Excel®
Managing Lists and Databases

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Excel : Managing Lists and Databases

Trainer: Mike Thomas

Sort a List

- Select a cell in the list
- Click the Home tab
- Click Sort and Filter
- Select A-Z, Z-A, Smallest to Largest, Largest to Smallest, Oldest to Newest, Newest to Oldest

Sort but Exclude Heading

- Select a cell in the list
- Click the Home tab
- Click Sort and Filter
- Select Custom Sort
- Ensure "My data has headers" is checked

Sort by Month (Chronological not Alphabetical)

- Select a cell in the list
- Click the Home tab
- Click Sort and Filter
- Select the column to sort by (month)
- Click the drop-down arrow in the Order section
- Select Custom List
- Select January, February etc

Sort by Row

- Select ALL the data to be sorted (do not include headings)
- Click the Home tab
- Click Sort and Filter
- Click Custom Sort
- Click Options
- Click Sort left to right
- Click OK
- Select the row(s) to be used as the sort

Filter a List

- Select a cell in the list
- Click the Home tab
- Click Sort and Filter
- Click Filter to add filter arrows to the headings

Saving a Filter

- Set up the filter as you want it
- Select View > Custom Views
- Click Add
- Ensure that Hidden rows, columns and filter settings is ticked
- Click OK

Advanced Filter

- Copy the column headings of your list
- Paste into 2 locations in the worksheet
- Ensure that you leave several blank rows below the Criteria Range headings

- Select a cell within the data
- Select Data > Advanced
- List Range: the data including the heading
- Criteria Range: Headings plus criteria (need flexibility of multiple rows)
- Copy To Range: Headings only

Examples of Criteria

Date	Course	Attendees	Revenue
	Getting Started with Excel		
		3	

- Course = Getting Started with Excel OR No of attendees is 3

Date	Course	Attendees	Revenue	Date
>=1/1/2015				<=31/1/2015

- Courses that were delivered in January 2015

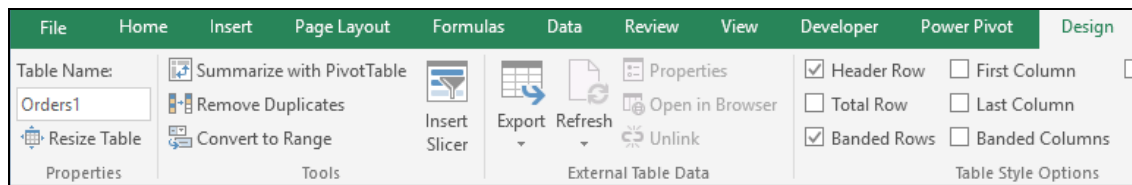| Date	Course	Attendees	Revenue			
					Today:	29 March 2015
				FALSE	Days:	30

- Formula: =A2>M1-M2

Tables

- To create a table – select a cell within the range to be converted
- Select Insert > Table
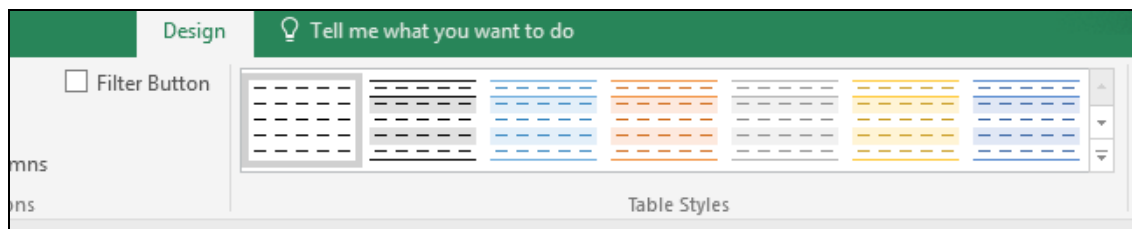

Change the Table Name

- Select a cell in the table
- Select the Design tab on the Ribbon
- Edit the Table Name box (left hand side of the Ribbon) and press Enter

- Always start a name with a letter, an underscore character (_), or a backslash (\)
- Use letters, numbers, periods, and underscore characters for the rest of the name.

Remove Filter Arrows and Change the Style

- Select a cell in the table
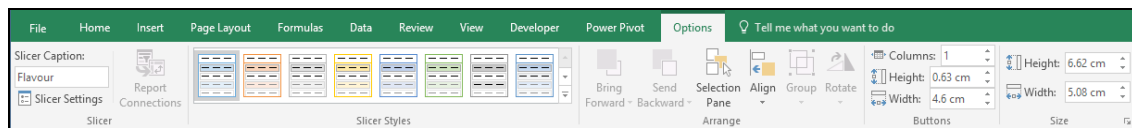- Select the Design tab on the Ribbon

Formulas

- Using Structured References makes formulas easier to understand
- Formulas in a table will be automatically copied down a column – and automatically added to new rows

