Lecture 4:

Manipulating rows and columns within Excel 2019

Inserting rows into a worksheet

• Open a workbook called **Rows and columns**. We need to insert a row for **Japan** between the row for **Canada** and the row for the **USA**. Select the row for the **USA**, as illustrated.

4	А	В	С	D	E	F	G
1							
2							
3		Country	Sales 2009	Sales 2010	Sales 2011	Sales 2012	Sales 2013
4		India	102	129	189	193	201
5		Canada	98	120	121	132	143
6		USA	109	110	109	102	94
7		United Kingdom	92	99	98	95	85
8		Australia	92	95	96	92	93
9		New Zealand	32	43	54	74	84
10		China	67	79	83	88	93
11		Pakistan	24	34	43	54	73
12		Mexico	12	24	20	23	32

• Right click over the selected row and from the popup menu displayed select the **Insert** command.

Country	Cali	bri 👻	11	• A	A	\$ -	%	,	+	es 20	11
India	в	I =	8-	A -		÷ ÷.0	.00. →.0	150			189
Canada		//	_	98	200 — R3	2.857	1.	20	_	ł.	121
USA	X	Cut		1			1	10			109
United Kin	00						9	99			98
Australia		<u>С</u> ору					9	95			96
New Zeala	ß	Paste	Option	15:			2	43			54
China		R						79			83
Pakistan		Dacte	Special				1	34			43
Mexico		Faste 3	sheciai				3	24			20

• The table will now look like this.

1	A	В	C	D	E	F	G
1							
2							
3		Country	Sales 2009	Sales 2010	Sales 2011	Sales 2012	Sales 2013
4		India	102	129	189	193	201
5		Canada	98	120	121	132	143
6							
7	<u></u>	USA	109	110	109	102	94
8		United Kingdom	92	99	98	95	85
9		Australia	92	95	96	92	93
10		New Zealand	32	43	54	74	84
11		China	67	79	83	88	93
12		Pakistan	24	34	43	54	73
13		Mexico	12	24	20	23	32

• Click on cell **B6** and type in the word '**Japan**'. Enter the following sales figures for **Japan**.

1	A	В	С	D	E	F	G
1							
2							
3		Country	Sales 2009	Sales 2010	Sales 2011	Sales 2012	Sales 2013
4		India	102	129	189	193	201
5		Canada	98	120	121	132	143
6		Japan	89	93	102	109	120
7		USA	109	110	109	102	94
8		United Kingdom	92	99	98	95	85
9		Australia	92	95	96	92	93
10		New Zealand	32	43	54	74	84
11		China	67	79	83	88	93
12		Pakistan	24	34	43	54	73
13		Mexico	12	24	20	23	32

Inserting columns into a worksheet

• We want to insert a column for sales figures in 2008, which needs to be inserted before the **2009** column. Select the column relating to **2009**, as illustrated.

4	Α	В	С	D	E	F	G
1							
2							
3		Country	Sales 2009	Sales 2010	Sales 2011	Sales 2012	Sales 2013
4		India	102	129	189	193	201
5		Canada	98	120	121	132	143
6		Japan	89	93	102	109	120
7		USA	109	110	109	102	94
8		United Kingdom	92	99	98	95	85
9		Australia	92	95	96	92	93
10		New Zealand	32	43	54	74	84
11		China	67	79	83	88	93
12		Pakistan	24	34	43	54	73
13		Mexico	12	24	20	23	32

• Right click over the selected column and from the popup menu displayed select the **Insert** command.

Country	Sales 200		Jaics ZUTT	Jane's 2012	Sales 2013
India	*	Cut	189	193	201
Canada			121	132	143
Japan		Copy	102	109	120
USA	Ĝ	Paste Options:	109	102	94
United Kingdom		n	98	95	85
Australia		Paste Special	96	92	93
New Zealand			54	74	84
China		Insert	83	88	93
Pakistan		<u>D</u> elete	43	54	73
Mexico		Clear Contents	20	23	32
	=	Format Cells			

• The column will be inserted, as illustrated.

1	А	В	С	D	E	F	G	н
1				*				
2								
3		Country		Sales 2009	Sales 2010	Sales 2011	Sales 2012	Sales 2013
4		India		102	129	189	193	201
5		Canada		98	120	121	132	143
6		Japan		89	93	102	109	120
7		USA		109	110	109	102	94
8		United Kingdom		92	99	98	95	85
9		Australia		92	95	96	92	93
10		New Zealand		32	43	54	74	84
11		China		67	79	83	88	93
12		Pakistan		24	34	43	54	73
13		Mexico		12	24	20	23	32

• Enter the following data into the column.

