



Level 6 Spreadsheet 6N4089

Section 3 – Worksheet Features

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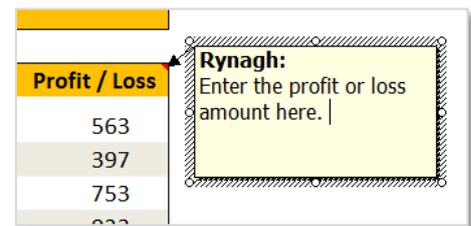
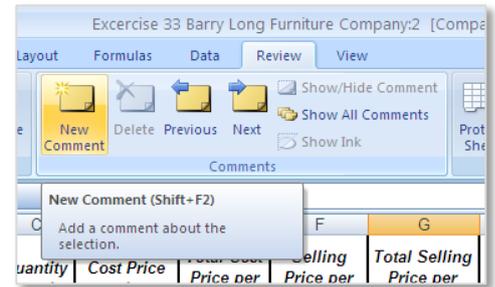


1. CELL COMMENTS

CREATE, EDIT AND DELETE COMMENTS

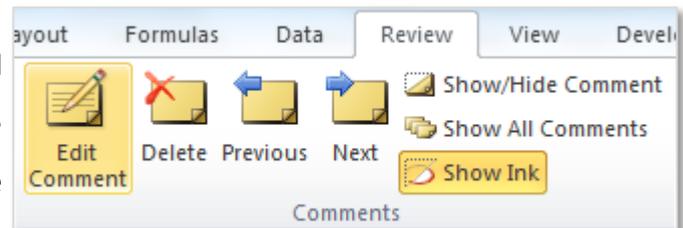
Comments are a small note attached to a cell; they can be used to remind the user of some information or can act as an instruction between the spreadsheet designer and the end user.

To **create** or add a comment to the current cell go to the **Review** tab to the **Comments** group and click on **New Comment** (or right click on the cell and select **Insert Comment**). This will add a comment to the cell showing the name of the editor in the top of the comment.



NOTE: Cells containing a comment are marked with a small red triangle in the top right hand corner of a cell. To view comments select a cell with a comment in it.

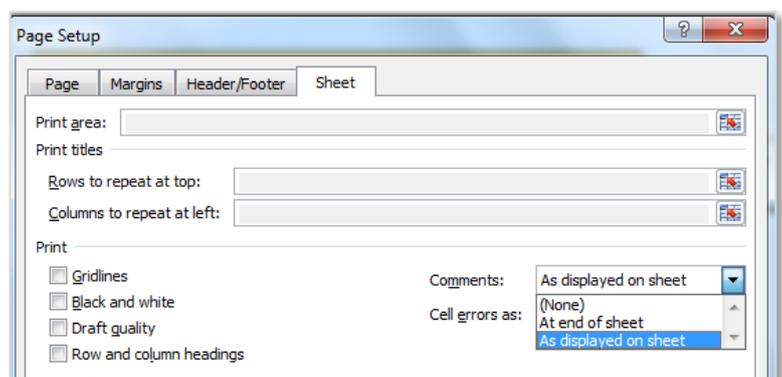
To **edit** or **delete** a comment, select the cell with comment in it and choose the relative option from the **Comments** group on the **Review** tab (or right click on the cell).



DISPLAY COMMENTS

Comments are not normally displayed on the spreadsheet and do not usually print. To display a comment or comments at all times: select the **Show/Hide Comment** to turn on one comment for a selected cell, or select **Show All Comments** to turn on all comments in a worksheet.

To print comments: display the comments required for printing and go the **Page Setup** dialogue under the **Sheet** tab in the **Comments:** drop down box choose the appropriate option (usually **As displayed on sheet** as shown).



2. LINKING AND IMPORTING

CREATE AND EDIT HYPERLINKS

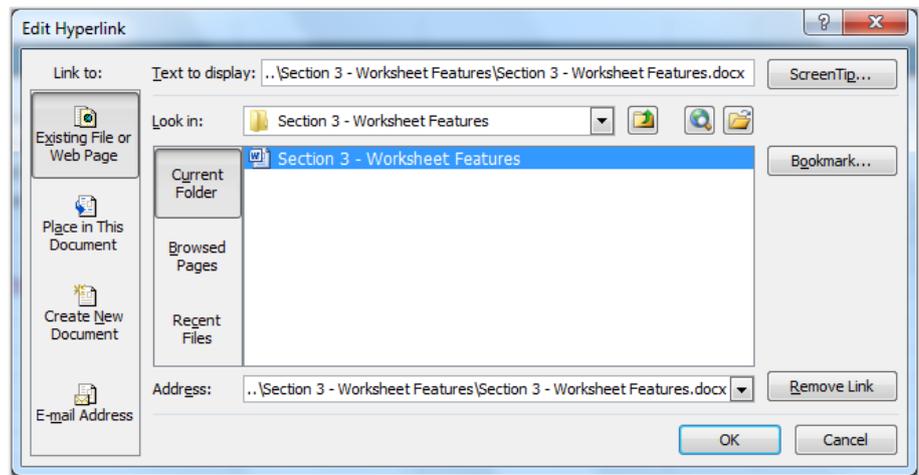
Hyperlinks can be added to documents to link files, websites, bookmarks, email address and worksheets.

This can be done in two ways:

1. Go to the **Insert** tab to the **Links** group and click on the **Hyperlinks** command.



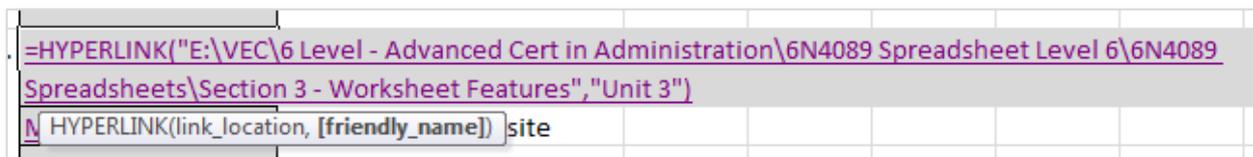
This opens the **Edit Hyperlink** dialogue box, select where the link will be made to and browse to the correct file or paste the URL (website address) and click ok.



NOTE: **Text to Display** at the top of the dialogue box.

2. Use the function **HYPERLINK** which has two arguments:

=Hyperlink(link_location,friendly_name)



The Hyperlink function uses the file path in “inverted commas” as a link_location, followed by a given friendly name also in “inverted commas” (this function can also be used with a URL or email address as the link_location).

NOTE: If a file path is renamed or changed the hyperlink will not be able to locate the required file.

Both methods create a hyperlink in a cell that can be clicked on to open the file or website.

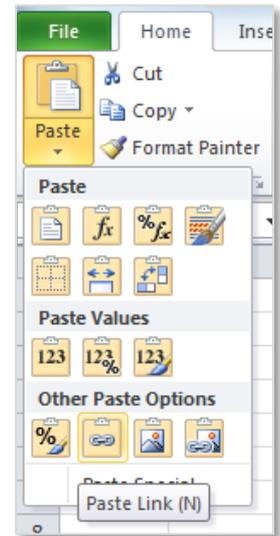
LINK BETWEEN WORKSHEETS

Data can be used across different worksheets in a variety of ways. The most simple method is to use the = and click on the worksheet and cell required, this will bring in the worksheet name (surrounded by 'apostrophes' and followed by an exclamation mark!) and the cell reference of the linked cell.

Example ='Financial Functions'!E18

Another method is to copy and paste the information using the **Paste Link** or paste **Linked Picture** from the **Paste** drop down menu on the Home tab as shown here.

The data will always be automatically updated in the destination worksheet using both of these methods.



LINK BETWEEN WORKBOOKS

Information can be linked between workbooks by creating a link to an **external reference**; this can be a cell reference, a range reference or a named range. External references are used when working with large amounts of data or complex formulas that are spread across several workbooks. The spreadsheet the information is taken into is known as the **destination** file.

The following example shows an external link to an *open* excel document with a SUM function:

=SUM('[Budget.xlsx]Annual'!C10:C25)

Notice apostrophes around the workbook and worksheet name, the workbook name is in [square brackets] the worksheet name is followed by an exclamation mark and the cell range is included.

If the external source excel document is *not open* the full file path should be included as follows:

=SUM('C:\Reports\[Budget.xlsx]Annual'!C10:C25)

When the external source includes a named range the external link will appear as follows:

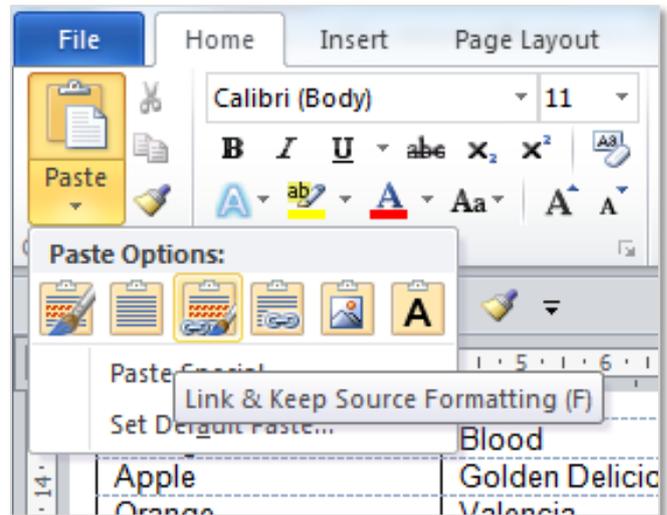
=SUM('Budget.xlsx'!Sales)

To include an external link open both workbooks and click on the cell range to be included in the formula – the file path and range will be added automatically.

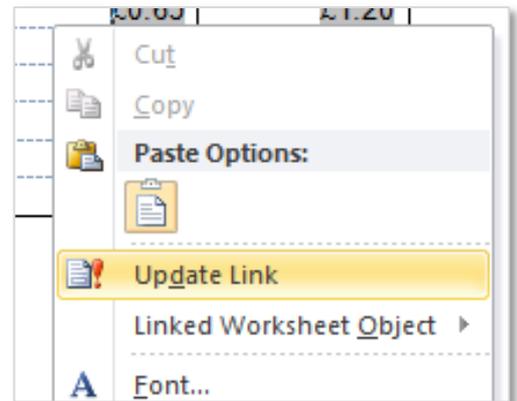
LINK DATA TO OTHER APPLICATIONS, E.G. WORD AND ACCESS

Data or charts can be linked into another application from Excel. For example a table or chart can be pasted into a Word document. To ensure the data in the Word document updates after it has been pasted the information can be set to dynamic linking. To do this, ensure the content is pasted as linked object.

1. Highlight the data to be copied from Excel and select copy.
2. Open the Word document where the information will be pasted and choose the **Paste** drop down, from the **Paste Options**: select **Link & Keep Source Formatting (F)** as shown.



3. If the information is updated in Excel and needs to be updated in the Word document open both files and right click in the Excel document and select **Update Link** as shown.

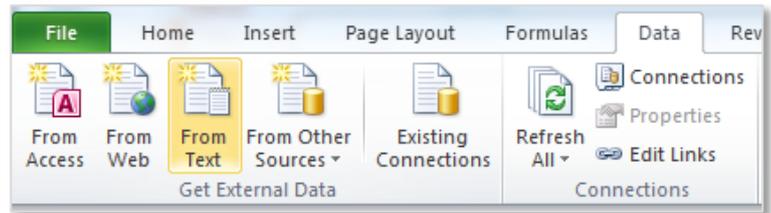


NOTE: By default, linked objects are updated automatically. This means that Word updates the linked information every time the Word file is opened or any time the source Excel file changes while the Word file is open.

NOTES:

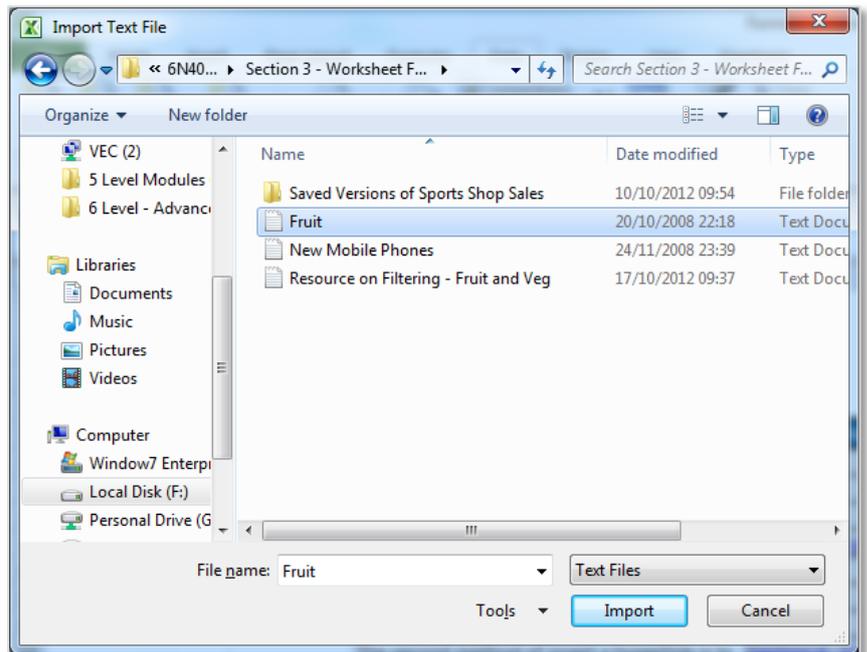
IMPORT DATA FROM OTHER APPLICATIONS, E.G. WORD AND ACCESS

To import data from another application go to the **Data** tab to the group **Get External Data**. Depending on the source of the data, choose the correct Application and browse to the data source location.

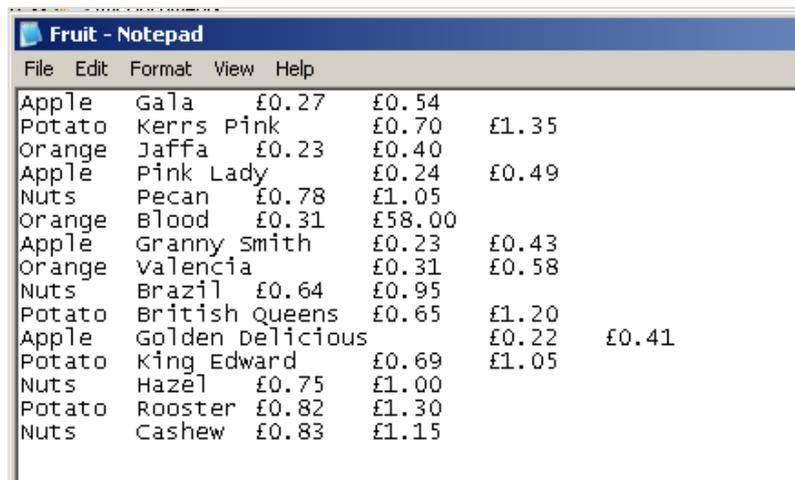


In this example data will be imported from a text file.