- Example of Structured References: **=[@Revenue]*10%**

Slicers

- Select a cell within the table
- Select Design > Insert Slicer
- Select the column to base the slicer on (the column to use as the filter)
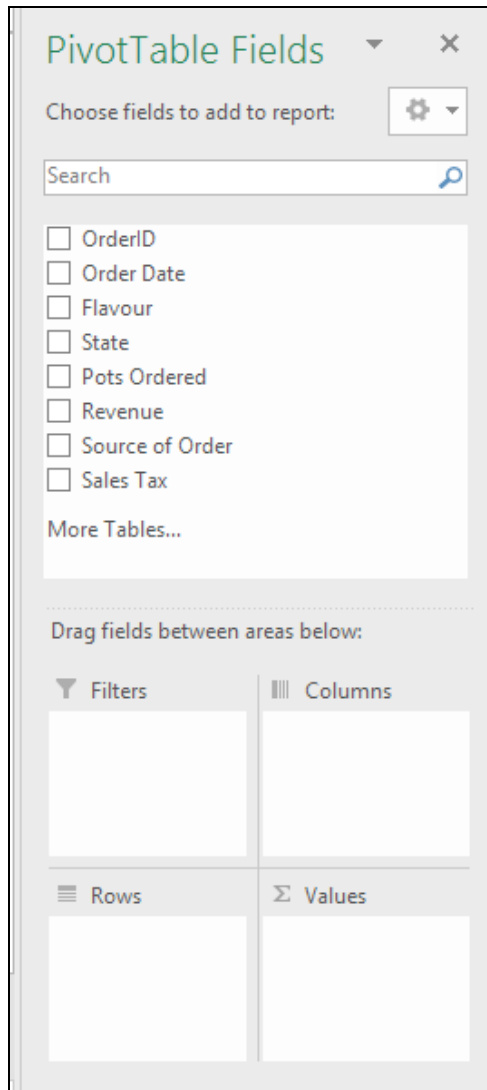
Customize the Slicer

- Select the slicer
- Use the Options tab on the Ribbon to…

- Change the colours
- Change the number of columns used to display the buttons
- Change the caption

- To prevent the slicer being moved or resized: Right click the Slicer > Size and Properties > Position and Layout section > tick Disable resizing and moving
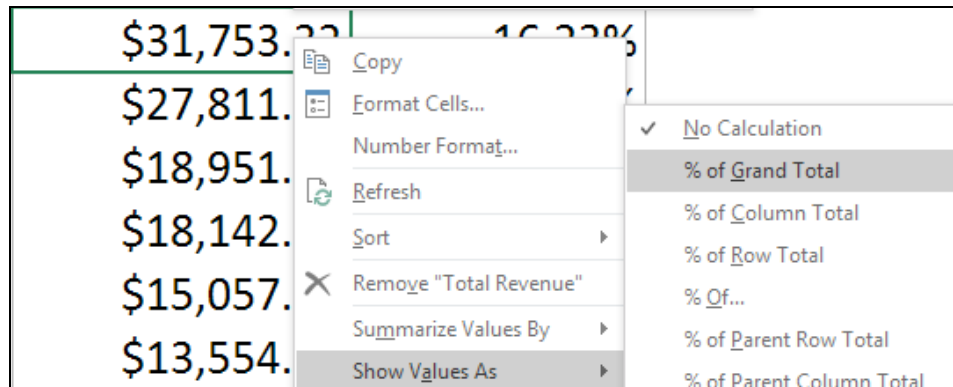
Pivot Tables

- Recommended that you base a pivot table on a Table
- Select a single cell in the source data
- Select Insert > Pivot Table
- Confirm the location of the source data
- Select the location for the pivot table (new worksheet or existing worksheet)
- Click OK

- Drag and drop the appropriate fields into the appropriate sections: Filters, Columns, Rows, Values
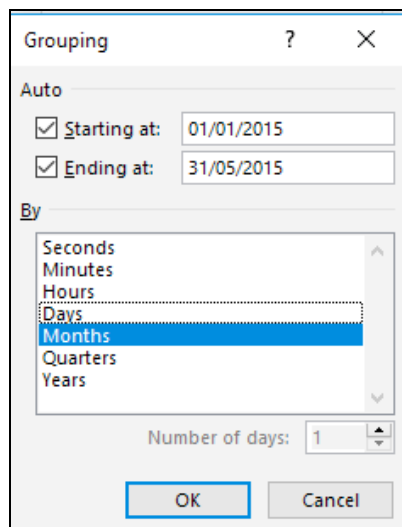
Change Numbers to Display as a Percentage

- Right click on a cell in the column of numbers to be displayed as a percentage
- Select Show Values As
- Select % of Grand Total

- Note: to display the original values AND the percentage, drag a second copy of the column into the Values section

Group By Month

- Right click on the field in the pivot table containing the dates
- Select Groups

- Click OK

- Note: to group by a different option, deselect Months by clicking on it and select the appropriate option