4	А	В	с	D	E	F	G
1							
2		1	(Å) (Å)				
3		Country	Sales 2008	sales 2009	Sales 2010	Sales 2011	Sales 2
4		India	93	102	129	189	
5		Canada	103	98	120	121	
6		Japan	50	89	93	102	
7		USA	120	109	110	109	
8		United Kingdon	93	92	99	98	
9		Australia	25	92	95	96	
10		New Zealand	105	32	43	54	
11		China	92	67	79	83	
12		Pakistan	56	24	34	43	
13		Mexico	82	12	24	20	

Deleting rows within a worksheet

• Select the row relating to **Canada**.

1	А	В	С	D	E	F	G	Н
1								
2								
3		Country	Sales 2008	Sales 2009	Sales 2010	Sales 2011	Sales 2012	Sales 2013
4		India	93	102	129	189	193	201
5		Canada	103	98	120	121	132	143
6		Japan	50	89	93	102	109	120
7		LISA	120	109	110	109	102	9/1

• Right click over the selected row and from the popup menu displayed select the **Delete** command.

	Calibri - 11 - A	т́а*\$ * % * 🗄	=
Country	B I = 🖉 - A		\$ 2010
India		102	129
Canada	Cut	98	120
Japan		89	93
USA	Сору	109	110
United Kingdo	Paste Options:	92	99
Australia	B	92	95
New Zealand	Dente Constin	32	43
China	Paste <u>S</u> pecial	67	79
Pakistan	<u>I</u> nsert	24	34
Mexico	<u>D</u> elete	12	24

• The row is deleted without any additional warning.

	А	В	C	D	E	F	G	Н
1								
2								
3		Country	Sales 2008	Sales 2009	Sales 2010	Sales 2011	Sales 2012	Sales 2013
4		India	93	102	129	189	193	201
5		Japan	50	89	93	102	109	120
6		USA	120	109	110	109	102	94
7		United Kingdom	93	92	99	98	95	85
8		Australia	25	92	95	96	92	93
9		New Zealand	105	32	43	54	74	84
10		China	92	67	79	83	88	93
11		Pakistan	56	24	34	43	54	73
12		Mexico	82	12	24	20	23	32

TIP: To delete multiple connected rows, use the **Shift** key trick to select multiple rows and then right click to delete the rows. To delete multiple non-connected rows, use the **Ctrl** key trick to select the multiple rows and then right click to delete the rows.

Deleting columns within a worksheet

• Select the column relating to **Sales 2013**.

4	Α	В	С	D	E	F	G	н
1								
2								
3		Country	Sales 2008	Sales 2009	Sales 2010	Sales 2011	Sales 2012	Sales 2013
4		India	93	102	129	189	193	201
5		Japan	50	89	93	102	109	120
6		USA	120	109	110	109	102	94
7		United Kingdom	93	92	99	98	95	85
8		Australia	25	92	95	96	92	93
9		New Zealand	105	32	43	54	74	84
10		China	92	67	79	83	88	93
11		Pakistan	56	24	34	43	54	73
12		Mexico	82	12	24	20	23	32

• Right click over the selected column and from the popup menu displayed select the **Delete** command.

Jx					-	Cali	bri 🔹 11 🔹 A
С	D	E	F	G		в	I = 👌 - 🛕
							Sales
				_		X	Cu <u>t</u>
les 2008	Sales 2009	Sales 2010	Sales 2011	Sales 2012	Sal		<u>С</u> ору
93	102	129	189	193		B	Paste Options:
50	89	93	102	109			
120	109	110	109	102			Paste <u>S</u> pecial
93	92	99	98	95			Insert
25	92	95	96	92			- AND
105	32	43	54	74			<u>D</u> elete
92	67	79	83	88			Clear Co <u>n</u> tents
56	24	34	43	54		e- 0-	Format Cells
82	12	24	20	23			<u>C</u> olumn Width

• The column is deleted without any additional warning.