1. Click on the **From Text** button and the **Import Text File** window will appear.
2. Browse to the location of the text file being importing, select the file and click on **import**.



NOTE: When importing data from a text file it is important to notice how the data is set up in the file. In this text file the data is separated by **tab spaces** or **Tab Delimited** as shown here. Data can also be separated by a single space, colons.

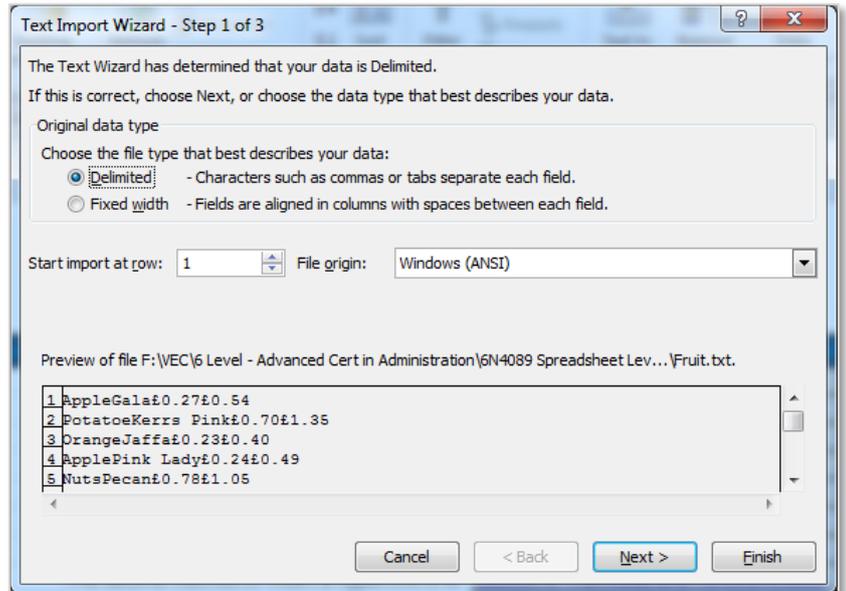


Fruit	Variety	Price 1	Price 2	Price 3	Price 4
Apple	Gala	£0.27	£0.54		
Potato	Kerrs Pink		£0.70	£1.35	
Orange	Jaffa	£0.23	£0.40		
Apple	Pink Lady		£0.24	£0.49	
Nuts	Pecan	£0.78	£1.05		
Orange	Blood	£0.31	£58.00		
Apple	Granny Smith		£0.23	£0.43	
Orange	Valencia		£0.31	£0.58	
Nuts	Brazil	£0.64	£0.95		
Potato	British Queens		£0.65	£1.20	
Apple	Golden Delicious		£0.22	£0.41	
Potato	King Edward		£0.69	£1.05	
Nuts	Hazel	£0.75	£1.00		
Potato	Rooster	£0.82	£1.30		
Nuts	Cashew	£0.83	£1.15		

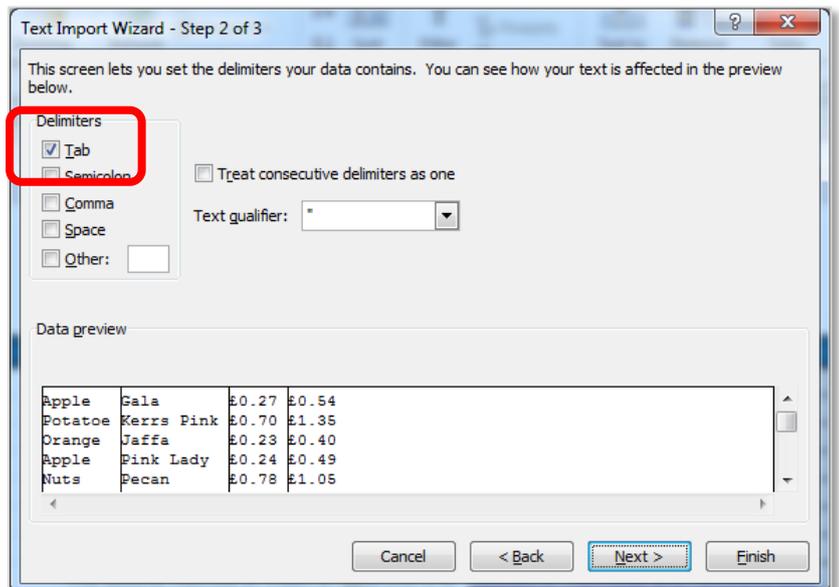
Follow the three steps to import data:

Step 1 – if the data is set up correctly (with tabbed spaces) in the text file, the wizard should detect that it is delimited. The data should be visible in the **Preview of File**.

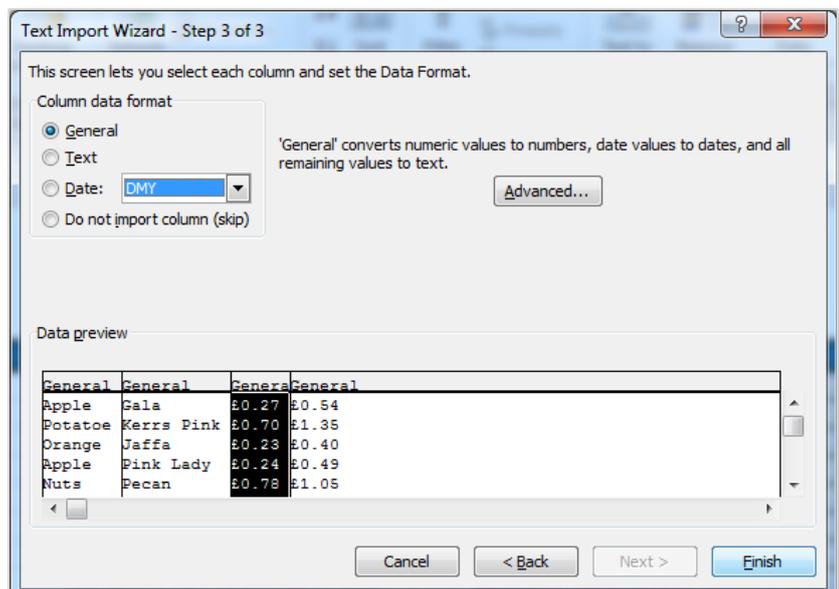
Select **Next**.



Step 2 – select how the data is delimited (spaced out). In this example the data is delimited by tabs however semicolons, commas, spaces or another symbol could be used. Check the **Data Preview** to ensure the data looks correctly separated into columns. Select **Next**.

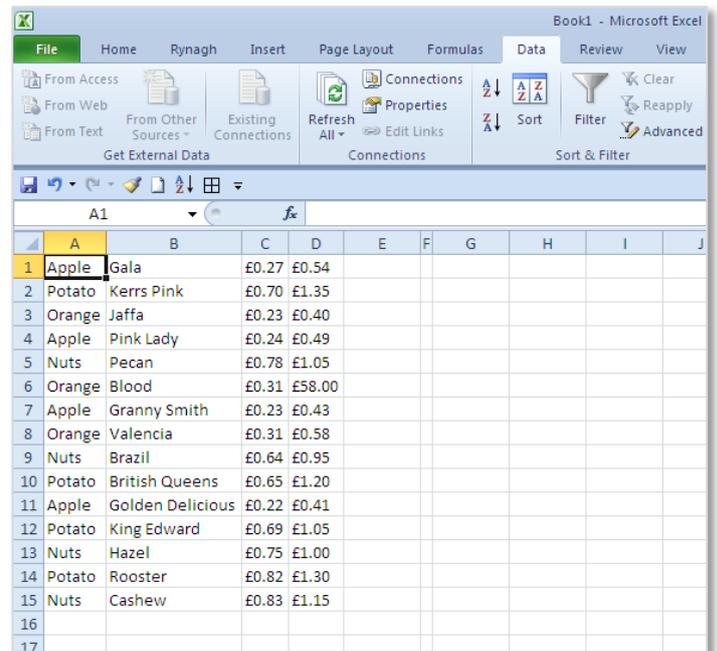


Step 3 – set the data type of each column. Click on each column in turn by selecting the grey heading and choosing the correct data type. Select **Next**.



The data should be imported into the Excel spreadsheet separated into appropriate columns and cells and without formatting as shown.

NOTES:



	A	B	C	D	E	F	G	H	I	J
1	Apple	Gala	£0.27	£0.54						
2	Potato	Kerrs Pink	£0.70	£1.35						
3	Orange	Jaffa	£0.23	£0.40						
4	Apple	Pink Lady	£0.24	£0.49						
5	Nuts	Pecan	£0.78	£1.05						
6	Orange	Blood	£0.31	£58.00						
7	Apple	Granny Smith	£0.23	£0.43						
8	Orange	Valencia	£0.31	£0.58						
9	Nuts	Brazil	£0.64	£0.95						
10	Potato	British Queens	£0.65	£1.20						
11	Apple	Golden Delicious	£0.22	£0.41						
12	Potato	King Edward	£0.69	£1.05						
13	Nuts	Hazel	£0.75	£1.00						
14	Potato	Rooster	£0.82	£1.30						
15	Nuts	Cashew	£0.83	£1.15						
16										
17										

3. LISTS

FILTER LISTS

Filtering is applied to lists of data, the result of a filter displays only the rows that meet the criteria specified and hides rows that do not need to be displayed. Showing only the information required. After filtering has been applied the data can be copied, formatted, printed and put into a chart without having to rearrange or move it.

Filtering can also be applied in more than one column. Filters are **additive**, which means that each additional filter is based on the current filter and further reduces the subset of data.

Three types of filter can be applied to data: **filter by values**, **filter by format** or **filter by criteria**. Each of these filter types is **mutually exclusive** for each range of cells or column table. For example, filtering can be applied by cell color or by a list of numbers, but not by both; it is possible to filter by icon or by a custom filter, but not by both.

NOTE: it is very important to ensure the first row of the information to be filtered has headings, filtering without headings can be confusing. In addition ensure that the data to be filtered has no gaps in the information. This could lead to the wrong result after the filter, where rows have been left out unintentionally.

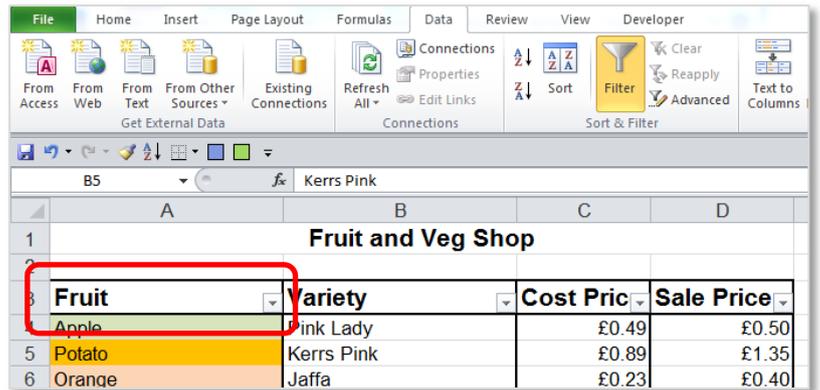
AUTOFILTER – FILTER IN PLACE

To use the **AutoFilter** click into the table and go to the **Data** tab to the **Sort & Filter** group and select the **Filter** button, the filters will automatically be turned on for each of the headings in the table (this will also work if entire table area is selected before turning on the **Filter**).

There are three types of filters that can be used they are **text**, **date** and **number**. Filters are applied differently depending on the data to be filtered.

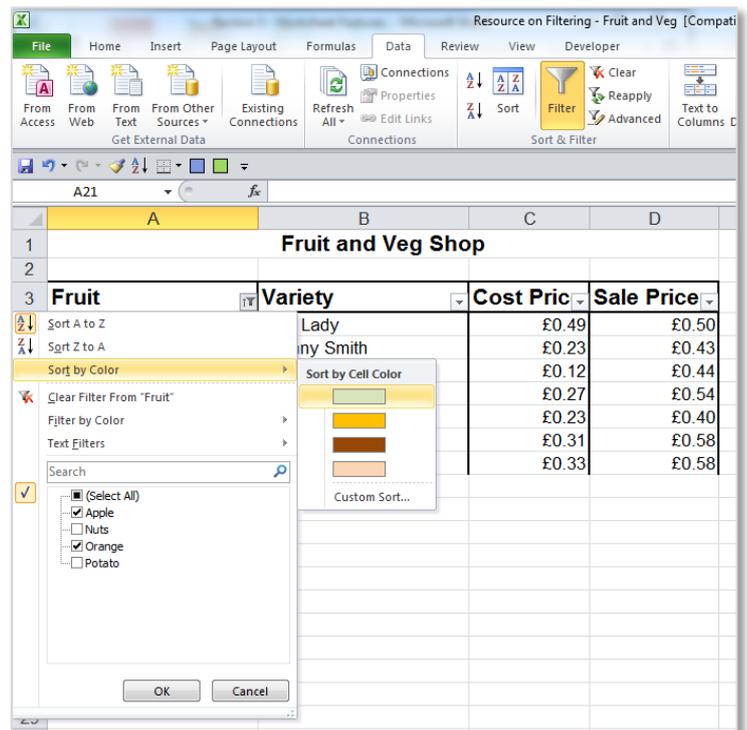
Filters can also be applied according to the colour of the cell - font or background

Experiment with the Resource on Filtering – Fruit and Veg.



Complete the following filters:

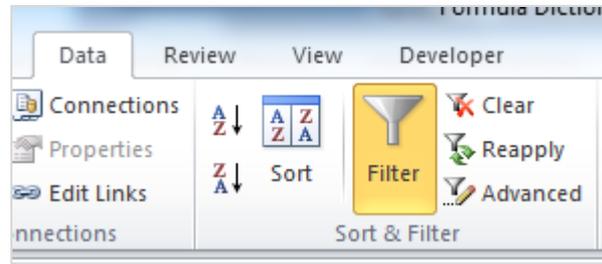
1. Filter the Fruit by Apples and Oranges as shown.
2. Sort the Fruit A to Z from the filter drop down.
3. Sort by the Colour Green, Orange, Brown as shown.



