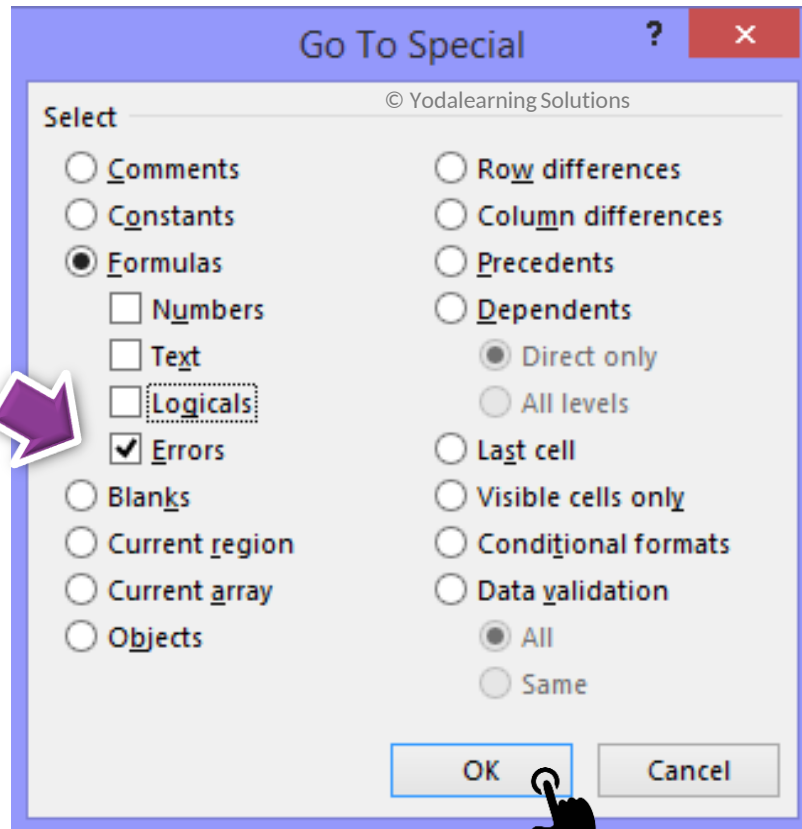
#3B: Go To (Special)
to delete errors in the cells

- **Situation:** Excel data set with many calculations
- **Complexity:** There are many error cells in the Worksheet. You wish to detect and delete these error cells in one go.

	A	B	C	D	E	F	G	H	I	J
4	© Yodalearning Solutions									
5	Dealer No.	Q1 03	Q2 03	Q3 03	Q4 03	Q1 04	Q2 04	Q3 04	Q4 04	Q1 05
6	Dealer 1	633	212	249	893	114	980	719	527	722
7	Dealer 2	120	698	906	466	595	427	837	233	345
8	Dealer 3	15	12	834	198	5	649	844	313	645
9	Dealer 4	310	743		565	227	834	353	246	443
10	Dealer 5	275	482	414	62	982	158	833	940	833
11	Dealer 6	603	644	8	705	478	135	335	945	669
12	Dealer 7	181	79	220	61	972	13	410	360	10
13	Dealer 8	627	876	752	457	710	207	96	119	434
14	Dealer 9	645	#DIV/0!	447	735	986	520	481	113	706
15	Dealer 10	507	647	172	90	944	32	757	389	179
16	Dealer 11	489	906	941	741	834	580	338	500	872
17	Dealer 12	134	244	699	780	734	#NAME?	200	140	306
18	Dealer 13	469	532	412	817	925	889	665	954	252
19	Dealer 14	796	860	2	584	48	738	414	3	655
20	Dealer 15	461	240	162	729	998	591	44	987	700
21	Dealer 16	653	259	823	670	82	601	694	806	44
22	Dealer 17	11	472	288	929	306	578	602	70	427
23	Dealer 18	617	266	742	298	704	267	205	241	#NAME?
24	Dealer 19	403	633	56	154	640	628	148	637	28

□ **Solution:**

1. Choose the data set
2. Press **Ctrl + G**, click on **“Special”** button, and press Enter



3. Choose **“Formulas”** and keep **“Errors”** option ticked ON. Press Enter.
4. All the cells with formula-driven errors will be selected. Press **Delete** or color the cells from the **Home** tab.
5. Note: **“Constant”** implies no formulas i.e. hard-coded text or number.

644	8	705	478	135	335	945	669
779	220	61	972	13	410	360	10
876	752	457	710	207	96	119	434
#DIV/0!	447	735	986	520	481	113	706
647	172	90	944	132	757	389	179
906	941	741	834	580	338	500	872
244	699	780	734	#NAME?	200	140	306
532	412	817	925	889	665	954	252
860	2	584	48	738	414	3	655
240	162	729	998	591	44	987	700
259	823	670	82	601	694	806	744
472	288	929	306	578	602	70	427
266	742	298	704	267	205	241	#NAME?
633	56	154	640	628	148	637	28



“Formulas” with **“Numbers”** can help select those cells whose answers are in number and are based on a calculation.