1	A	В	с	D	E	F	G
1							
2							
3		Country	Sales 2008	Sales 2009	Sales 2010	Sales 2011	Sales 2012
4		India	93	102	129	189	193
5		Japan	50	89	93	102	109
6		USA	120	109	110	109	102
7		United Kingdom	93	92	99	98	95
8		Australia	25	92	95	96	92
9		New Zealand	105	32	43	54	74
10		China	92	67	79	83	88
11		Pakistan	56	24	34	43	54
12		Mexico	82	12	24	20	23

TIP: To delete multiple connected columns, use the **Shift** key trick to select multiple columns and then right click to delete the columns. To delete multiple non-connected columns, use the **Ctrl** key trick to select the multiple columns and then right click to delete the columns.

Modifying column widths

• Select a column, such as the **Sales 2010** column. Right click over the selected column and from the popup menu displayed select the **Column Width** command.

1	A	В	С	D	_	Cal	ibri + 11 + A	A	\$ - % , 🖽
1						в	I = 👌 - 🔺 -		
2								-	
3		Country	Sales 2008	Sales 2009	Sal	X	Cut	1	Sales 2012
4		India	93	102		Ē	<u>С</u> ору	89	193
5		Japan	50	89		ß	Paste Options:	02	109
6		USA	120	109			-	09	102
7		United Kingdom	93	92				98	95
8		Australia	25	92			Paste <u>S</u> pecial	96	92
9		New Zealand	105	32			<u>I</u> nsert	54	74
10		China	92	67			Delete	83	88
11		Pakistan	56	24			- Clear Contents	43	54
12		Mexico	82	12			1000 0000000	20	23
13						8 0	<u>F</u> ormat Cells	-	
14							<u>C</u> olumn Width		
15						_	1.12.1		

• The **Column Width** dialog box is displayed which allows you to set the column width. Within the dialog box displayed, enter a slightly larger value for the column width and then click on the **OK** button.

Column Width	?	×
<u>C</u> olumn width:	12.86	
OK	Can	cel

Modifying column widths using 'drag and drop'

• Move the mouse pointer to the line between the header for **column B** and **column C**, as illustrated below.

4	А	В	С	D	E
1					
2					
3		Country	Sales 2008	Sales 2009	Sales 2
4		India	93	102	
5		Japan	50	89	
6		USA	120	109	
7		United Kingdom	93	92	
8		Australia	25	92	

• Press the mouse button and keep it pressed.

The pointer changes to a black cross with double arrows when placed on the line between two columns.

• Move the mouse pointer left or right to make the column narrower or wider.

Release the mouse button and the column width will change as required.

Automatically resizing the column width to fit contents

• Resize all the columns so that they are too narrow to properly display the data contained within the columns. Your screen will look similar to the illustration below.

1	А	В	С	D	E	F	G	
1								Sa
2								
3		Country	Sales 20	Sales 2	Sales	Sales 20	Sales 2	012
4		India	93	102	129	189	193	
5		Japan	50	89	93	102	109	
6		USA	120	109	110	109	102	
7		United Kingdom	93	92	99	98	95	
8		Australia	25	92	95	96	92	
9		New Zealand	105	32	43	54	74	
10		China	92	67	79	83	88	
11		Pakistan	56	24	34	43	54	
12		Mexico	82	12	24	20	23	
1.1								

• To automatically resize each column width to fit the contents, select all the columns containing data (i.e. column **B** to column **G**).

1	А	В	C	D	E	F	G	
1								Sa
2								
3		Country	Sales 200	Sales 2	Sales	Sales 20	Sales 2	012
4		India	93	102	129	189	193	
5		Japan	50	89	93	102	109	
6		USA	120	109	110	109	102	
7		United Kingdom	93	92	99	98	95	
8		Australia	25	92	95	96	92	
9		New Zealand	105	32	43	54	74	
10		China	92	67	79	83	88	
11		Pakistan	56	24	34	43	54	
12		Mexico	82	12	24	20	23	
10								

• Double click on the junction between one of the column headers within the selected columns.

А	В	C 🗖 D		E	F	G	
	Country	Sales 200	Sales 2	Sales	Sales 20	Sales 2	
	India	93	102	129	189	193	
	Japan	50	89	93	102	109	
	USA	120	109	110	109	102	
	United Kingdom	93	92	99	98	95	

• The columns will automatically resize to accommodate the data within each column.