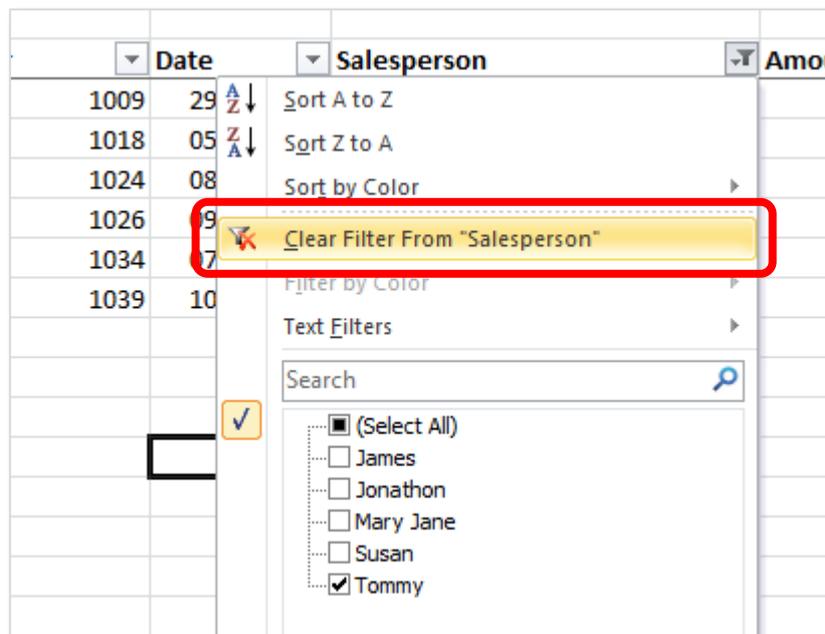
NOTE: With **Text** filters if a heading has two different spellings or has a space after it in a column, the auto filter will pick up both headings. Try to ensure there are no spelling errors in worksheets to avoid this problem.

REMOVE A FILTER

To remove any filter that has been applied first click in the table anywhere, then go to the **Data** tab to the **Sort & Filter** group and deselect the **Filter** command button.



Alternatively click on the heading which has a filter applied to it. The filter symbol will have changed to this  and from the filter list select the **Clear Filter From:** option.

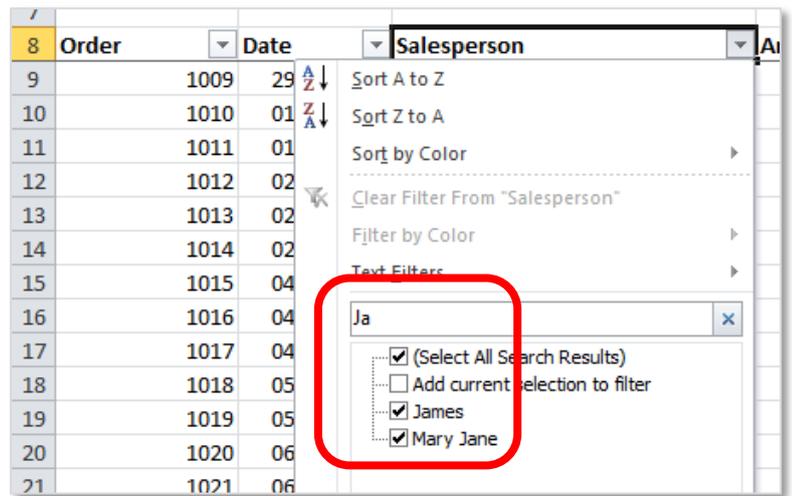


NOTES:

CUSTOM AUTOFILTER – TEXT, DATE AND NUMBER

TEXT

Use the search box in **Custom Filter** to apply very specific criteria. For example in a **TEXT** filter it might be required to find a salesperson with the name containing with the letters 'Ja', in the **Search** box on the filter drop down menu type the letters. This will filter all the appropriate information.



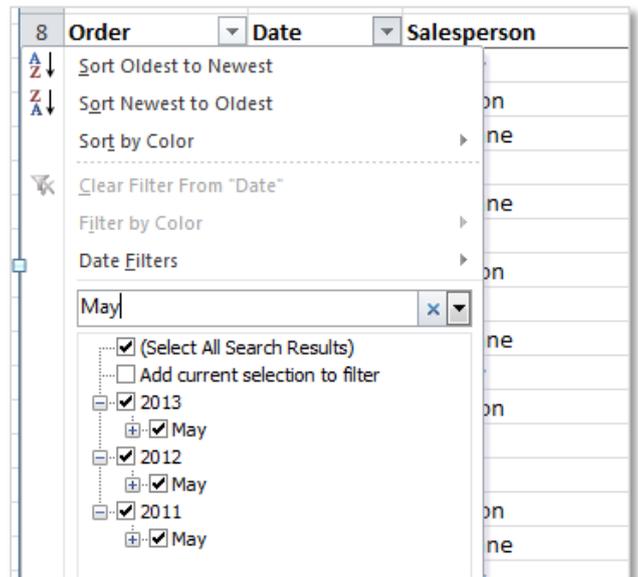
8	Order	Date	Salesperson	Amount
29	1029	21/06/2011	Mary Jane	€4,270.00
33	1033	07/01/2012	James	€460.00
35	1035	07/01/2012	Mary Jane	€1,570.00
38	1038	09/01/2012	Mary Jane	€925.00
40	1040	14/01/2012	Mary Jane	€2,074.00
42	1042	03/02/2013	James	€4,765.00
45	1045	05/02/2013	Mary Jane	€780.00
46				

The following wildcard characters can be used as comparison criteria for **text** filters.

Use	To find
? (question mark)	Any single character For example, sm?th finds "smith" and "smyth"
* (asterisk)	Any number of characters For example, *east finds "Northeast" and "Southeast"

DATE

Custom Filters can also be used for **DATE** filters. In this example the month of May is custom searched in the Date column. The filter list automatically shows all the available dates showing May, when applied only sales in May are shown. Clicking on the plus symbol next to the month will show all the available days in that month.



8	Order	Date	Salesperson	Amount
9	1009	29/05/2011	Tommy	€1,245.00
39	1039	10/05/2012	Tommy	€360.00
45	1045	05/05/2013	Mary Jane	€780.00
46				

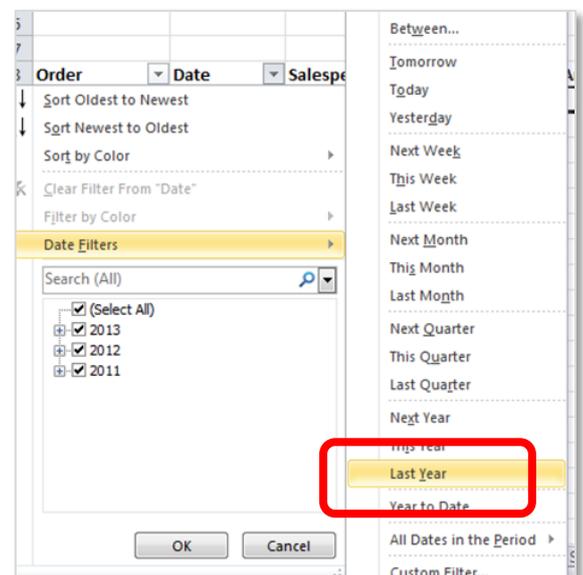
In addition using a number here will bring up all the dates with that number in them. For example typing 4 – will give any dates with 4th 14th or 24th.

The following wildcard characters can be used as comparison criteria for **number** filters.

Use	To find
*4	This will show any number containing a 4 anywhere in the number.
?4*	This will show any value starting with the number 4.
?1,*	This will show all values that start with one thousand – 1,???

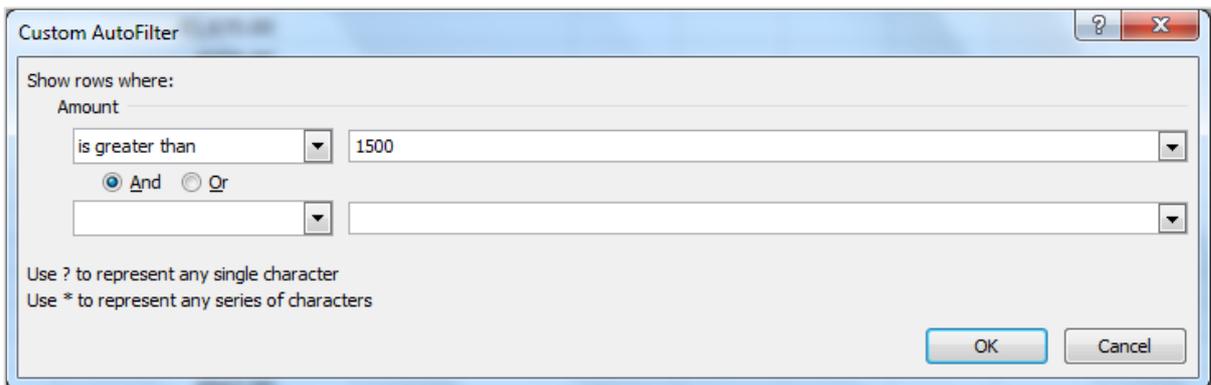
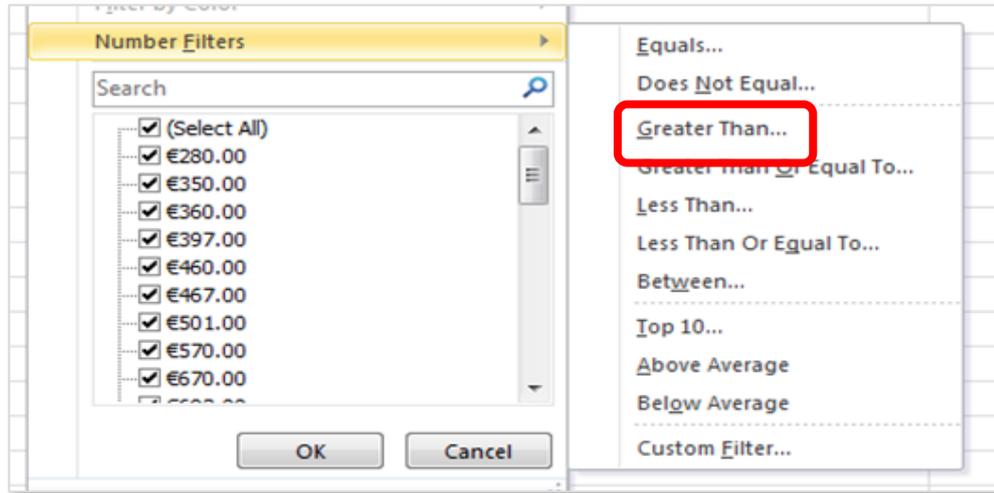
Date filters can also be applied in preset group categories as shown here. In this example the filter will show all orders places **Last Year**.

There are a variety of different options here for date filters. Some of these options can be filtered further, for example the **Between...** filter can be used to set two specific dates.



NUMBER

To apply a **Custom Filter** to a **NUMBER** there are a variety of options experiment with some of these options to understand how they behave. Notice that those options with the three dots after them for example **Greater than...** will open a **Custom Auto Filter** dialogue box to allow the required figures to be set (see below).



ADVANCED AUTO FILTER TO EXTRACT FILTERED DATA

An advanced filter is similar to a normal filter, the main difference is that the information is filtered using criteria and the filtered information is filtered out to a new location instead of remaining in place. It is very useful for **Extracting** information.

To use the advanced filter again it is very important to have the data correctly set up. No spaces (missing information) in the data and no blank lines. Set up the criteria range above the data set as shown on the next page.

ONE CRITERIA

In this example the **Criteria range** is cells A7:D8 and the **List range** is cells A10:D47.

Criteria Range

List Range

Order	Date	Salesperson	Amount
		Tommy	
Order	Date	Salesperson	Amount
1009	29/05/2011	Tommy	€1,245.00
1010	01/06/2011	Jonathon	€752.00
1011	01/06/2011	Mary Jane	€1,690.00
1012	02/06/2011	Susan	€2,790.00
1013	02/06/2011	Mary Jane	€467.00
1014	02/06/2011	James	€9,030.00
1015	04/09/2011	Jonathon	€3,870.00
1016	04/06/2011	Susan	€840.00
1017	04/06/2011	Mary Jane	€501.00
1018	05/06/2011	Tommy	€1,362.00
1019	05/06/2011	Jonathon	€1,780.00
1020	06/06/2011	Susan	€397.00
1021	06/03/2011	James	€2,630.00
1022	07/06/2011	Jonathon	€4,501.00
1023	07/06/2011	Mary Jane	€2,848.00

Before using the **Advanced Filter** first type in the criteria to be filtered, in this example the word **Tommy** is in cell C8 as we want to find all the sales completed by Tommy and extract this data to another location or list.

Next click anywhere in the **List Range** (this ensure the list range is automatically selected), to access the Advanced Filter go to the **Data** tab to the **Sort & Filter** group and select the **Advanced** button, this will open the **Advanced Filter** dialogue box.



In this example the **list range** is automatically selected as A10:D47, the **criteria range** is A7:D8 (to select this click in the criteria range text box and highlight the range). The **Copy to another location** radio button is selected, this turns on the **Copy to:** option, in this example the filtered data will be copied to cell F28. To apply the filter click ok.

Advanced Filter

Action

Filter the list, in-place

Copy to another location

List range: \$A\$10:\$D\$47

Criteria range: \$A\$7:\$D\$8

Copy to: ed Filter!\$F\$28

Unique records only

OK Cancel

This results in the filtered data being extracted from the list range starting at the cell F28 as shown.

Order	Date	Salesperson	Amount
		Tommy	
Order	Date	Salesperson	Amount
1024	08/06/2011	Tommy	€693.00
1025	09/06/2011	Jonathon	€670.00
1026	09/06/2011	Tommy	€1,670.00
1027	13/06/2011	Susan	€350.00
1028	21/06/2011	Jonathon	€2,970.00
1029	21/06/2011	Mary Jane	€4,270.00
1030	22/06/2011	Jonathon	€280.00
1031	04/01/2012	Susan	€570.00
1032	05/01/2012	Jonathon	€4,820.00
1033	07/01/2012	James	€460.00
1034	07/01/2012	Tommy	€750.00
1035	07/01/2012	Mary Jane	€1,570.00
1036	08/01/2012	Jonathon	€2,430.00

Order	Date	Salespers	Amount
1009	29/05/2011	Tommy	€1,245.00
1018	05/06/2011	Tommy	€1,362.00
1024	08/06/2011	Tommy	€693.00
1026	09/06/2011	Tommy	€1,670.00
1034	07/01/2012	Tommy	€750.00
1039	10/05/2012	Tommy	€360.00

Note that when the cell references are entered into the **Advanced Filter** dialogue box they automatically have absolute cell referencing applied to them. The **Criteria** and **Extracted Range** of cells are automatically to the **Name Manager** (this will be discussed in detail in the next point 4 Naming Cells).