The VLOOKUP Function

	A	B	C	D	E	F	G	H
1	**First Name**	**Surname**	**Grade**	**Office**	**Region**		**Office**	**Region**
2	Dorothy	Abney	A	Shanghai			Manchester	Europe
3	Lonnie	Adkins	A	Seattle			London	Europe
4	Rosette	Ahmad	D	Shanghai			New York	America
5	Dennis	Albertson	E	Tokyo			Seattle	America
6	Barbara	Aldridge	D	Tokyo			Paris	Europe
7	Harold	Alexander	A	Tokyo			Tokyo	Asia
8	Dewey	Allen	C	Seattle			Shanghai	Asia
9	Yvonne	Almond	A	Manchester				
10	Pamala	Alvarado	D	Paris				
11	Lisa	An	C	Manchester				
12	Trevor	Anderson	D	Seattle				
13	Melissa	Arguello	B	Manchester				
14	Omar	Arguello	A	Tokyo				
15	Elizabeth	Arroyo	E	Seattle				
16	Mark	Arteaga	D	London				

- In the example above you've been asked to add the region to each employee record
- The regions are stored in a separate table (G2:H8)
- The region for an employee will be based on the Office that they are located in

- Enter the following formula in E2: =VLOOKUP([@Office],Offices,2,FALSE)

- @Office is the column containing the value to be searched for (looked up)
- Offices is the name of the table containing the matches and the answers
- 2 refers to the fact that the answer is coming from the 2nd column of the lookup table
- FALSE means Excel has to find an exact match. If it does not, an error is returned as the result of the VLOOKUP function

Flash Fill (Excel 2013 and 2016 Only)

- Automatically fills a column of data when it senses a pattern
- To have Excel automatically fill in the Employee No into column C...

	A	B	C
1	EmployeeID	Name	Employee No
2	TET3781	WELLS,SHANNON	3781
3	TET5475	MURPHY,GRACIE	
4	TET3826	NORTH,GEORGE	
5	TET3940	GRIFFIN,SOPHIA	
6	TET5186	STEVENS,MORGAN	
7	TET3666	SHEPPARD,CONNOR	
8	TET5291	ABBOTT,EDWARD	
9	TET4815	SHEPPARD,LIANNE	
10	TET5461	SHORT,MAX	
11	TET5414	SUMMERS,PETER	

- Type the desired value into C2
- Press CTRL +E
- Excel detects that what is in C2 is the last 4 digits of A2 and repeats the "pattern" down column C
- Flash Fill only works if there are no blank columns between the cells being flash filled and the cells being used to generate the "pattern"

Text to Columns

- This is used to split the contents of a single cell into separate cells

	A
1	Title,Name,Surname,StreetAddress,City,PostCode,EmailAddress,TelephoneNumber
2	Ms,Alicia,Begum,11 Red Lane,Escart,PA29 0YA,AliciaBegum@jourrapide.com,07771576400
3	Mr,Hayden,Vincent,40 Winchester Rd,Metton,NR11 3NZ,HaydenVincent@cuvox.de,07982298468
4	Mr,Dylan,Bradley,30 Station Rd,Queenborough,ME11 8TL,DylanBradley@rhyta.com,07975293447
5	Ms,Alexandra,Young,18 Nith Street,Glasson,CA5 2ED,AlexandraYoung@teleworm.us,079046635468

- For example to split the data in column A into separate columns…

- Select the cells containing the headings and the names (i.e. A1:A5)
- Select Data > Text to Columns
- Ensure Delimited is selected and click Next
- The Delimiter character is the character that separates each element within the cell
- In this example, the delimiter is a comma
- Click Next
- Select the Destination cell. In this example, using the above screenshot, select A1 to overwrite the existing list or select another cell elsewhere if you wish to retain the original
- Click Finish

	A	B	C	D	E	F	G
1	Title	Name	Surname	StreetAddress	City	PostCode	EmailAddress
2	Ms	Alicia	Begum	11 Red Lane	Escart	PA29 0YA	AliciaBegum@jourrapide.com
3	Mr	Hayden	Vincent	40 Winchester Rd	Metton	NR11 3NZ	HaydenVincent@cuvox.de
4	Mr	Dylan	Bradley	30 Station Rd	Queenbor	ME11 8TL	DylanBradley@rhyta.com
5	Ms	Alexandra	Young	18 Nith Street	Glasson	CA5 2ED	AlexandraYoung@teleworm.us
6							

SubTotals

- Use SubTotals to group a list based on a specific column and automatically insert total/average/counts for each group, along with an overall total.

- Subtotals will not work if the list/range has been converted to a Table.
- Before applying the Subtotals command, the list/range must be sorted on the column that the data will be "grouped on"

- Select a single cell in the list/range
- From the Data menu select Subtotal and complete the following fields:

- At each change in: Select the column you have sorted the list by
- Use Function: Select the type of subtotal required (e.g. total, average, count)
- Add Subtotal to: Select the column that the function will apply to

- Replace Current Subtotals: To have more than one subtotal you must uncheck this box before applying the second and subsequent subtotals