4	A	В	с	D	E	F	G
6							
2							
3		Country	Sales 2008	Sales 2009	Sales 2010	Sales 2011	Sales 2012
		India	93	102	129	189	193
;		Japan	50	89	93	102	109
5		USA	120	109	110	109	102
7		United Kingdom	93	92	99	98	95
3		Australia	25	92	95	96	92
3		New Zealand	105	32	43	54	74
0		China	92	67	79	83	88
1		Pakistan	56	24	34	43	54
2		Mexico	82	12	24	20	23

Modifying row heights

Select one or more rows and then right click over the selected row(s).
 From the popup menu displayed select the **Row Height** command.

1	А		В	С		D
1						
2			Cali	ibri + 11 + A	A	\$ • % • =
3		Count	110.00	$I \equiv \bigcirc \cdot A$		• /0 · ⊟ •.0 .00 •.0
4		India	D	I = <u>₩</u> · <u>A</u>	Ц. Ц. С.	.00 →.0 V
5		Japan	V	<u></u>	50	89
6		USA	100	Cut	20	109
7		United		<u>С</u> ору	93	92
8		Australi	B	Paste Options:	25	92
9		New Ze		1	.05	32
10		China		.	92	67
11		Pakistar		Paste <u>S</u> pecial	56	24
12		Mexico		Insert	82	12
13				Delete		
14				Clear Contents		
15						
16			8- 0-	Eormat Cells		
17				<u>R</u> ow Height		
18				<u>H</u> ide		

 The Row Height dialog is displayed allowing you to set the exact row height, as required.

Row Height	?	×
<u>R</u> ow height:	15	
ОК	Ca	ncel

TIP: If you click between any two row headers, you can drag the row height up or down as required, to modify the row height.

• Save your changes and close the workbook.

Manipulating cells and cell content within Excel 2019

Copying a cell or range contents within a workbook

• Open a workbook called **Copying moving and deleting**.

• Select a cell, range, row or column to copy. In this case select the range **B4** to **E4**.

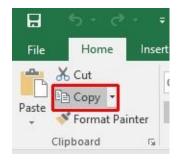
TIP: A range like this is often written as B4:E4.

Your screen will look something like this:

1	A	В	C	D	Е
1	Stock Levels				
2					
3					
4		Component number	Number in stock	Value each item	Total value in stock
5		100846	2	56.99	113.98
6		100332	0	28.38	0
7		100622	5	12.74	63.7
8		100847	2	32.99	65.98
9		100743	5	18.99	94.95
10		100934	1	12.99	12.99

• Press **Ctrl+C** to copy the selected range to the Clipboard.

TIP: To copy a selected item to the Clipboard using the Ribbon, click on the **Home** tab and then click on the **Copy** icon in the **Clipboard** group on the **Ribbon**.



• Click at the location you wish to paste the data to. In this case click on cell **B14** and press the **Ctrl+V** keys to paste the data from the Clipboard.

TIP: To paste an item from the Clipboard using the Ribbon, click on the **Home** tab and then click on the **Paste** icon, in the **Clipboard** group on the **Ribbon**.

H	2.4	
File	Home	Inse
Paste	👗 Cut 🗈 Copy 🔹	
Ŧ	Sormat Pa Clipboard	ainter ای

• Your data will now look like this.

	Stock Levels				
1					
		Component number	Number in stock	Value each item	Total value in stock
		100846	2	56.99	113.98
		100332	0	28.38	0
		100622	5	12.74	63.7
		100847	2	32.99	65.98
		100743	5	18.99	94.95
1		100934	1	12.99	12.99
		Component number	Number in stock	Value each item	Total value in stock

TIP: You can use the same technique to copy entire rows or columns. Pressing **Ctrl+A** will select everything within a worksheet and allow you to copy the entire worksheet contents to the Clipboard when you press **Ctrl+C**.

Deleting cell contents

• Select the range that you wish to delete the contents of. In this case select the range **B10:E10**, as illustrated.

1	A	В	С	D	E	
	Stock Levels					
		Component number	Number in stock	Value each item	Total value in stock	
		100846	2	56.99	113.98	
		100332	0	28.38	0	
		100622	5	12.74	63.7	
		100847	2	32.99	65.98	
		100743	5	18.99	94.95	
1		100934	1	12.99	12.99	

• Press the **Del** key and the cell contents will be deleted.

TIP: You can use the same technique to delete entire rows or column contents. Pressing **Ctrl+A** will select everything within a worksheet and allow you to delete the entire worksheet contents when you press the **Del** key.