MULTIPLE CRITERIA – AND

To filter a list range by more than one criteria the same **Advanced** filter method can be used. The difference with multiple criteria is that in the criteria range, more than one criteria is added along one line (by keeping the criteria along one line a AND filter is applied).

In this example the advanced filter will find sales by Susan, after the 01/01/2011 which were greater than €500. Note that the **> Greater Than** symbol is used along with the criteria. The resulting filter will be extracted to cell G12.

This is an AND criteria all 3 criteria must be met for the filter to show a result.

Note the **Criteria range** has three criteria and the **extracted filtered data** meets all of these criteria.

Order	Date	Salesperson	Amount
	>01/01/2011	Susan	>500
Order	Date	Salesperson	Amount
1009	29/05/2011	Tommy	€1,245.00
1010	01/06/2011	Jonathon	€752.00
1011	01/06/2011	Mary Jane	€1,690.00
1012	02/06/2011	Susan	€2,790.00
1013	02/06/2011	Mary Jane	€467.00
1014	02/06/2011	James	€9,030.00
1015	04/09/2011	Jonathon	€3,870.00
1016	04/06/2011	Susan	€840.00
1017	04/06/2011	Mary Jane	€501.00
1018	05/06/2011	Tommy	€1,362.00
1019	05/06/2011	Jonathon	€1,780.00
1020	06/06/2011	Susan	€397.00

Order	Date	Salesperson	Amount
1012	02/06/2011	Susan	€2,790.00
1016	04/06/2011	Susan	€840.00
1031	04/01/2012	Susan	€570.00
1037	09/01/2012	Susan	€847.00

MULTIPLE CRITERIA – AND WITH A RANGE

In this example the criteria heading Amount has been used twice. This can be used on cells which have a number value or a date range (not on text). All of the sales made by Susan after 01/01/2011 that were less than €1,000 but greater than €500 are shown. Note that the criteria range has two Amount headings - <1000 and >5000.

Order	Date	Salesperson	Amount	Amount
	>01/01/2011	Susan	<1000	>500
Order	Date	Salesperson	Amount	
1009	29/05/2011	Tommy	€1,245.00	
1010	01/06/2011	Jonathon	€752.00	
1011	01/06/2011	Mary Jane	€1,690.00	
1012	02/06/2011	Susan	€2,790.00	
1013	02/06/2011	Mary Jane	€467.00	
1014	02/06/2011	James	€9,030.00	
1015	04/09/2011	Jonathon	€3,870.00	
1016	04/06/2011	Susan	€840.00	
1017	04/06/2011	Mary Jane	€501.00	
1018	05/06/2011	Tommy	€1,362.00	
1019	05/06/2011	Jonathon	€1,780.00	
1020	06/06/2011	Susan	€397.00	
1021	06/03/2011	James	€2,630.00	

Order	Date	Salesperson	Amount
1016	04/06/2011	Susan	€840.00
1031	04/01/2012	Susan	€570.00
1037	09/01/2012	Susan	€847.00

This type of example could be used on dates to extract all sales from the 1st of January in any year to the 31st December, by adding two date column and adding >01/01/2011 and <31/12/2011. This could also be used to exclude a particular year by reversing the symbols.

MULTIPLE CRITERIA – OR

In this example the multiple criteria uses two lines, this will mean the two rows of filters are applied to the data simultaneously. So in this example we can see the data for Susan or Mary Jane and the sales they have made after the 01/01/2011 that were greater than €500.

Order	Date	Salesperson	Amount
	>01/01/2011	Susan	>500
	>01/01/2011	Mary Jane	>500
Order	Date	Salesperson	Amount
1009	29/05/2011	Tommy	€1,245.00
1010	01/06/2011	Jonathon	€752.00
1011	01/06/2011	Mary Jane	€1,690.00
1012	02/06/2011	Susan	€2,790.00
1013	02/06/2011	Mary Jane	€467.00
1014	02/06/2011	James	€9,030.00
1015	04/09/2011	Jonathon	€3,870.00
1016	04/06/2011	Susan	€840.00
1017	04/06/2011	Mary Jane	€501.00
1018	05/06/2011	Tommy	€1,362.00
1019	05/06/2011	Jonathon	€1,780.00
1020	06/06/2011	Susan	€397.00
1021	06/03/2011	James	€2,630.00
1022	07/06/2011	Jonathon	€4,501.00
1023	07/06/2011	Mary Jane	€2,848.00
1024	08/06/2011	Tommy	€693.00
1025	09/06/2011	Jonathon	€670.00
1026	09/06/2011	Tommy	€1,670.00
1027	13/06/2011	Susan	€350.00
1028	21/06/2011	Jonathon	€2,970.00
1029	21/06/2011	Mary Jane	€4,270.00
Order	Date	Salesperson	Amount
1011	01/06/2011	Mary Jane	€1,690.00
1012	02/06/2011	Susan	€2,790.00
1016	04/06/2011	Susan	€840.00
1017	04/06/2011	Mary Jane	€501.00
1023	07/06/2011	Mary Jane	€2,848.00
1029	21/06/2011	Mary Jane	€4,270.00
1031	04/01/2012	Susan	€570.00
1035	07/01/2012	Mary Jane	€1,570.00
1037	09/01/2012	Susan	€847.00
1038	09/01/2012	Mary Jane	€925.00
1040	14/01/2012	Mary Jane	€2,074.00
1045	05/05/2013	Mary Jane	€780.00

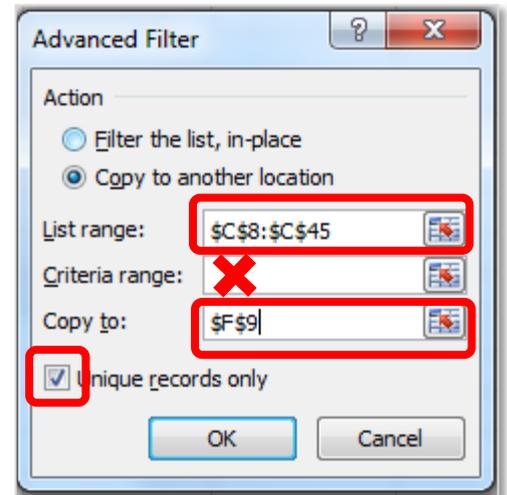
ADVANCED FILTER OF UNIQUE RECORDS

Advanced Filtering can also be used to remove unique values from a list to summarize it to one value no matter how many times it is repeated on a list. For example if a list of the sales team staff from the **Salesperson** column over the last three years was required, this technique could be used to prevent searching the list manually.

When selecting the data for this technique only the column containing the information needs to be highlighted for the **List range**.

To use this technique highlight the column to be filtered as the **List range**, in this example that is the **Salesperson** column.

Don't select a **Criteria range** - this should be left blank as we have no criteria this time. Select a **Copy to** location, to allow the list to be extracted and not copied in place. Finally tick the box next to **Unique records only** to ensure the data is not repeated as it is in the list.



This will result in a separate list of the sales staff with each member of the staff only showing once. This list can then be sorted alphabetically if required.

	Order	Date	Salesperson	Amount	
7					
8					
9	1009	29/05/2011	Tommy	€1,245.00	Salesperson
10	1010	01/06/2011	Jonathon	€752.00	Tommy
11	1011	01/06/2011	Mary Jane	€1,690.00	Jonathon
12	1012	02/06/2011	Susan	€2,790.00	Mary Jane
13	1013	02/06/2011	Mary Jane	€467.00	Susan
14	1014	02/06/2011	James	€9,030.00	James
15	1015	04/09/2011	Jonathon	€3,870.00	
16	1016	04/06/2011	Susan	€840.00	
17	1017	04/06/2011	Mary Jane	€501.00	
18	1018	05/06/2011	Tommy	€1,362.00	
19	1019	05/06/2011	Jonathon	€1,790.00	

NOTES: Visit [Excel is Fun](#) by Mike Girvin for more information on Advanced Filtering.

ADD SUBTOTALS TO FILTERED LISTS

After a list has been filtered it can be very useful to have a subtotal of the new filtered information. There are two methods of achieving subtotals for filtered lists the **SUBTOTAL Formula** and **Outline Subtotals**. The first is the formula which will be covered now and will appear again in Section 4 – Formula and Functions.

SUBTOTAL FORMULA

In this example the sales for 2013, 2012 and 2011 amount to €72,358. Only the sales for 2012 are required and a new subtotal for just this year is required. The normal SUM formula will show the total for all rows in the range even after a filter is applied, this is why the SUBTOTAL formula is required.

The SUBTOTAL formula has two arguments the first is the **function_num** which determines the type of calculation to be completed by the formula. As this is adding SUM is required which is the number 9. The second argument is the **full** range of the cells to be calculated before the filter has been applied, in this example that is the range **D9:D45**.

Order	Date	Salesperson	Amount
1012	02/06/2011	Susan	€2,790.00
1016	04/06/2011	Susan	€840.00
1020	06/06/2011	Susan	€397.00
1027	13/06/2011	Susan	€350.00
1031	04/01/2012	Susan	€570.00
1037	09/01/2012	Susan	€847.00
1044	04/02/2013	Susan	€460.00
1009	29/05/2011	Tommy	€1,245.00
1018	05/06/2011	Tommy	€1,362.00
1024	08/06/2011	Tommy	€693.00
1026	09/06/2011	Tommy	€1,670.00
1034	07/01/2012	Tommy	€750.00
1039	10/05/2012	Tommy	€500.00

The screenshot shows the formula dropdown menu for the SUBTOTAL function. The '9 - SUM' option is highlighted, indicating it has been selected for the formula.

The screenshot shows the filtered data with a SUBTOTAL formula applied to the Amount column. The formula bar displays `=SUBTOTAL(9,D9:D45)`, which calculates the sum of the visible filtered data.

The result of the subtotal formula after a filter has been applied on the year 2012 is as follows:

8	Order	Date	Salesperson	Amount
11	1033	07/01/2012	James	€460.00
20	1032	05/01/2012	Jonathon	€4,820.00
21	1036	08/01/2012	Jonathon	€2,430.00
29	1035	07/01/2012	Mary Jane	€1,570.00
30	1038	09/01/2012	Mary Jane	€925.00
31	1040	14/01/2012	Mary Jane	€2,074.00
37	1031	04/01/2012	Susan	€570.00
38	1037	09/01/2012	Susan	€847.00
44	1034	07/01/2012	Tommy	€750.00
45	1039	10/05/2012	Tommy	€360.00
46				€14,806.00
47				

Note that the rows are not sequential which shows the filter has been applied and the subtotal is €14,806.00.

NOTES:

4. NAMES

NAME A CELL

A **Name** is a meaningful shorthand of the contents of a cell that makes it easy to understand at a glance. Using names on cell can make formula easier to understand, names can be defined for individual cells or for whole ranges. After a cell has been named this name can be used in any formula.

When choosing a **name** for the cell ensure it is unique to Excel for example, *Today* cannot be used as a name because this is the name of a function in Excel. **Names** cannot contain a space, cell references cannot be used as the name of a cell, up to 255 characters can be used and names can contain upper and lower case letters.

To set the name of a cell **select or click** on the cell to be named (this step is often overlooked if the cell is not correctly selected the wrong cell will be named) – in this case it is cell C7

In the **Name Box** type the name to be applied - *TaxRate* and press the **enter key**.

After a cell has been named the **Name Box** can be used to quickly access the cell, to do this, click on the down arrow to the right of the name box and select the name of the cell. This will bring the cursor to the named cell from any worksheet.

Name box

	A	B	C
7		Tax Rate	17%
8	Product	Cost	Tax
9	Table	€45.00	
10	Chair	€105.00	

	B	C
1	Tax Rate	17%
2	Product	Tax
3	Table	€7.65
4	Chair	€17.85
5		

NAME A RANGE OF CELLS

In the same way a single cell can be named a range of cells can be named, this applies to both adjacent and non-adjacent groups of cells.

Again this allows them to be easily found and highlighted with the name box, and allows ease of use of the range within functions and formula.

To apply a name to a range of cells highlight the range of cells to be named, click on the **name box**, type in the name of the range of cells and press the **enter key**. The name will appear in the name box.

Name box

	A	B	C
1		Tax Rate	17%
2	Product	Cost	Tax
3	Table	€45.00	€7.65
4	Chair	€105.00	€17.85
5			

Remember that there should be no spaces used in a name box. To identify a range with two words use an underscore between them e.g. Tax_rate.

USE NAMES IN FORMULAS

Named ranges can also be used in formula and functions instead of cell references e.g.

7		Tax Rate	17%
8	Product	Cost	Tax
9	Table	€45.00	=B9*TaxRate
10	Chair	€105.00	€17.85

=Tax + Cost

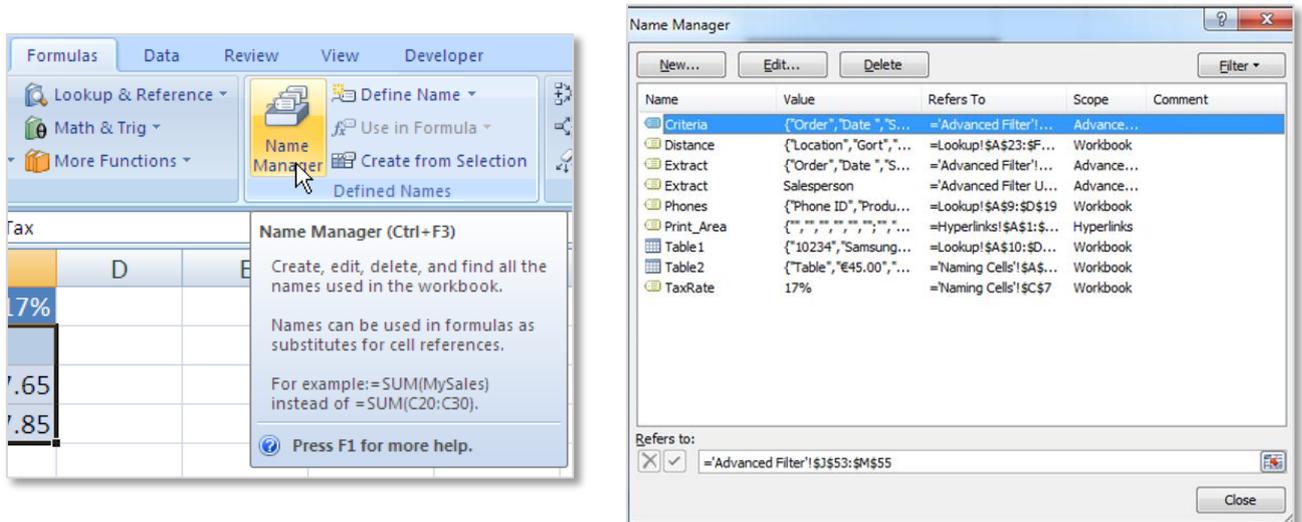
=SUM (tax)

Note: Another important feature of a named range is that it doesn't change when a formula is auto filled. Therefore it provides an alternative to using **absolute cell referencing** in functions and formula.