#4: 2-D Lookup

using VLOOKUP + MATCH

- **Situation:** Given below is a 90-degree Table containing the Product Name and their location-wise prices.
- **Complexity:** A user can choose the product name and the location (in the yellow cells). You need to find out the price based on the user input, without using complex Nested IF statements.

Product Name	Product 1		
Location	London	© Yodalearning Solutions	
Price	=IF(AND(C3="Product 1",C4="London"),4000,IF(AND(
Price List:			
	Amsterdam	London	New York
Product 1	4,500	4,000	4,250
Product 2	3,400	2,800	3,500
Product 3	10,300	9,400	9,850
Product 4	450	400	458
Product 5	6,700	5,786	7,000

... cont'd

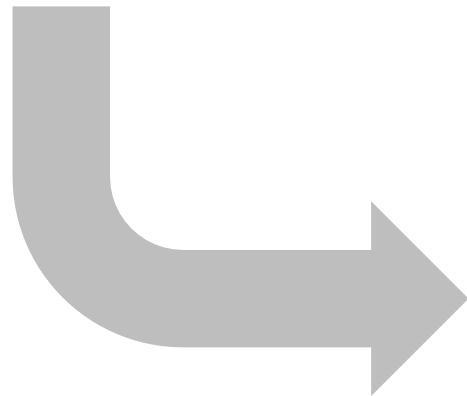
=VLOOKUP(

VLOOKUP(lookup_value, table_array, [col_index_num,][range_lookup])

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=MATCH(

MATCH(lookup_value, lookup_array, [match_type])



VLOOKUP() aka *Senior*

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Emp ID	Name	Gender	Age
9780960142	Price, Susan	F	25
9831012345	Swann, Trina	F	57
9821181333	Hobbs, Patsy	M	21
9830021207	McCook, Sherri E.	M	22

MATCH() aka *Junior*

... cont'd

Solution:

- ❑ VLOOKUP() with MATCH() should help you.
- ❑ MATCH() function will be inserted inside the VLOOKUP() function.
- ❑ MATCH() counts the position no. (1st, 2nd, 3rd...)

	A	B	C	D	E	F
1	Why VLookup() with Match() is important ?					
2						
3	Product Name		Product 1			
4	Location		New York			
5	Price		=VLOOKUP(C3,\$B\$8:\$E\$13,MATCH(C4,\$B\$8:\$E\$8,0),0)			
6						
7						
8						
8			Price List:			
9			Amsterdam	London	New York	
9			Product 1	4,500	4,000	4,250
10			Product 2	3,400	2,800	3,500
11			Product 3	10,300	9,400	9,850
12			Product 4	450	400	458
13			Product 5	6,700	5,786	7,000
14						

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0 (zero) for exact match.

#5: Slabs based Lookup using VLOOKUP with TRUE

- **Situation:** The table to grade the scores (0 to 5) have been provided. The grades range is A+ to E.
- **Complexity:** To calculate the correct grade, it will take a complex Nested IF statement. How would you easily calculate the grades if the grading table was more complex?

Ratings Range	Grade
0-3	E
3.1 to 3.5	D
3.6 to 4.0	C
4.1 to 4.5	B
4.6 to 4.9	A
5	A+

	A	B	C	D
1				
2	Name	AbduSalaam, Ismael		
3	Rating	3.5		
4	Grade	=IF(B3<3.1,"E",IF(B3<3.6,"D",IF(B3<4.1,"C",IF(B3<4.6,"B",IF(B3<5,"A","A+")))))		
5				



Complex nested IF statement

□ **Solution:** Use VLOOKUP with TRUE

1. Create a new column with ratings range (number) arranged in an **ascending order** and where every value is read top to down with the meaning of **>=**

Ratings Range	Grade
0-3	E
3.1 to 3.5	D
3.6 to 4.0	C
4.1 to 4.5	B
4.6 to 4.9	A
5	A+

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	F	G	H
1			
2			
3	>=	Ratings Range	Grade
4	0	0-3	E
5	3.1	3.1 to 3.5	D
6	3.6	3.6 to 4.0	C
7	4.1	4.1 to 4.5	B
8	4.6	4.6 to 4.9	A
9	5	5	A+
10			

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1

2. Use VLOOKUP with TRUE

	A	B	C	D	E	F
1	Applications: VLookup() with "True"					© Yodalearning Solutions
2						
3		Name	Rating	Grade		
4		AbduSalaam, Ismael	3.5	=VLOOKUP(C4,\$F\$4:\$H\$9,3,TRUE)		
5		Abney, Jeffery	3.9	C		
6		Adams, Jennifer M	3.7	C		

Convert the logic in **slabs** ...

... where the logic flow is \geq

... & the values in **ascending** order

	F	G	H
1			© Yodalearning Solutions
2			
3	>=	Ratings Range	Grade
4	0	0-3	E
5	3.1	3.1 to 3.5	D
6	3.6	3.6 to 4.0	C
7	4.1	4.1 to 4.5	B
8	4.6	4.6 to 4.9	A
9	5	5	A+
10			



TRUE can be substituted with 1