Moving the contents of a cell or range within a workbook

• Select the range you wish to move and then cut it to the Clipboard. In this case select the data, as illustrated. This is referred to as the range **B5:E9**.

4	A	В	C	D	E
1	Stock Levels				
2					
3					
4	8	Component number	Number in stock	Value each item	Total value in stock
5		100846	2	56.99	113.98
5		100332	0	28.38	0
7		100622	5	12.74	63.7
8		100847	2	32.99	65.98
9		100743	5	18.99	94.95

- Press the **Ctrl+X** keys to cut the selected data to the Clipboard.
- Click at the location you wish to move the selected data to, in this case click in cell **B15**, and press **Ctrl+V**, to paste the data.

4	A	В	C	D	E
,	Stock Levels				
		Component number	Number in stock	Value each item	Total value in stock
) 1					
2		Component number	Number in stock	Value each item	Total value in stock
4		100846	2	56.99	113.98
5		100332	0	28.38	0
6		100622	5	12.74	63.7
7		100847	2	32.99	65.98
8		100743	5	18.99	94.95

TIP: You can use the same technique to move entire rows or columns.

• Save your changes and close the workbook.

Editing cell content

- It is easy to edit existing data within a cell or to replace existing data within a cell. Open a workbook called **Editing**.
- Click on cell **B3**. Double click in front of the word '**Region**' and insert the word '**Sales**' followed by a space. Press the **Enter** key to commit your changes to the cell.

1	А	В	С	D
1				
2				
3		Sales Region	2012	2013
4		North	3847	4382
5		South	2847	3847
6		East	5437	6349
7		West	1847	2746

• Click on cell **B7**. Double click on the word '**West**', to select it and then over type the selected word with the word '**Central**'. Press the **Enter** key to commit your changes to the cell.

1	А	В	C	D
1				
2				
3		Sales Region	2012	2013
4		North	3847	4382
5		South	2847	3847
6		East	5437	6349
7		Central	1847	2746

Undo and Redo

• Click on the **Undo** icon (top-left of your screen) to reverse the last action. Try it now.



• Click on the **Redo** icon (top-left of your screen) to reapply the last action. Try it now.



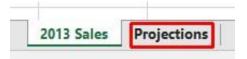
• Save your changes and close the workbook.

Copying data between worksheets (within the same workbook)

- Open a workbook called Worksheet manipulation.
- Select a cell, range, row or column to copy. In this case select the range **B3:C8**. Your screen will look something like this:

E	5.	Ċ-	Ŧ.		
F	ile Home	e Inse	rt Pa	ge Layout	Formulas
ľ	Cut		Calibri	1.7	11 - A A
Pas *	te V Format Clipboard		BI	U → Ent	- 🖄 - 🛕
C2	1 🔻	: >	<	f _x	
A	A		В		с
1	2013				
2					
3		Regi	on	Sales	
4		Euro	ре	72	27,463
5		Afric	a	34	13,745
6		Asia	•	28	33,174
7		Aust	ralia	28	37,636
8		Ame	rica	83	31,173
0					

• Press **Ctrl+C** to copy the selected range to the Clipboard. Click on the second worksheet tab (called **Projections**).



You will now see the contents of the second, empty worksheet displayed.

Click at the location you wish to paste the data to. In this case click on cell C4 and press the Ctrl+V keys to paste the data from the Clipboard. You have successfully copied selected data from one worksheet to another worksheet within the same workbook.

BEFORE CONTINUING: Click on the **Undo** icon to undo this copy.

The **Undo** icon is displayed towards the top-left of your screen.

Leave the workbook open and carry on to the next section.



Moving data between worksheets (within the same workbook)

- Switch back to the first worksheet within the workbook called **Worksheet manipulation**.
- Select a cell, range, row or column to move. In this case select the range **B3:C8**. Your screen will look something like this:

B3	*	: × <	$f_{\mathcal{K}}$	Region
À	A	В		C
1	2013			
2				
3		Region	Sale	es
4		Europe		727,463
5		Africa		343,745
6		Asia		283,174
7		Australia		287,636
8		America		831,173
9				

- Press **Ctrl+X** to cut (move) the selected range to the Clipboard.
- Click on the second worksheet tab (called **Projections**).

2013 Sales	Projection
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You will now see the contents of the second, empty worksheet displayed.