NAME MANAGER

The **Name Manager** can be used to create, edit, delete and find all the names used in the workbook. To access the Name Manager go to the **Formulas** tab to the **Defined Names** group and click on the **Name Manager** command. Alternatively use the keyboard shortcut Ctrl + F3.

This will open the Name Manager dialogue box which displays a list of all of the named cells or ranges in the workbook.

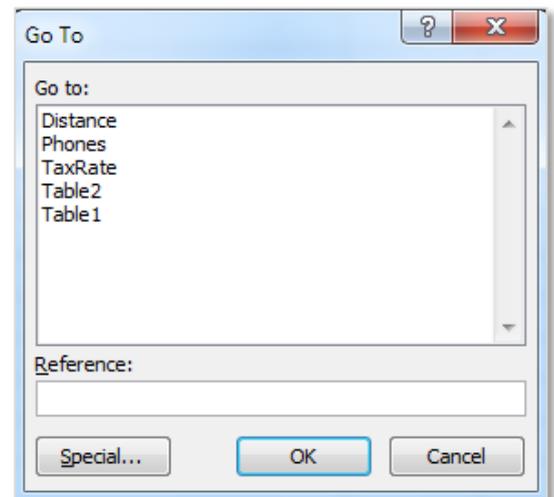


DELETE OR EDIT A NAMED CELL OR RANGE

To delete a range open the Name Manager (using the method above or the shortcut keys Ctrl + F3). From the **Name Manager** dialogue box select the range to be deleted and click on the **Delete** command. To edit a name it to include a different cell reference range click on the **Edit** command and select the correct range.

USE GO TO WITH NAMES

As mentioned previously a name can be used to quickly access a cell or range of cells from anywhere in the workbook using the drop down on the **name box**. In addition the **Go To** shortcut dialogue box can be used to access names. To use this feature use the shortcut keys **Ctrl + G**, this will open the **Go To** dialogue box, select the required name, click OK and the name is highlighted.



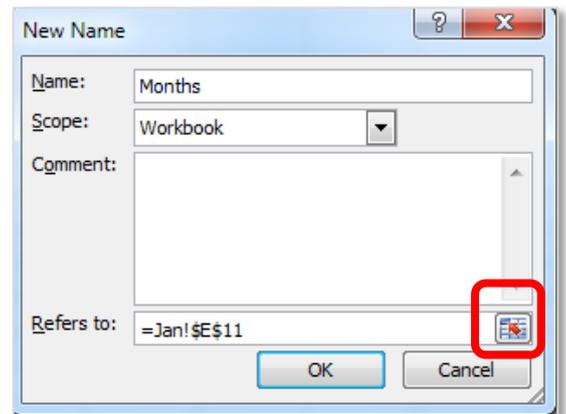
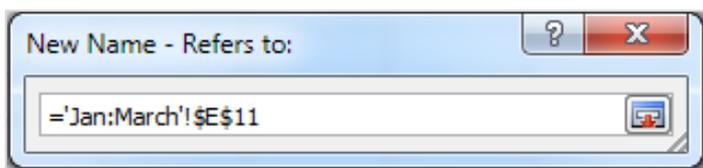
NAMING CELLS FOR A RANGE, UNION OR INTERSECTION

To name a range of cells for a Range, Union or Intersection reference use the normal method of highlighting the cells and clicking in the name box and naming the cells.

NAMING CELLS FOR A 3D RANGE

To name a 3D Range of cells the method is different, because 3D named range spans more than one worksheet the **Name Manger** dialog box must be used and not the Name Box.

In the Name Manager click on the **New** command and this will open the **New Name** dialogue box. To select the range use the **Refers to:** launch button to manually select the ranges.



Select the required cell range and then holding the Shift button select each of the required worksheets. Then return to the **New Name** dialogue box with the launch button. The 3D Range will show in the **Refers to:** box, showing the range of the sheets! and the absolute cell reference of the selected cells.

It is important to note that the new 3D Range will show in the Name Manager but will not appear in the Name Box, however the 3D Range can be used in formula as a normal named group of cells.

Example: Months Totals across 3 Worksheets.

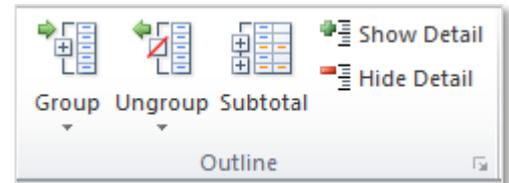
The totals for Jan, Feb and March have been set to a 3D Range named *Months* to add all three a SUM formula has been used.

	A	B	C	D	E	F	G
1							
2		January Income					
3							
4		Wages		€1,500.00			
5		Rent		€500.00			
6		Other		€50.00			
7		Total Jan		€2,050.00			
8							
9							
10							
11		Overall Total for 3 Years			=SUM(Months		
12					SUM(number1, [number2], ...)		
13					Months		

5. OUTLINES

CREATE OUTLINES

Outlining is used to group and summarise a list of data to help make the data easier to understand. It can be used to organise data, hide data from view, show only certain data and for subtotaling lists. Up to 8 groups can be applied to outlined data.



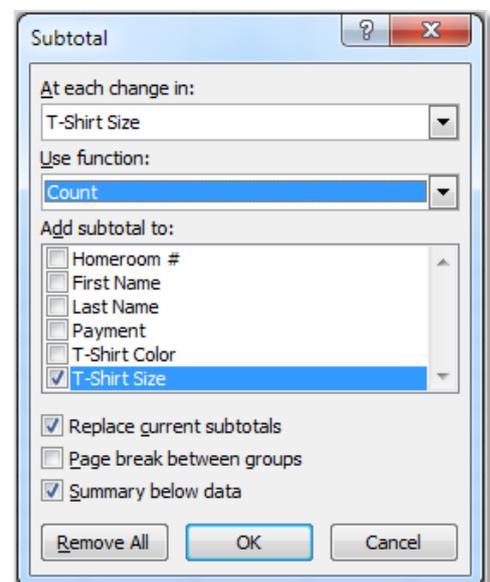
To use **Outlines** first the data must be complete and sorted according to the data to be outlined. In the example we will use the data is sorted according to the *T-Shirt Size* column as this column will be counted.

To access **outlines** (ensure your mouse is clicked into the data list to be outlined, then) go to the **Data** tab to the **Outline** group and click on the **Subtotal** command. This will open the **Subtotal** dialogue box.

In the **At each change in:** select the column which is being used for the outline (the sorted column).

Under **Use function:** choose the function relating to the result required. In this example a total of T-Shirt sizes is required so **Count** is selected.

Finally at **Add subtotal to:** select the column the subtotal will appear in, in this example it is the T-Shirt Size column.



This creates an outline of the contents of the list of data as shown.

T-SHIRT SALES – OUTLINED DATA

View Groups by Level

6	A	B	C	D	E	F
7						
7	Homeroom #	First Name	Last Name	Payment	T-Shirt Color	T-Shirt Size
8	105	Esther	Yaron	7-Oct	Dark Red	Small
9	135	Anisa	Naser	14-Oct	Dark Red	Small
10	220-A	Brigid	Ellison	Pending	Dark Red	Small
11	105	Melissa	White	7-Oct	Heather Grey	Small
12	220-B	Malik	Reynolds	7-Oct	Heather Grey	Small
13	220-B	Windy	Shaw	7-Oct	Heather Grey	Small
14	220-A	Christopher	Peyton-Gomez	Pending	White	Small
15	220-B	Michael	Lazar	14-Oct	White	Small
16					Small Count	8
17	105	Christiana	Chen	5-Oct	Dark Red	Medium
18	105	Sidney	Kelly	11-Oct	Dark Red	Medium
19	220-A	Chevonne	Means	5-Oct	Dark Red	Medium
20	220-B	Samantha	Bell	11-Oct	Dark Red	Medium
21	105	Nathan	Albee	13-Oct	Heather Grey	Medium
22	220-B	Avery	Kelly	11-Oct	Heather Grey	Medium
23	110	Matt	Benson	11-Oct	White	Medium
24	110	Gabriel	Del Toro	13-Oct	White	Medium
25	135	James	Panarello	15-Oct	White	Medium
26	135	Chantal	Weller	15-Oct	White	Medium
27					Medium Count	10
28	105	Derek	MacDonald	Pending	Dark Red	Large
29	110	Kris	Ackerman	1-Oct	Heather Grey	Large
30	135	Jordan	Weller	5-Oct	Heather Grey	Large
31	110	Regina	Olivera	1-Oct	White	Large
32	135	Alex	Yuen	5-Oct	White	Large
33					Large Count	5
34	135	Lia	Richards	4-Oct	Dark Red	X-Large
35	220-B	Karla	Nichols	6-Oct	Dark Red	X-Large
36	220-B	Tyrese	Hanlon	4-Oct	Heather Grey	X-Large
37	220-A	Juan	Flores	6-Oct	White	X-Large
38					X-Large Count	4
39					Grand Count	27

WORK WITH OUTLINES

When the data has been outlined the groups can be shown or hidden by the minus or plus symbols to the left of the row headings (numbers). The data can also be displayed by level just below the name box. Experiment with these options and the **Subtotal** dialogue box to understand how **Outlines** work.

REMOVE AN OUTLINE

To remove an outline click in the data and go to the **Data** tab to the **Outline** group, select the **Subtotal** command and from the Subtotal dialogue box select the **Remove All** command.

Outlined data can be **grouped** and **ungrouped** as required in columns or in rows. For more information on Outlines view the GCF Learn Free Outline [video](#).

6. SCENARIOS

CREATE SCENARIOS

A **Scenario** in Excel is one of the three **What-If Analysis** tools. It can be used to determine possible results from a set of data by allowing the input values to be changed under different saved scenarios. The purpose of a scenario is to be able to store several sets of data possibilities in one cell.

Example: Small Business Projected Sales

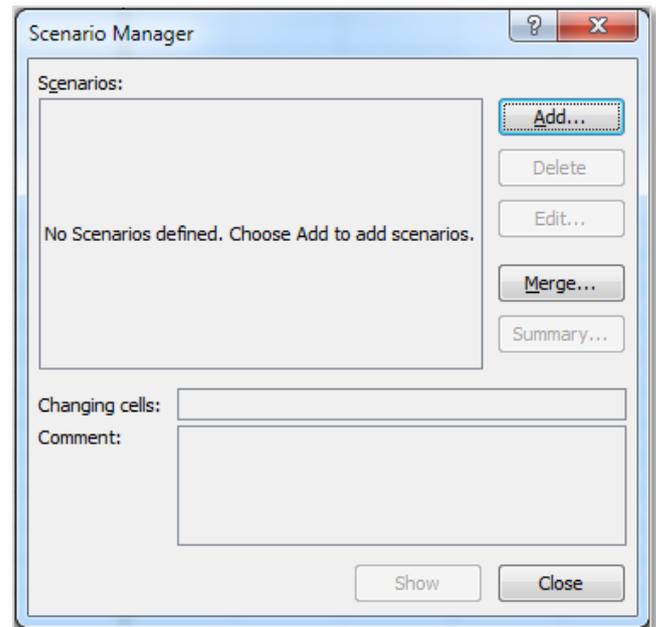
In this example the projected *Sales Target*, *Expense* and *Profit* are shown for a small business over a period of six months. Three scenarios will be created:

- The first will be the original projected sales for the business over the six months.
- The second scenario will be figures 10% above the original scenario.
- And the third scenario will be figures 10% below the original figures.

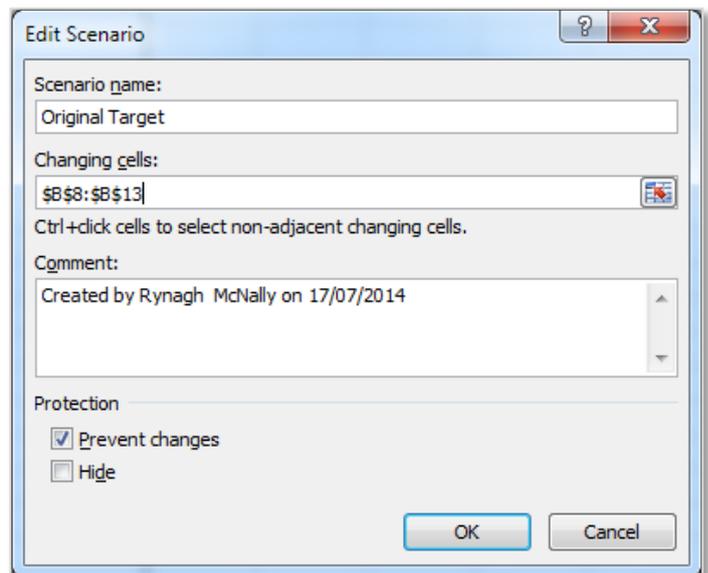
		Sales Target	Expense	Profit
7				
8	Jan	€25,000.00	€15,000.00	€10,000.00
9	Feb	€30,000.00	€17,000.00	€13,000.00
10	Mar	€30,000.00	€17,500.00	€12,500.00
11	Apr	€40,000.00	€18,000.00	€22,000.00
12	May	€42,000.00	€19,000.00	€23,000.00
13	Jun	€45,000.00	€21,000.00	€24,000.00

ORIGINAL TARGET

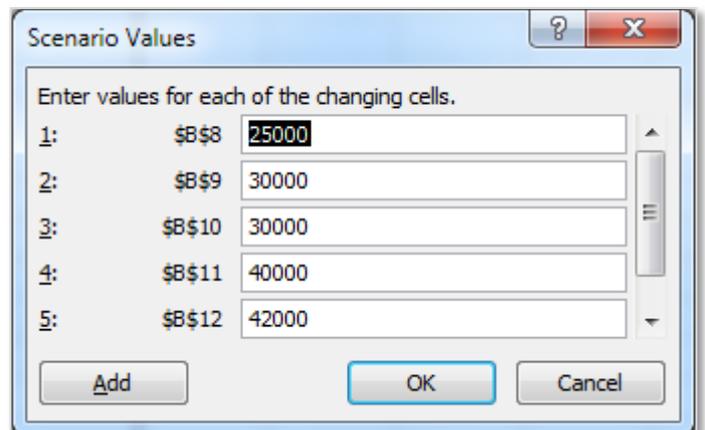
To create the first scenario which will be named **Original Target**, go to the **Data** tab to the **Data Tools** group and click on the **What-If Analysis** command button, from the drop down list select **Scenario Manager...** In the **Scenario Manager** dialogue box select **Add**.