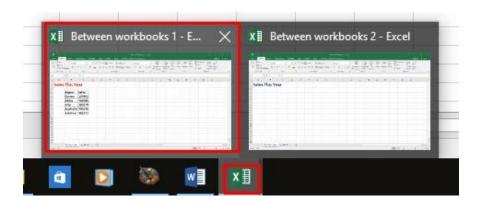
Click at the location you wish to paste the data to. In this case click on cell C4 and press the Ctrl+V keys to paste the data from the Clipboard. You have successfully moved selected data from one worksheet to another worksheet within the same workbook.

• Save your changes and close the workbook.

Moving data worksheets (between different workbooks)

- Open a workbook called Between workbooks 1.
- Open a second workbook called **Between workbooks 2**.
- Display the contents of the **Between workbooks 1** workbook.

NOTE: To switch between multiple open workbooks, click on the **Excel** icon displayed within the Taskbar at the bottom of the screen and click on **Between Workbooks 1**.



• Within the **Between workbooks 1** workbook, select a cell, range, row or column to move. In this case select the range **B3:C8**. Your screen will look something like this:

	A	В	С			
1	Sales This Year					
2						
3		Region	Sales			
4		Europe	127463			
5		Africa	943745			
6		Asia	283174			
7		Australia	987636			
8		America	381173			

• Press **Ctrl+X** to cut (move) the selected range to the Clipboard.

- Switch to the second workbook (called **Between workbooks 2**).
- Click at the location you wish to paste the data to. In this case click on cell C4 and press the Ctrl+V keys to paste the data from the Clipboard. You have successfully moved selected data from one workbook to another workbook.

NOTE: You could have selected a different worksheet within the second workbook if you wanted.

Leave the workbook open and carry on to the next exercise.

Copying data between worksheets (in different workbooks)

- Select the data in the second workbook.
- Press Ctrl+C to copy the selected data to the Clipboard.
- Switch back to the first workbook.
- Click where you wish to paste the data to.
- Press **Ctrl+V** to paste the data from the Clipboard.

You have now copied selected data from one workbook to another workbook.

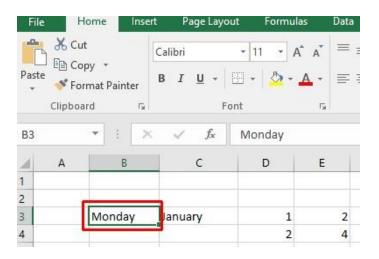
• Close any open workbooks and save your changes.

AutoFill

• Open a workbook called AutoFill.

File	Ho	ome In	sert	Page Lay	out	Formul	as	Data	Re
9	🔏 Cut 🗎 Cop		Cali	bri	+ 1	1 - A	ĂĂ	= =	= =
Paste		nat Painter	В	I <u>U</u> ≁	Font	- 🖉	• •		1 =
E8		•	×	$\checkmark f_x$					
	A	В	1	С	P -	D	E		F
1									
2	-		_		_	_	_	_	
3		Monday	Ja	nuary		1		2	
4						2		4	
5									
6									
-									1

• Click on cell **B3** which contains the word **Monday**.



• Move the mouse pointer to the bottom-right corner of this cell and the mouse pointer shape will change to the shape of a small black cross.

	Clipbo	ard		F2	F	ont	15
3		•		×	√ f _x	Monday	
1	А		В		с	D	E
		Mo	onday		lanuary	1	2
				L		2	4

When the mouse pointer changes shape, press the mouse button down, and while keeping it pressed move slowly down the page to cell **B7**. When you release the mouse button you will see that Excel has 'AutoFilled' the range you dragged across with days of the week.

1	A	В	C	D	E
1					
2					
3		Monday	January	1	2
4		Tuesday		2	4
5		Wednesday			
6		Thursday			
7		Friday			
8		Saturday			
9		Sunday	~		
10					

• Click on cell C3 which contains the word January.

xI	8 5	- ¢				
FIL	E F	IOME INSE	RT PAGE L	AYOUT FO	RMULAS	DAT
Past			Calibri B I <u>U</u> +	~ 11 ~ A	≡ A - ≡	
	Clipboa		F	ont	r <u>s</u>	
C3		• : ×	$\checkmark f_x$	January		
	А	В	С	D	E	F
1						
2						
3		Monday	January	1	2	
4		Tuesday		2	4	
5		Wednesday	e			
6		Thursday				
7		Friday				
8		5 %				
9						

• Use the AutoFill feature to automatically create a column containing all the months of the year.

1	A	В	C	D	E
1					
2					
3		Monday	January	1	2
4		Tuesday	February	2	4
5		Wednesday	March		
6		Thursday	April		
7		Friday	May		
8		Saturday	June		
9		Sunday	July		
10			August		
11			September		
12			October		
13			November		
14			December		
-					

• Select the cell range **D3:D4**.

4	А	В	с	D	E	F
1						
2						
3		Monday	January	1	2	
4		Tuesday	February	2	4	
5		Wednesday	March			
6		Thursday	April			
7		Friday	May			
8		Saturday	June			
9		Sunday	July			

• Use AutoFill to extend the series down the page. As you will see the series becomes 1,2,3,4,5,6,7 etc.

1	Α	В	C	D	E	F
1						
2						
3		Monday	January	1	2	
4		Tuesday	February	2	4	
5		Wednesday	March	3		
6		Thursday	April	4		
7		Friday	May	5		
8		Saturday	June	6		
9		Sunday	July	7		
10			August	8		
11			September	9		
12			October	10		
13			November	11		
14			December	12		
					-1	

• Select the cell range E3:E4.

4	А	В	C	D	E
1					
2					
3		Monday	January	1	2
4		Tuesday	February	2	4
5		Wednesday	March	3	100

• Use AutoFill to extend the series down the page. As you will see the series becomes **2,4,6,8,10** etc.

1	А	В	С	D	E
1					
2					
3		Monday	January	1	2
4		Tuesday	February	2	4
5		Wednesday	March	3	6
6		Thursday	April	4	8
7		Friday	May	5	10
8		Saturday	June	6	12
9		Sunday	July	7	14
10			August	8	16
11			September	9	18
12			October	10	20
13			November	11	22
14			December	12	24

• Save your changes and close the workbook.

Copying a data range using AutoFill

- Open a workbook called AutoFill a data range.
- Select the range **B2:B24**.

	A	В
1		
2		Name
3		Agustín
4		Amerigo
5		Birgit
6		Christa
7		Dennis
8		Enrique
9		Ernst
10		George
11		Girish
12		Hilda
13		Jan
14		Lou
15		Louis
16		Mallika
17		Mark
18		Nancy
19		Robert
20		Ruth
21		Susan
22		Tom
23		Tom
24		Valentino
25		

• Move the mouse pointer to the bottom-right corner of this range and the mouse pointer shape will change to the shape of a small black cross.



When the mouse pointer changes shape, press the mouse button down, and while keeping it pressed move slowly to the right, by two columns.

1	А	В	с	D
1				
2		Name		
3		Agustín		
4		Amerigo		
5		Birgit		
6		Christa		
7		Dennis		
8		Enrique		
9		Ernst		
10		George		
11		Girish		
12		Hilda		
13		Jan		
14		Lou		
15		Louis		
16		Mallika		
17		Mark		
18		Nancy		
19		Robert		
20		Ruth		
21		Susan		
22		Tom		
23		Tom		
24		Valentino		

When you release the mouse button you will see that Excel has 'AutoFilled' the range you dragged across with data, as illustrated below.

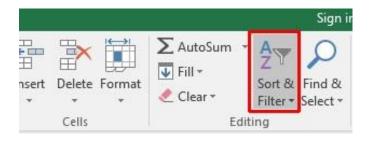
41	A	В	C	D
1				
2		Name	Name	Name
3		Agustín	Agustín	Agustín
4		Amerigo	Amerigo	Amerigo
5		Birgit	Birgit	Birgit
6		Christa	Christa	Christa
7		Dennis	Dennis	Dennis
8		Enrique	Enrique	Enrique
9		Ernst	Ernst	Ernst
10		George	George	George
11		Girish	Girish	Girish
12		Hilda	Hilda	Hilda
13		Jan	Feb	Mar
14		Lou	Lou	Lou
15		Louis	Louis	Louis
16		Mallika	Mallika	Mallika
17		Mark	Mark	Mark
18		Nancy	Nancy	Nancy
19		Robert	Robert	Robert
20		Ruth	Ruth	Ruth
21		Susan	Susan	Susan
22		Tom	Tom	Tom
23		Tom	Tom	Tom
24		Valentino	Valentin	Valentino
25				

• Save your changes and close the workbook.

Sorting a cell range

• Open a workbook called **Sorting**.