From the **Edit Scenario** dialogue box set the **Scenario name:** and the **Changing cells:** (cells that will be changed) and click **OK**.



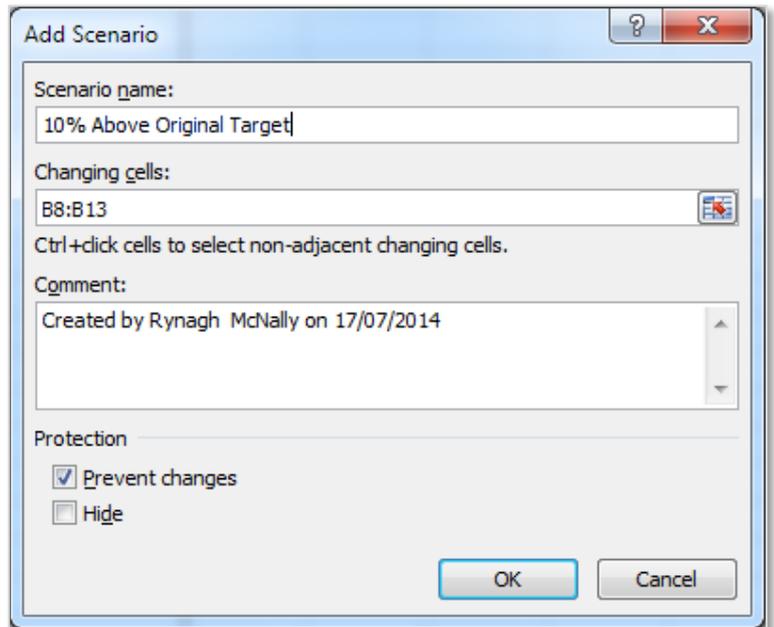
In the **Scenario Values** dialogue box the values typed in the selected changing cells will automatically appear. As this is the Original Target these values do not need to be changed at this time. Click **OK** to save this scenario.



10% ABOVE ORIGINAL TARGET

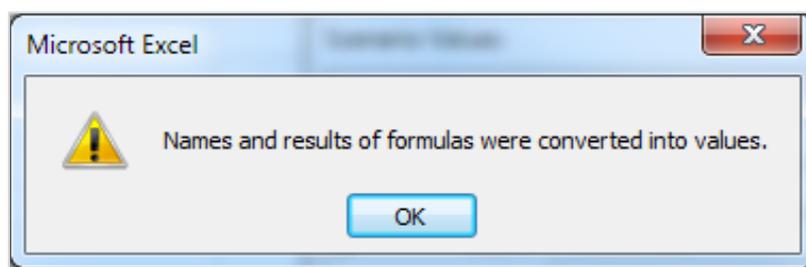
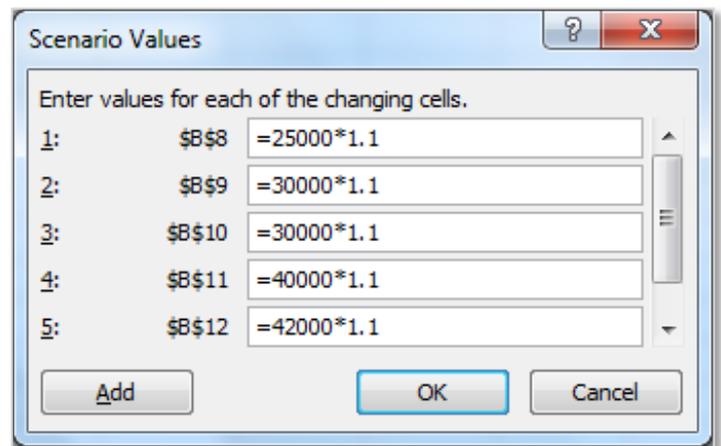
In this example the second scenario will be one where the sales are 10% above the original target. Click on **Add** to create a new scenario

Name the scenario and select the changing cells as shown.



In this scenario where the figures are estimated at 10% above the original target a formula is applied in the **Scenario Values** dialogue box. The original figure is multiplied by 1.1 to get 110%.

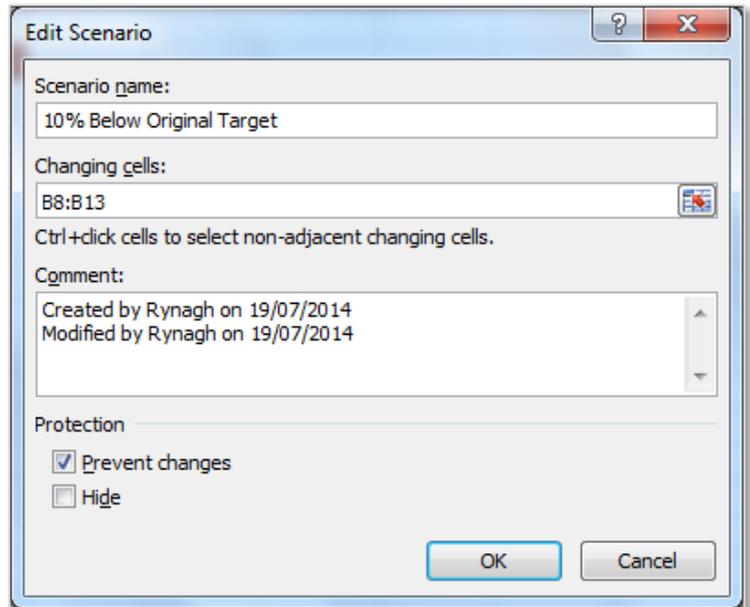
The formula are then converted to values and saved as the values for that scenario.



10% BELOW ORIGINAL TARGET

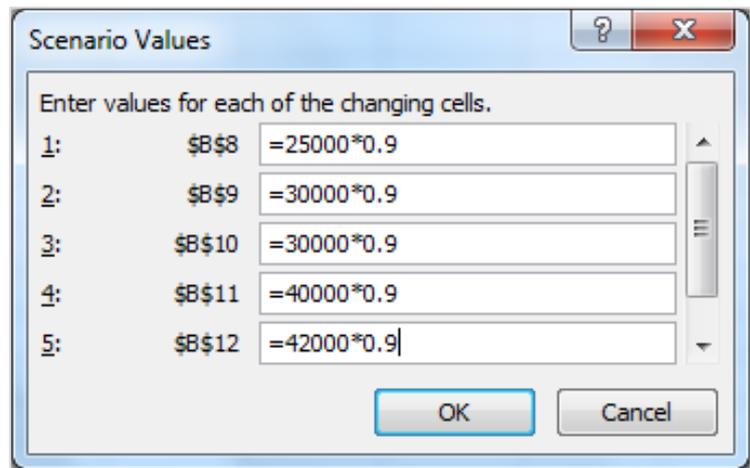
Finally in the third scenario the sales are 10% below the original target. Click on **Add** to create a new scenario.

Again name the scenario and select the correct cell range (ensure the range is set to the original target before applying the 10% less formula).



In this scenario the formula used reduces the original target by multiplying it by 0.9.

Click ok to save the third scenario and convert the formula into values.

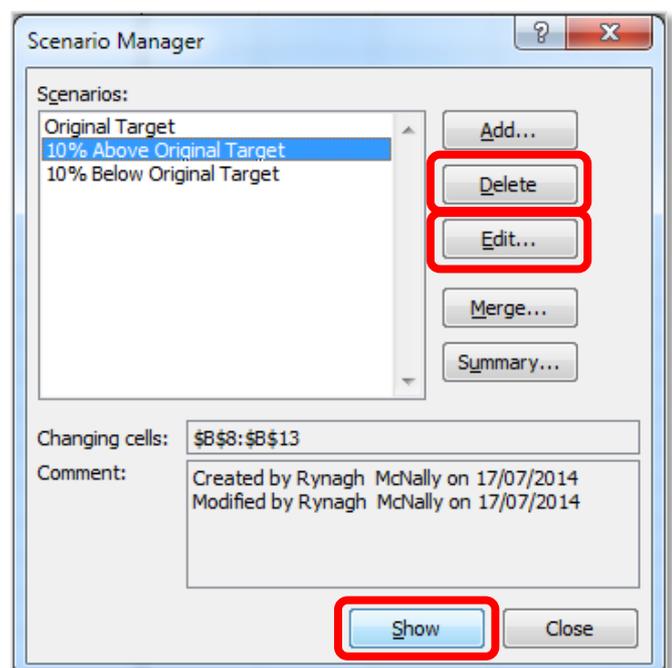


USE, EDIT AND DELETE SCENARIOS

When a scenario is applied the data in the worksheet is actually changed to that scenario.

To **Use** or return to a specific scenario reopen the **Scenario Manager**, select the required scenario and select **Show**.

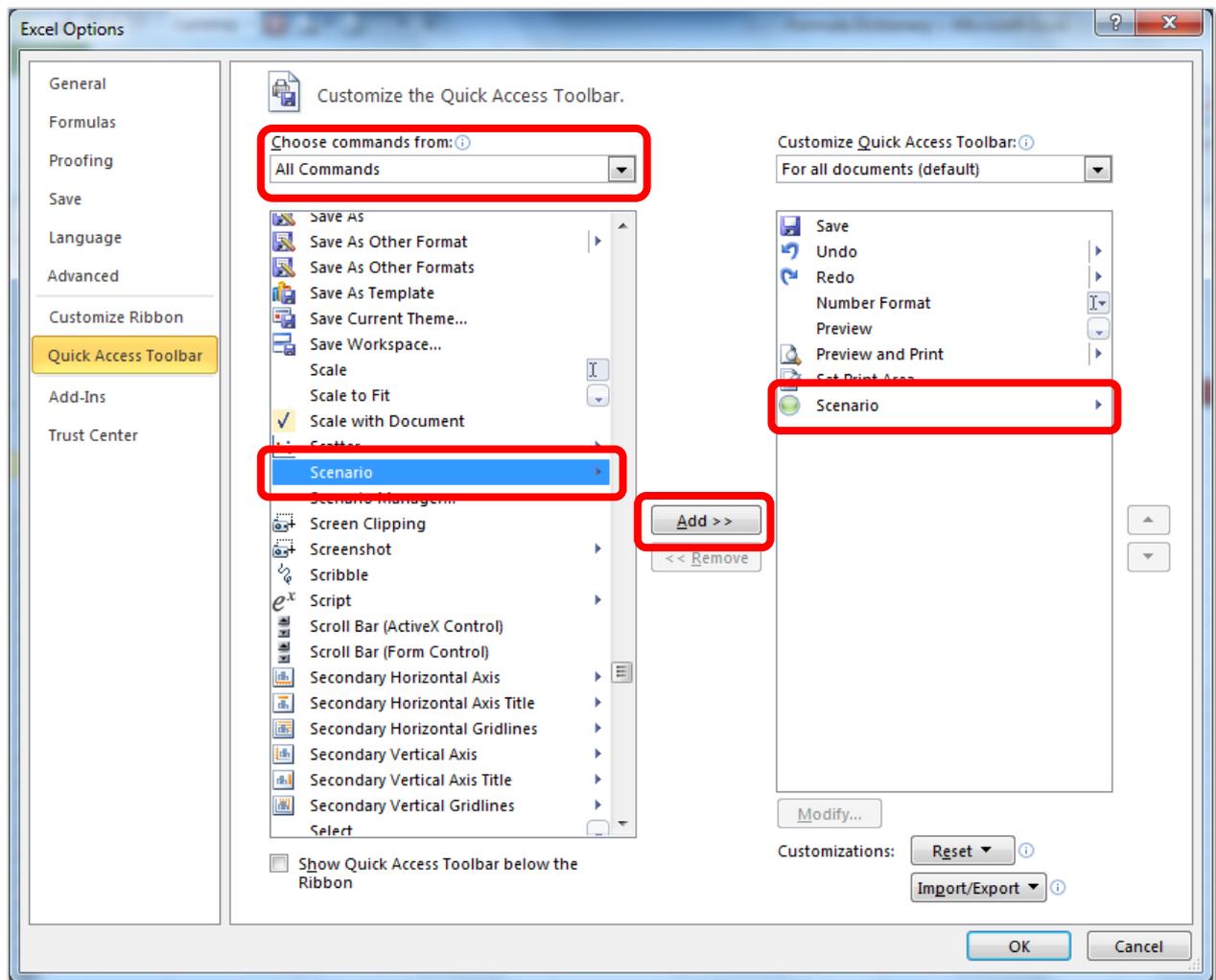
To **Edit** or **Delete** a scenario, select the scenario and choose the appropriate command from the **Scenario Manager**.



ADD SCENARIOS TO THE QUICK ACCESS TOOLBAR

After scenarios have been created they can be easily used from the **quick access toolbar**. Excel has provided a nice shortcut tool on the quick access toolbar and as new scenarios are created they are added to the shortcut.

Open **Excel Options**, select **Quick Access Toolbar**, choose commands from All Commands, scroll down to **Scenario** and add the command to the quick access toolbar. Now all scenarios created for that worksheet are easily available from the quick access toolbar.

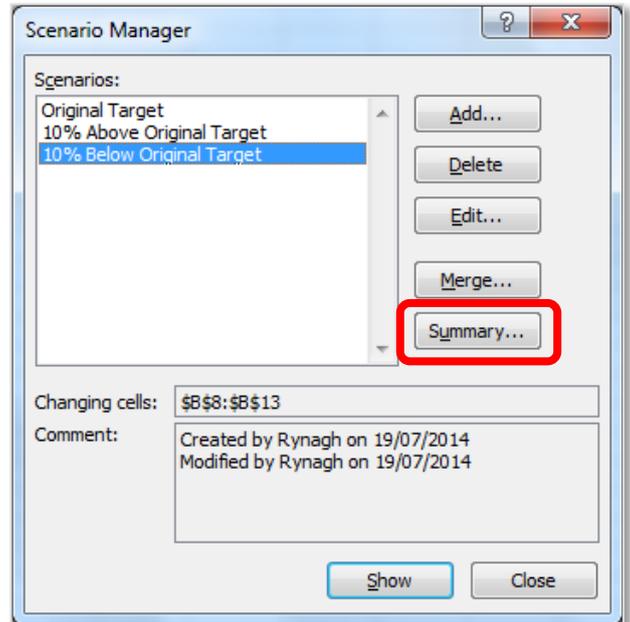


NOTES:

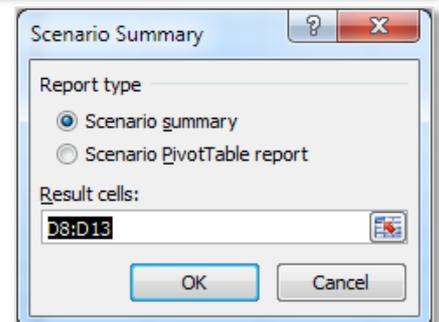
CREATE A SCENARIO SUMMARY REPORT

After the Scenario Manager has been used to create scenarios in Excel a **summary report** of each of these scenarios can be created. This report displays not only the changing and resulting values for all the scenarios defined but also the current values in the changing cells in the workbook table at the time the report is generated.

Access the **Scenario Summary** by going to the **Data** tab to the **Data Tools** group, open the **Scenario Manger** from the **What-If Analysis** group. In the Scenario Manager dialogue box click the **Summary** command button.



From the **Scenario Summary** dialogue box select the cells with the results required for summary, in this example these are cells D8:D13 which show the **Profit**.



The table below shows the completed **Summary Report** based on the different scenarios for the data and the outcomes in the **Result Cells** or the **Profit** column.

		Current Values:	Original Target	10% Above Original Target	10% Below Original Target
Changing Cells:					
	\$B\$8	€30,250.00	€25,000.00	€30,250.00	€20,250.00
	\$B\$9	€36,300.00	€30,000.00	€36,300.00	€24,300.00
	\$B\$10	€36,300.00	€30,000.00	€36,300.00	€24,300.00
	\$B\$11	€48,400.00	€40,000.00	€48,400.00	€32,400.00
	\$B\$12	€50,820.00	€42,000.00	€50,820.00	€34,020.00
	\$B\$13	€45,000.00	€45,000.00	€45,000.00	€45,000.00
Result Cells:					
	\$D\$8	€15,250.00	€10,000.00	€15,250.00	€5,250.00
	\$D\$9	€19,300.00	€13,000.00	€19,300.00	€7,300.00
	\$D\$10	€18,800.00	€12,500.00	€18,800.00	€6,800.00
	\$D\$11	€30,400.00	€22,000.00	€30,400.00	€14,400.00
	\$D\$12	€31,820.00	€23,000.00	€31,820.00	€15,020.00
	\$D\$13	€24,000.00	€24,000.00	€24,000.00	€24,000.00

Notes: Current Values column represents values of changing cells at time Scenario Summary Report was created. Changing cells for each scenario are highlighted in gray.

7. SORTING

Sorting is used in worksheets to allow the data to be displayed in the order that is required by the user. This can be in ascending or descending, according to numerical or alphabetical order and can be applied to rows or columns.

Sorting allows the user to see data in a structured way and to find values quickly. Sorting is also a pre-requisite to a variety of features in Excel such as Outlines and to some functions such as Lookups.

TO SORT ON ONE COLUMN

To sort information first click in any cell of the column the table is to be sorted by, then go to the **Data** tab to the **Sort & Filter** group and click on **Sort A to Z** or **Sort Z to A** command buttons. The data will be automatically sorted according to the selected column.



In this example the mouse was clicked in cell A11 before the sort, when the **Sort A to Z** sort was applied the result was that all the sports clubs were organised by Club in alphabetical order.

	Sports Shop Football Sales			
	Club	Shirt	Shorts	Hats
11	Aston Villa	325	123	213
12	Blackburn	134	24	156
13	Blackburn	134	234	108
14	Chelsea	231	221	98
15	Juventus	351	361	106
16	Leicester	313	225	156
17	Liverpool	564	226	346
18	Manchester	451	112	241
19	Newcastle	214	111	115



Questions???

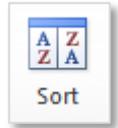
What happens when you highlight a whole column before you apply a sort?

What does this mean?

Why does this happen?

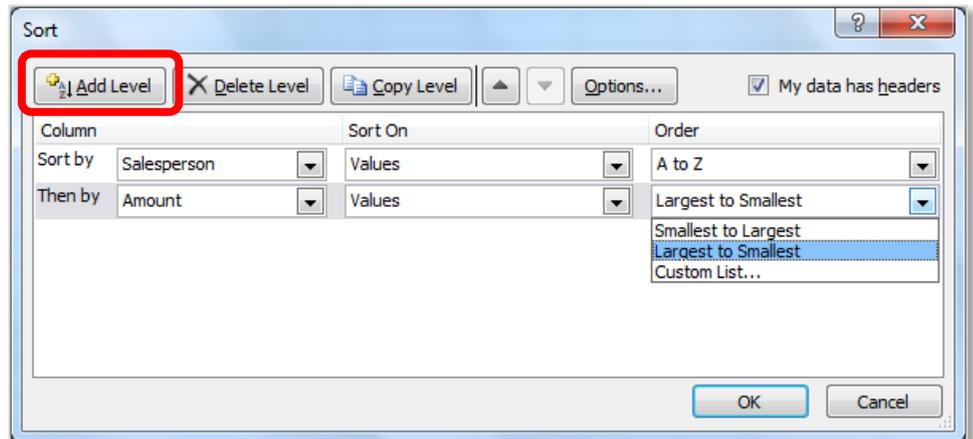
SORT ON MULTIPLE COLUMNS

To sort a table according to several **Columns** the **Sort** dialogue box is used. To access it go to the **Data** tab to the **Sort and Filter** group and click on the **Sort** command button.



The following example lists sales, the dates they were made, the staff member that made the sales and the amount of the sale. The data will be sorted by the Salesperson in *alphabetical order* and then by the *Amount* of the sales by *largest to smallest*.

From the **Sort by** drop down list the column heading *Salesperson* is selected then the **Order** is set to **A to Z**. Then the **Add Level** command button is selected to allow a second level to be



applied to this sort. In the second sort **Then by** the *Amount* is selected as the column and the **Order** is set to **Largest to Smallest**. Ok is selected to apply the sort and the result is the sorted data shown below.

21					
22	Order	Date	Salesperson	Amount	
23	1016	10/04/2014	Cannon	€1,500.39	Sorted by Salesperson
24	1023	15/04/2014	Cannon	€740.82	
25	1013	09/04/2014	Cannon	€568.82	Then sorted by Amount
26	1030	18/04/2014	Cannon	€300.76	
27	1024	16/04/2014	Charles	€1,198.02	
28	1032	20/04/2014	Charles	€586.03	
29	1031	19/04/2014	Charles	€250.73	
30	1014	09/04/2014	Charles	€201.74	
31	1029	18/04/2014	Davis	€1,690.83	
32	1021	15/04/2014	Davis	€893.82	
33	1012	09/04/2014	Davis	€504.72	
34	1028	17/04/2014	Davis	€307.04	
35	1018	11/04/2014	Davis	€109.35	
36	1022	15/04/2014	Thomas	€1,022.49	
37	1015	10/04/2014	Thomas	€900.93	
38	1010	09/04/2014	Thomas	€805.50	
39	1020	15/04/2014	Thomas	€487.82	
40	1027	17/04/2014	Thomas	€404.73	
41	1026	17/04/2014	Wells	€783.94	

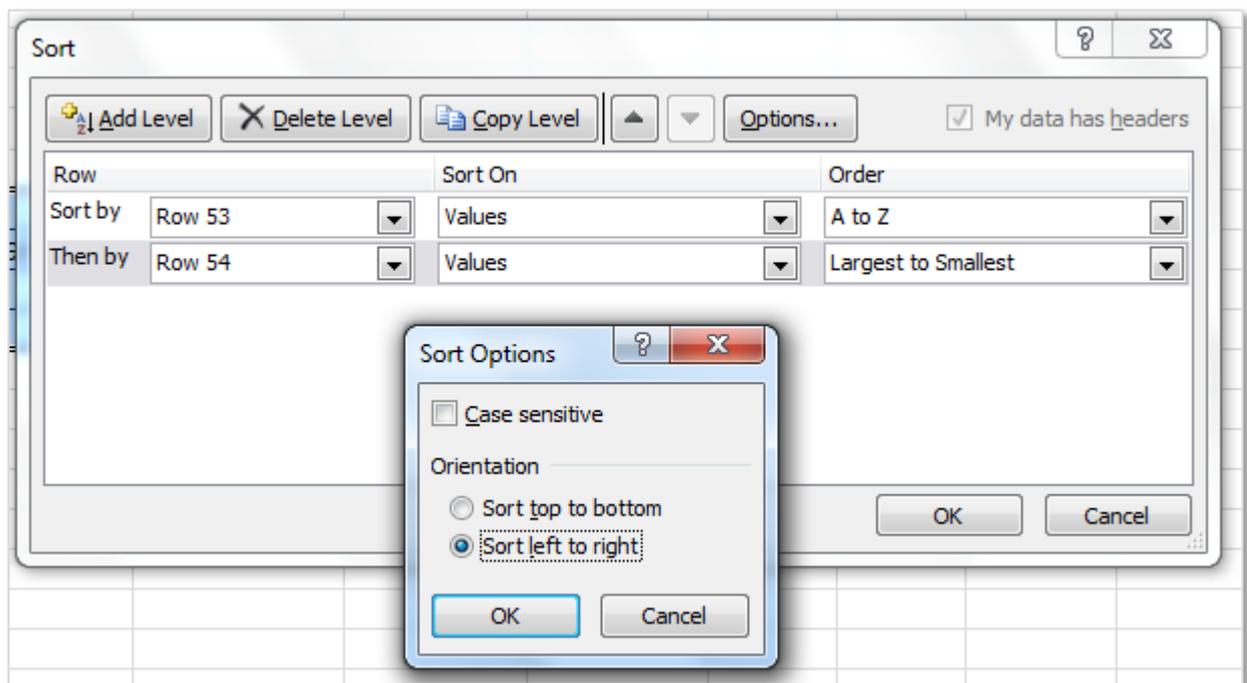
NOTE: Sorting can also be applied by **font colour** or **cell icon**. For more information on sorting watch the following [Sorting video](#).

SORT ON MULTIPLE ROWS

Sorting data by Columns is the most common method of sorting; however data can also be sorted by **Rows**. To sort data by rows ensure the data is set up appropriately, in this example the data has the headings on the left side and each sale is organised down the column instead of across the row.

49	Sales Sort by Rows							
50								
51	Order	1010	1011	1012	1013	1014	1015	1016
52	Date	09/04/2014	09/04/2014	09/04/2014	09/04/2014	09/04/2014	10/04/2014	10/04/2014
53	Salesperson	Thomas	Wells	Davis	Cannon	Charles	Thomas	Cannon
54	Amount	€305.50	€270.89	€504.72	€568.82	€201.74	€900.93	€1,500.39
55								

In the following example the data will be sorted according to the *Salesperson* and the *Amount* of the sale. To begin highlight only the data to be sorted – do **not** include the headings of the data. To access sorting by rows go to the **Data** tab to the **Sort & Filter** group and click on the **Sort** command button. In the **Sort** dialogue box click on the **Options** command button, to open the **Sort Options** dialogue box. To sort data according to rows choose the second option **Sort left to right** as shown below.



This will remove the option to sort the data according to column names and instead the sorting will be applied by row numbers. In the example above the data is sorted by **Row 53 Salesperson** and **Row 54 Amount**. Click on **Ok** to apply the sort and the result is the data sorted according to

Sales Sort by Rows							
49							
50							
51	Order	1016	1013	1014	1012	1015	1010
52	Date	10/04/2014	09/04/2014	09/04/2014	09/04/2014	10/04/2014	09/04/2014
53	Salesperson	Cannon	Cannon	Charles	Davis	Thomas	Thomas
54	Amount	€1,500.39	€568.82	€201.74	€504.72	€900.93	€805.50

the rows as shown.

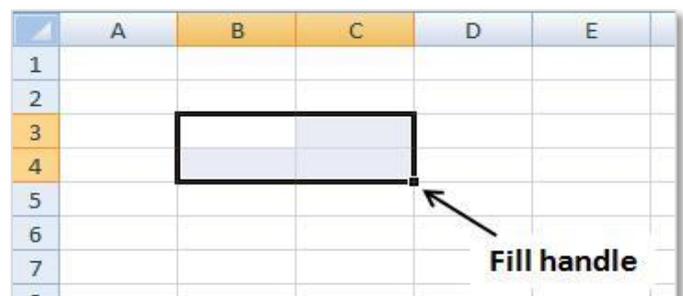
CREATE SERIES AND CUSTOM LISTS

SERIES

Instead of entering data manually on a worksheet, the **Auto Fill** feature can be used to automatically fill cells with data, which follow a pattern or based on data in other cells. **Series** can be created based on numbers, dates or built in **Custom Lists**.

Examples of **Series** are 1, 2, 3, 4, 5, 6 or 2, 4, 6, 8, 10 or 3, 6, 9, 12, 15.

The **Auto Fill** feature is accessed by clicking on the **Fill Handle** (the small black square in the lower-right corner of the selection), when the cursor is pointed on the fill handle, the pointer changes to a black cross, as shown. Auto-fill can be applied to numbers, text, months, days and formulae.



To create a series type in the starting value in the first cell, in the next cell type a value which will establish the pattern. Highlight the cells containing these starting values. Then drag the **fill handle** across the range that needs to be filled.

3 Examples

Note: To fill in increasing order, drag down or to the right. To fill in decreasing order, drag up or to the left.

26			
27			Nov
28			Dec
29	Monday		1
30	Tuesday		3
31	Wednesday		5
32	Thursday		7
33	Friday		9

The following table shows a variety of different series which are automatically available in Excel.

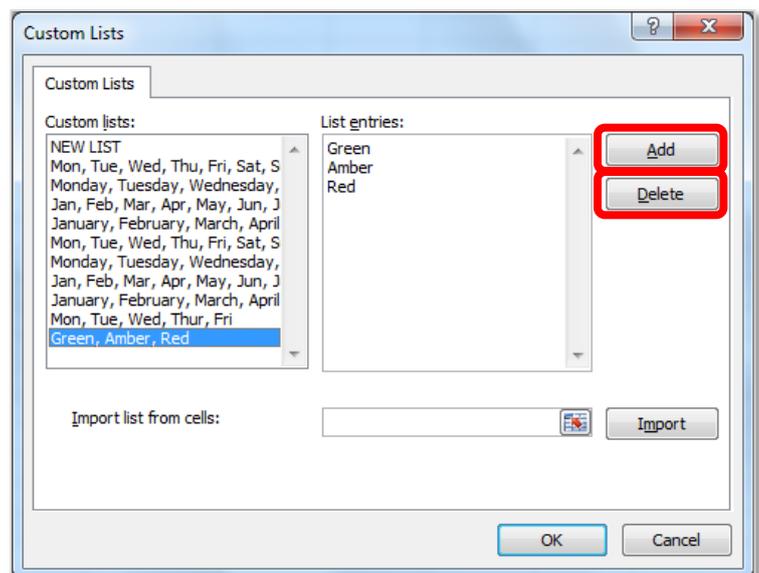
INITIAL SELECTION	EXTENDED SERIES
1, 2, 3	4, 5, 6,...
9:00	10:00, 11:00, 12:00,...
Mon	Tue, Wed, Thu,...
Monday	Tuesday, Wednesday, Thursday,...
Jan	Feb, Mar, Apr,...
Jan, Apr	Jul, Oct, Jan,...
Jan-07, Apr-07	Jul-07, Oct-07, Jan-08,...
15-Jan, 15-Apr	15-Jul, 15-Oct,...
2007, 2008	2009, 2010, 2011,...
1-Jan, 1-Mar	1-May, 1-Jul, 1-Sep,...
Qtr3 (or Q3 or Quarter3)	Qtr4, Qtr1, Qtr2,...
text1, textA	text2, textA, text3, textA,...
1st Period	2nd Period, 3rd Period,...
Product 1	Product 2, Product 3,...