- The data within column **B** consists of text, while the data in column **C** consists of numbers.
- Click within the data contained within column **B** (for instance click on cell **B7**).
- Click on the **Home** tab and from within the **Editing** group click on the **Sort & Filter** button.



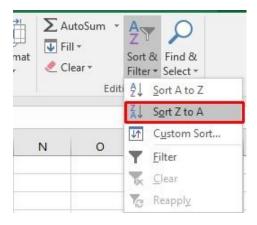
• Click on the **Sort A to Z** option.

		Sign in 💡
∑ AutoSum → ↓ Fill → ≪ Clear →		Sort & Find & Filter + Select +
	Edi	ti Ž↓ <u>S</u> ort A to Z
		Z↓ Sort Z to A
		Custom Sort
4	0	T ilter
		📡 <u>C</u> lear
		Reapply

• The data will be displayed as illustrated.

A 1	A B	с
1		
2		
3		
4	Countries	Value of Sales
5	Australia	3281746
6	Canada	2183721
7	China	2917438
8	India	1846276
9	Ireland	2948183
10	New Zealand	1019483
11	Pakistan	1281637
12	United Kingdo	m 2093627
13	USA	4817423
14		

• Click on the 'Sort Z to A' option under the Sort & Filter button.



• The data will be displayed as illustrated.

Clipboard Fall Fon		5. Gil	
E9	\bullet : $\times \checkmark f_x$		
A	В	c	
1			
2			
4	Countries	Value of Sales	
5	USA	4817423	
6	United Kingdom	2093627	
7	Pakistan	1281637	
8	New Zealand	1019483	
9	Ireland	2948183	
10	India	1846276	
11	China	2917438	
12	Canada	2183721	
13	Australia	3281746	

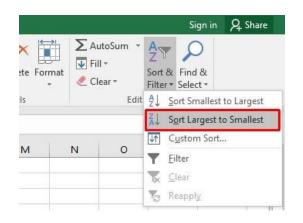
- Click within the data contained in column **C** (for instance click on cell **C8**).
- Click on the Home tab, and from within the Editing group click on the Sort & Filter button. From the drop down list displayed, click on the Sort Smallest to Largest option.



The data will be displayed as illustrated.

Countries	Value of Sales
New Zealand	1019483
Pakistan	1281637
India	1846276
United Kingdom	2093627
Canada	2183721
China	2917438
Ireland	2948183
Australia	3281746
USA	4817423

• Click on the 'Sort Largest to Smallest' option.



The data will be displayed as illustrated.

Countries	Value of Sales
USA	4817423
Australia	3281746
Ireland	2948183
China	2917438
Canada	2183721
United Kingdom	2093627
India	1846276
Pakistan	1281637
New Zealand	1019483

• Save your changes and close the workbook.

Searching and replacing data

- Open a workbook called Search and replace.
- Press **Ctrl+F** to start the **Search** utility (or click on the **Home** tab, then click on the **Find & Select** icon, from the menu displayed select the **Find** command).

This will display the **Find and Replace** dialog box, as illustrated.

Find and	Replace			?	Х
Fin <u>d</u>	Replace				
Find wh	at:				~
				Op <u>t</u> ions	>>
		Find All	<u>F</u> ind Next	Clo	se

- Within the **Find what** section of the dialog box, enter the word '**Blue**'. Click on the **Find Next** button and you will find the next occurrence of the word Blue. Keep pressing on this button to find all occurrences within the worksheet.
- Click on the **Replace** tab within the **Find and Replace** dialog box.

 Find and Replace
 ? X

 Find
 Replace

 Find what:
 ~

 Replace with:
 ~

 Options >>

 Replace All
 Replace

 Find All
 Find Next

TIP: Or use the keyboard shortcut Ctrl+H.

- Within the **Find what** section type in the word '**Blue**'.
- Within the **Replace with** section type in the word '**Purple**'.

- Click on the Find Next button and once found click on the Replace button. Carry on replacing all occurrence of the word Blue with the word Purple.
- Close the Find and Replace dialog box.
- Press **Ctrl+H** to display the **Find and Replace** dialog box, with the **Replace** tab already selected for you.
- Within the **Find what** section type in the word '**Red**'.
- Within the **Replace with** section type in the word '**Orange**'.
- Click on the **Replace All** button and all occurrences of the word **Red** will immediately be replaced by the word **Orange**.
- Save your changes and close the workbook.

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