CUSTOM LISTS

Custom Lists are pre-set **series** in Excel which are applied when the **auto fill handle** is dragged to other cells. To access **Custom Lists** to view all the available list go to **Excel Options** to the **Advanced** menu, scroll down to the **General** section and click on the command button **Edit Custom Lists**, this will open the **Custom Lists** dialogue box.

From here all the available Custom Lists can be seen, **new** custom lists can be added and custom lists that are not required can be **deleted**.

To apply custom lists type the starting value and use the **auto fill handle**, click on the box and drag down or across to apply the list.

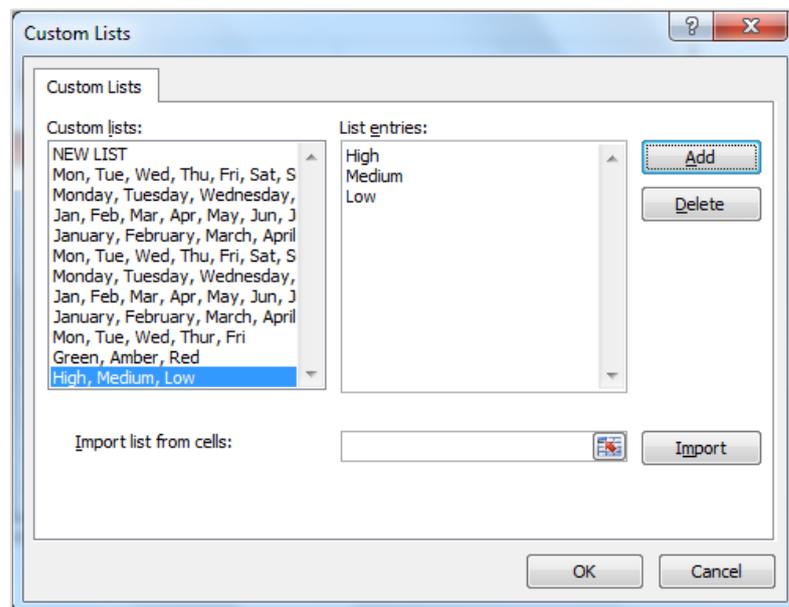


SORT BY A CUSTOM LIST

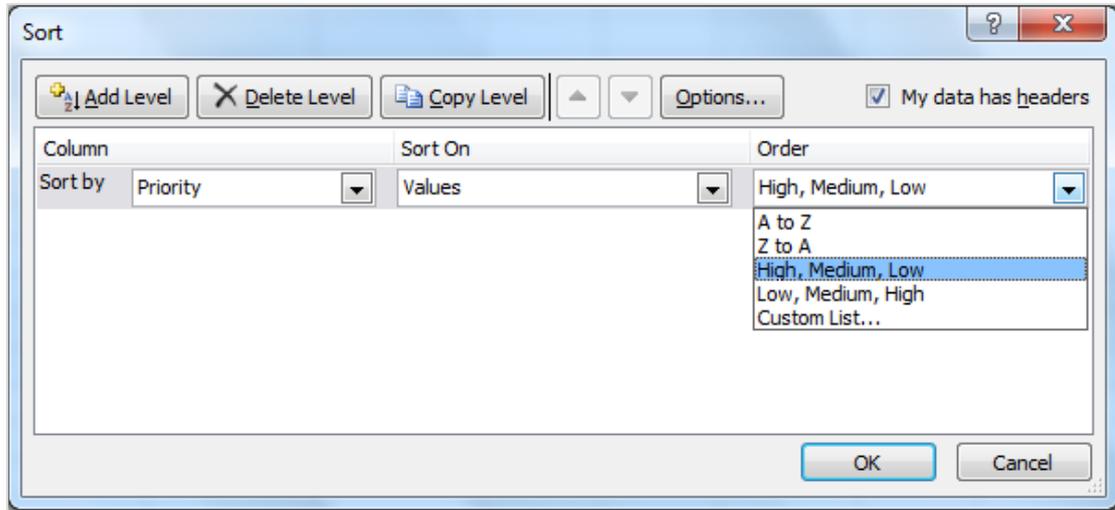
Custom Lists can also be used to sort data, in the following table the Sales information could be sorted several different ways for example by the month under the *Delivery* column by **ascending** or **descending** sort or by the *Priority*. For this scenario the sort will be applied by the *Priority* column by *High, Medium* and then *Low*. This is not alphabetical, however a custom list can be created for this order and then the data can be sorted by this custom list.

	Chicken	Steak	Fish	Delivery	Priority
56					
57	Sort Using a Custom List				
58					
59	€1,900.00	€500.00	€900.00	Feb	High
60	€500.00	€775.00	€1,200.00	Jun	Low
61	€730.00	€220.00	€850.00	Jun	Low
62	€850.00	€760.00	€780.00	Mar	High
63	€1,200.00	€580.00	€590.00	Jan	Medium
64	€960.00	€970.00	€440.00	Feb	Low
65	€2,500.00	€900.00	€790.00	Aug	High
66	€906.00	€1,050.00	€920.00	Dec	Medium
67	€570.00	€1,200.00	€1,080.00	Apr	High
68	€670.00	€12,500.00	€780.00	May	Low
69	€980.00	€990.00	€980.00	Aug	Low
70					

First the **Custom List** is created from the **Custom List** dialogue box as shown on the previous page. Type the list in the required order into the **List entries:** box. Then click on the **Add** command button. Then click **Ok** and **Ok**.



The sorting is then applied by going to the **Data** tab, to the **Sort & Filter** group and clicking on the **Sort** command button. In the **Sort** dialogue box set the **Column** to *Priority* and the **Order** to the custom list *High, Medium, Low* as shown.



The result is the data sorted according to the *Priority* with the *High* first, *Medium* second and finally the *Low* priority sales.

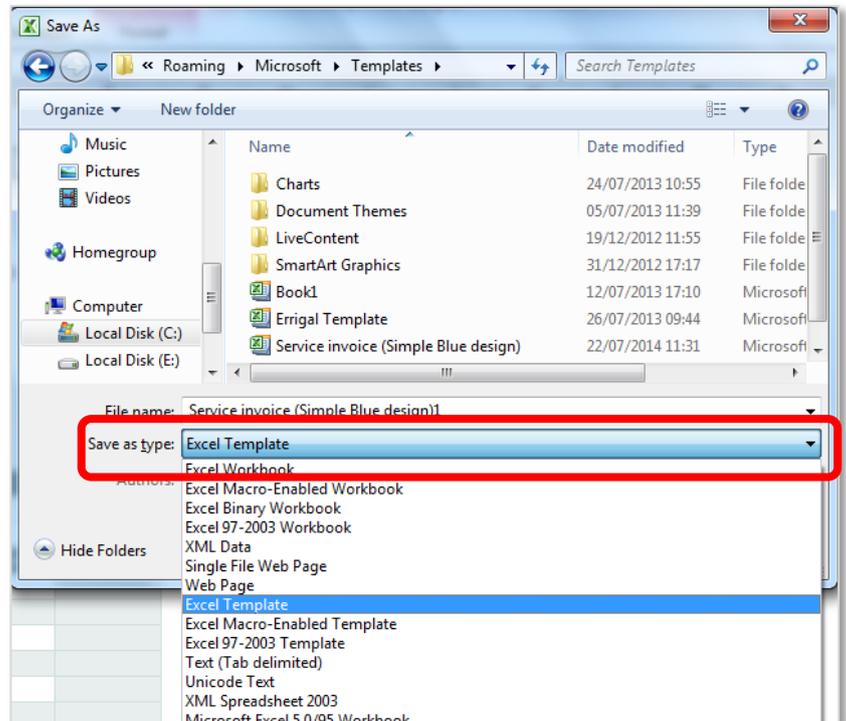
	Chicken	Steak	Fish	Delivery	Priority
56					
57	Sort Using a Custom List				
58					
59	€570.00	€1,200.00	€1,080.00	Apr	High
60	€2,500.00	€900.00	€790.00	Aug	High
61	€1,900.00	€500.00	€900.00	Feb	High
62	€850.00	€760.00	€780.00	Mar	High
63	€906.00	€1,050.00	€920.00	Dec	Medium
64	€1,200.00	€580.00	€590.00	Jan	Medium
65	€980.00	€990.00	€980.00	Aug	Low
66	€960.00	€970.00	€440.00	Feb	Low
67	€500.00	€775.00	€1,200.00	Jun	Low
68	€730.00	€220.00	€850.00	Jun	Low
69	€670.00	€12,500.00	€780.00	May	Low
70					
71					

For an alternative example on **Sorting by a Custom List** visit www.techrepublic.com.

FROM A PERSONAL DESIGN

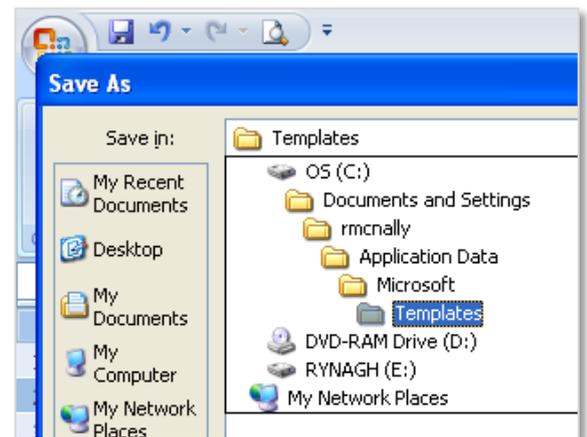
A **template** can also be created from a *document created by the user*. This document can be set up in any style with formatting or information required by the company, such as an invoice layout (with formula), or company logo, already saved into it. By saving the document as a template it can be easily reused again for future workbooks.

To save a file as a template, first set up the formatting required in the Excel document. Then go to **File** and select **Save As**, in the **Save as** dialogue box choose **Excel Template** from the **Save as type**: dropdown list. **Name** the template in the **File name**: box with an appropriate name to allow the document to be easily recognised for future use.



The file location will change to the default **Template folder** for the computer. Using this folder will enable the computer will find the file automatically when creating a new template in the future.

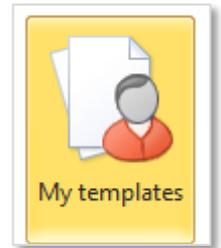
Note: Changing this location to a USB for example will allow the user to remove the template from the computer, however Word will not find this template automatically when a new template is created.

**Question?**

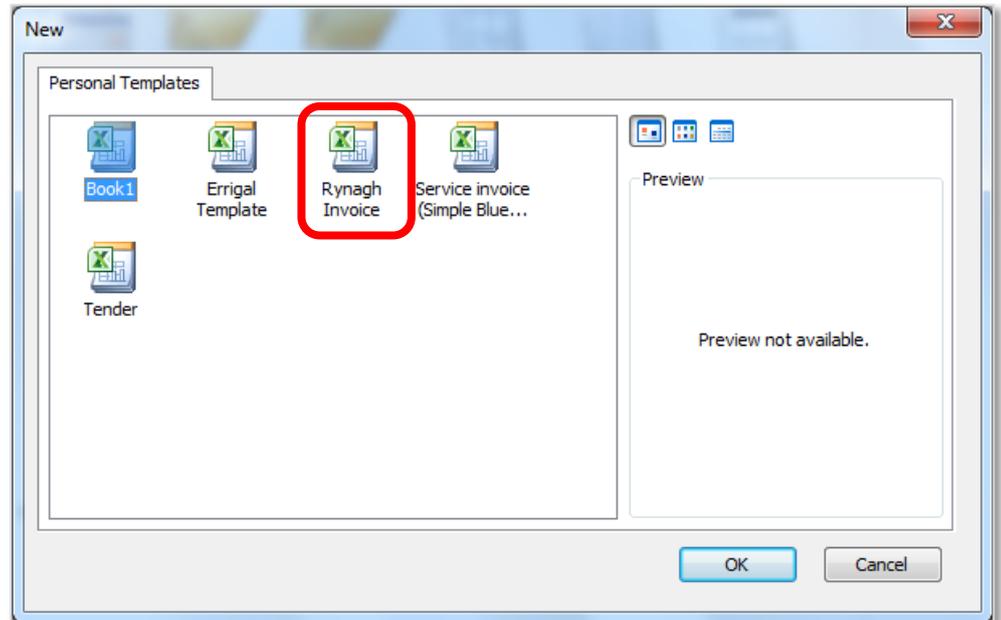
What is the difference in saving a template as an Excel Workbook or as an Excel Template?

USE A TEMPLATE PREVIOUSLY CREATED AND SAVED

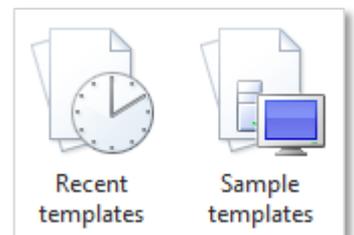
To use a template that has been created go to the **File** menu and then to **New** and select the **My Templates** command button. This will open the templates folder showing all templates created on this computer and saved to the **My Templates** folder.



To use the template **select** it and click on the **Ok** command button.



Additional templates can also be accessed from the **Recent Templates** and the **Sample Templates** options on the new menu.



EDIT A TEMPLATE

To **Edit a Template** and change its design, make the required changes to the template and ensure when saving these changes that it is saved as an **Excel template**. This will ensure the new changes to the template are available from future use.

Normal saves to a document created from a template should be saved as an **Excel Workbook**.

9. REFERENCES

WEBSITES:



Advanced Filtering – for more information visit the YouTube channel [Excel is Fun](#) by Mike Girvin.

Auto filtering - to view a video on auto filtering follow this link: office.microsoft.com

Filtering – for more information visit office.microsoft.com.

Hyperlink function – for more information visit office.microsoft.com.

Linking between workbooks – for more information visit office.microsoft.com.

Naming Cells and ranges – for more information visit office.microsoft.com.

Outlines – for more information visit GCFLearnFree.org.

Sort by a Custom List – for more information visit www.techrepublic.com.

NOTES: