

Exercises

Exercise 1. Create and format a PivotTable on the existing worksheet

- Insert a PivotTable
- Navigate the PivotTable screen
- Add fields to your PivotTable
- Format values in a PivotTable

The file you will be working on is called **Staff Finance.xlsx**. There are currently two worksheets in this workbook. For this exercise the worksheet named **Data Spending** will be used and contains the fields **Name, Week, Spending and Amount**. Each record will provide you with the amount each employee has spent, when it was spent and what spending category it relates to.

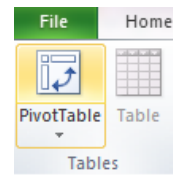
Task 1

Insert a PivotTable into your existing worksheet, cell **H4**, using the **Data Spending** worksheet and name the PivotTable- **Pivot1Data**

Step 1

Using your file **Staff Finance.xlsx**

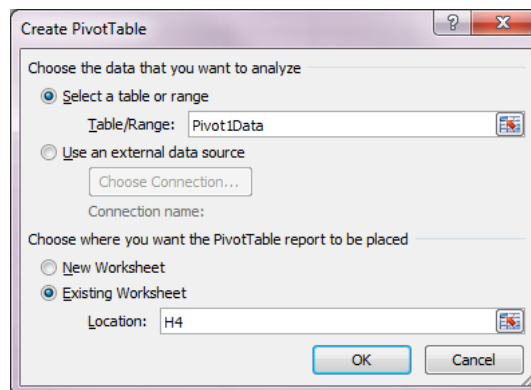
Click anywhere inside the table (Pivot1Data) in the **Data Spending** worksheet. You can see this is a table by selecting a cell within the data and the **Table Tools | Design** button will have appeared on the **Ribbon**.



Select **Insert | Tables PivotTable** from the **Ribbon**.

Step 2

The **Create PivotTable** dialog box will now appear.



In the **Table/Range** text field make sure the cell reference is **Pivot1Data** (Excel will name this tabl/range for you, you do not need to type this name in).

Select **Existing Worksheet** from the **Choose where you want the PivotTable report to be placed** section and enter **H4** in the **Location** text box and click **OK**

Task 2

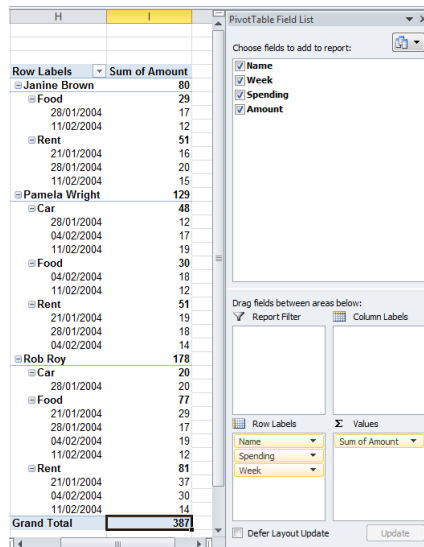
Add the **Name**, **Spending** and **Week** fields as rows in your PivotTable and show the **Sum of Amount** as your values

Step 1

Add fields **Name** and **Spending** and **Week** as Row Labels (in that order) and **Amount** as the values. To add fields to the PivotTable simply drag the field name to the appropriate PivotTable area of the PivotTable task pane.

Note: If you do not add the fields in the above order the table will sort according to the order you add your fields. You can move your fields up and down the list under Row Labels by dragging and dropping. Try this and see the difference in your view.

The completed PivotTable task pane and PivotTable should look the same as below.



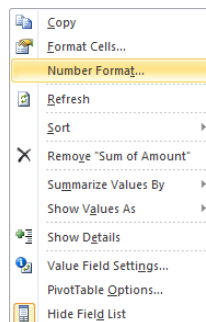
Task 3

Format the amount field to currency, 2 decimal places

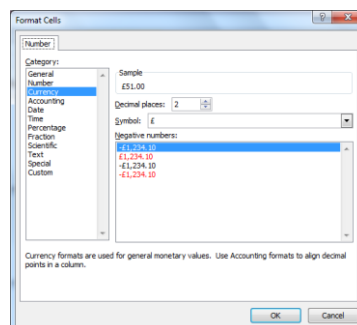
Row Labels	Sum of Amount
Janine Brown	£80.00
Food	£29.00
28/01/2004	£17.00
11/02/2004	£12.00
Rent	£51.00
21/01/2004	£16.00
28/01/2004	£20.00
11/02/2004	£15.00
Pamela Wright	£129.00
Car	£48.00
28/01/2004	£12.00
04/02/2004	£17.00
11/02/2004	£19.00
Food	£30.00
04/02/2004	£18.00
11/02/2004	£12.00
Rent	£51.00
21/01/2004	£19.00
28/01/2004	£18.00
04/02/2004	£14.00
Rob Roy	£178.00
Car	£20.00
28/01/2004	£20.00
Food	£77.00
21/01/2004	£29.00
28/01/2004	£17.00
04/02/2004	£19.00
11/02/2004	£12.00
Rent	£81.00
21/01/2004	£37.00
04/02/2004	£30.00
11/02/2004	£14.00
Grand Total	£387.00

Step 1

Select any cell within the column named **Sum of Amount**, point your mouse at the cell you have selected and right click, then select **Number Format**.



Select **Currency** from the list and format to **2 decimal places** and click on **OK**



	<p>This will format all the values in the column of data. The formatting will remain when the PivotTable is refreshed in the future.</p> <p>Your PivotTable should now look like below</p>
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Task 4

Save your file and leave the file open for further work in **Exercise 2**

Exercise 2. Expand/collapse data and change row to column data

- Expand and collapse PivotTable data
- Rows versus column data
- Change row and column labels

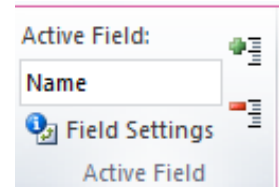
Task 1

Collapse your week and spending data to show a summary by **Name** and **Sum of Amount** only

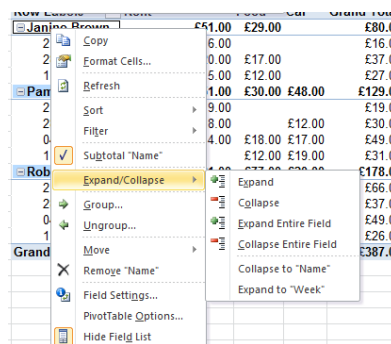
Step 1

Using your file **Staff Finance.xlsx** from Exercise 1 or if you did not complete this task use the file **Staff Finance Ex1 completed.xls**

To summarise your data to display the Name and the Total Amount, select a Name in your PivotTable then select from the ribbon **PivotTable Tools | Analyze | Active Field** and select expand, which has a green plus sign or collapse, which has a red minus sign.



Alternatively if you point at the Name field and **right click** then select **Expand/Collapse** and the below menu will appear, with options to expand entire fields or just the values.



Your view should now look like below.

Row Labels	Sum of Amount
Janine Brown	£80.00
Pamela Wright	£129.00
Rob Roy	£178.00
Grand Total	£387.00

Task 2

Expand your data to revert back to showing all of the data in your PivotTable.

Step 2

Using one of the above techniques expand your PivotTable to show all your data. Your PivotTable should now display all of the data for **Name, Spending and Week**

Task 3

Experiment with different ways or expanding and collapsing your data.

Using the different methods available to you, collapse the dates under **Spending** to achieve the below view where the **Week** field has been collapsed and the **Name** and **Spending** fields are visible

Which way did you find easier, using the right click method or selecting the + or – signs on the pivot table?

Row Labels	Sum of Amount
Janine Brown	£80.00
Food	£29.00
Rent	£51.00
Pamela Wright	£129.00
Car	£48.00
Food	£30.00
Rent	£51.00
Rob Roy	£178.00
Car	£20.00
Food	£77.00
Rent	£81.00
Grand Total	£387.00

Task 4

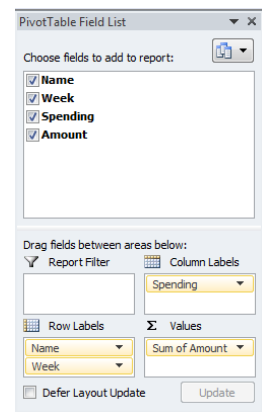
Insert a field as Column Labels

Step 1

Move the **Spending** field to a **Column Label** by selecting it in the **Row Labels** area within the **PivotTableField** list and dragging and dropping it to the **Column Labels** area.

See below for **PivotTableField** List view and for the newly updated PivotTable. Your **Spending** categories (**Car, Food, Rent**) should now appear as column headings

Sum of Amount	Column Labels			
Row Labels	Car	Food	Rent	Grand Total
Janine Brown		£29.00	£51.00	£80.00
21/01/2004			£16.00	£16.00
28/01/2004		£17.00	£20.00	£37.00
11/02/2004		£12.00	£15.00	£27.00
Pamela Wright	£48.00	£30.00	£51.00	£129.00
21/01/2004			£19.00	£19.00
28/01/2004		£12.00	£18.00	£30.00
04/02/2004		£17.00	£14.00	£49.00
11/02/2004		£19.00	£12.00	£31.00
Rob Roy	£20.00	£77.00	£81.00	£178.00
21/01/2004		£29.00	£37.00	£66.00
28/01/2004	£20.00	£17.00		£37.00
04/02/2004		£19.00	£30.00	£49.00
11/02/2004		£12.00	£14.00	£26.00
Grand Total	£68.00	£136.00	£183.00	£387.00



Task 5

Change label names

Step 2

Change the **Row Labels** name to **Week** and the **Column Labels** name to **Spending**. Your PivotTable will now look like below.

Sum of Amount	Spending			
Week	Rent	Food	Car	Grand Total
Janine Brown	£51.00	£29.00		£80.00
21/01/2004		£16.00		£16.00
28/01/2004	£20.00	£17.00		£37.00
11/02/2004	£15.00	£12.00		£27.00
Pamela Wright	£51.00	£30.00	£48.00	£129.00
21/01/2004	£19.00			£19.00
28/01/2004	£18.00		£12.00	£30.00
04/02/2004	£14.00	£18.00	£17.00	£49.00
11/02/2004		£12.00	£19.00	£31.00
Rob Roy	£81.00	£77.00	£20.00	£178.00
21/01/2004	£37.00	£29.00		£66.00
28/01/2004		£17.00	£20.00	£37.00
04/02/2004	£30.00	£19.00		£49.00
11/02/2004	£14.00	£12.00		£26.00
Grand Total	£183.00	£136.00	£68.00	£387.00

Task 6

Save your work and close your file.

Exercise 3. Filter, Sort and Drill down data

- Filter pivot data
- Sort pivot data
- Drill down your PivotTable data

The file you will be working on for this exercise is called **Sales.xlsx**. This contains a table which provides information for sales to each Company, their Invoice Number, Date of Sale, Firm Code, Company Name, Budget Code, Amount, Discount and the Total (Amount – Discount).

Task 1

Create a PivotTable with **Company Name** as **Row** labels, **Budget Code** as **Column** labels and **Total**, formatted to currency in **Values**. Format the values to currency.

Step 1

Open the file **Sales.xlsx**

Create a PivotTable on a **new worksheet** in the file **Sales** by selecting **Insert, Tables | PivotTable** and selecting **New Worksheet** from the **Create PivotTable** dialog box

Step 2

You require a **Row Label** of **Company Name**, **Column Label** of **Budget Code** and the **Total** as the **Values**

Step 3

Format your values as currency, 2 decimal places. A quick method is to point at the values, right click and select Number Format

The PivotTable should now look similar to below

Sum of TOTAL	Column Labels					Grand Total
Row Labels	440	441	442	444	446	
A.Daley Inc	£11,762.73	£1,950.30	£3,227.19	£4,687.30	£8,572.42	£30,199.94
Comp. Stores	£1,489.47	£3,912.10	£1,394.91	£3,540.50		£10,336.98
Hardcopy stores	£49,265.16	£7,713.54	£9,007.99	£2,736.33	£27,968.30	£96,691.32
PerfectWorld	£10,701.27	£1,054.35		£8,420.80	£5,421.01	£25,597.43
Plumbtastic Ltd	£11,230.24	£6,871.13	£10,966.50	£4,107.29	£12,050.72	£45,225.87
Sitting Pretty	£7,765.29	£6,619.68	£4,502.05	£5,627.68	£6,949.14	£31,463.84
Grand Total	£92,214.16	£28,121.10	£29,098.64	£29,119.90	£60,961.58	£239,515.36

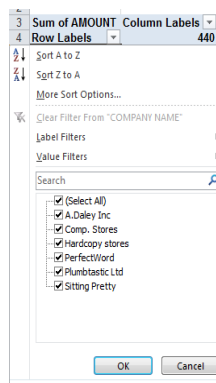
Rename your worksheet '**Pivot Sales**'. Point at the worksheet name on the bottom of the screen, which is likely to be '**Sheet 1**' and double click it. This will highlight the text and you can overtype with the text '**Pivot Sales**'

Task 2

Filter your data to display **Companies**, '**Perfect World**' and '**Hardcopy stores**' and '**Sitting Pretty**' for **Budget Codes 440** and **444**.

Step 1

Point and click on the dropdown arrow with the heading 'Row labels' select (Select All) to deselect the list entries and then select 'Perfect World' and 'Hardcopy stores' and 'Sitting Pretty' and select **OK**



Step 2


Use the same process to select the **Budget Codes** 440 and 444 by pointing and clicking on the arrow with a heading of 'Column Labels', The PivotTable should now look like below

Sum of TOTAL	Column Labels		
Row Labels	440	444	Grand Total
Hardcopy stores	£49,265.16	£2,736.33	£52,001.49
PerfectWord	£10,701.27	£8,420.80	£19,122.07
Sitting Pretty	£7,765.29	£5,627.68	£13,392.97
Grand Total	£67,731.72	£16,784.81	£84,516.53

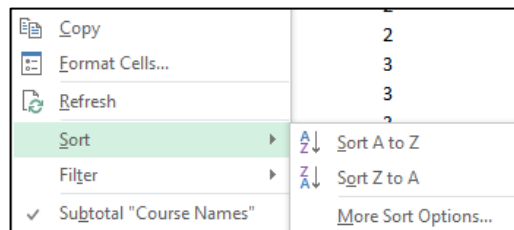
Task 3

Sort the **Companies** descending Z to A

Step 1

Select the drop down arrow next to the **Company Name** Row Labels heading and at the top of the filter menu select the  **Sort Z to A** option.

Alternatively if you right click on the **Company Name** field, choose **Sort** and then choose Z to A.



Step 2

Choose a method to sort your **Company Names** descending.

Your pivot should now look like below

Sum of TOTAL	Column Labels		
Row Labels	440	444	Grand Total
Sitting Pretty	£7,765.29	£5,627.68	£13,392.97
PerfectWord	£10,701.27	£8,420.80	£19,122.07
Hardcopy stores	£49,265.16	£2,736.33	£52,001.49
Grand Total	£67,731.72	£16,784.81	£84,516.53

Task 4

Drill down to find each record for **Hardcopy Stores** purchases of code **440**.

Step 1

Click into the cell containing the sales for Hardcopy Stores for code 440 and double click on this total.

A new work sheet will appear which will consist of 24 records and the first few records appear below.

Name the new worksheet '**Invoices Hardcopy**'

	A	B	C	D	E	F	G	H
	INVOICE NUMBER	DATE	FIRM CODE	COMPANY NAME	BUDGET CODE	AMOUNT	DISCOUNT	TOTAL
2	1236	22/08/2015	3	Hardcopy stores	440	3126	93.78	3032.22
3	1323	16/10/2014	3	Hardcopy stores	440	2269	34.035	2234.965
4	1322	29/07/2015	3	Hardcopy stores	440	2327	34.905	2292.095
5	1321	16/03/2015	3	Hardcopy stores	440	646	0	646
6	1320	15/03/2015	3	Hardcopy stores	440	3721	111.63	3609.37
7	1319	01/01/2015	3	Hardcopy stores	440	130	0	130
8	1310	28/06/2015	3	Hardcopy stores	440	785	0	785
9	1309	14/04/2015	3	Hardcopy stores	440	1218	12.18	1205.82
10	1308	03/04/2015	3	Hardcopy stores	440	1178	11.78	1166.22

Task 5

Save your work leave file open for **Exercise 4**

Exercise 4. Group data by text

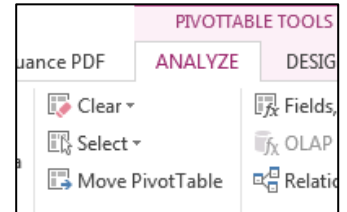
➤ Group your PivotTable data by text

Task 1

Locate your PivotTable and clear all filters

Step 1

Using the file **Sales.xlsx** or if you did not complete this task use the file **SalesEx3 completed.xlsx**



Step 2

Locate the worksheet with the PivotTable in, possibly 'Sheet1' or 'Pivot Sales'. Click into your PivotTable and select **PivotTable Tools Options, Actions** group from the Ribbon and select **Clear | Clear Filters**

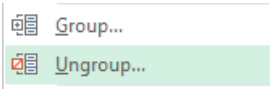
Task 2

Create the following group names for the companies.

Daley & Plumtastic

Comp Stores and Perfect World

Hardcopy stores and Sitting Pretty.

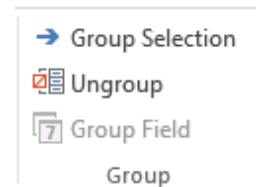


Step 1

All data should now be visible in your PivotTable. If not, ensure you have cleared your filters as per step 1 above. To group data within a field, select either adjacent or non-adjacent data by holding the <Ctrl> key and clicking on non-adjacent data or holding the <Shift> key down to select adjacent data. Select **A.Daley Inc** and holding down the Ctrl key select **Plumtastic Ltd**.

You can then either select **PivotTable Tools | Analyze | Group | Group Selection**.

Or alternatively right click and select **Group**



Step 2

You will see that it has a default name of **Group1**. This is not very descriptive, so rename this **Daley & Plumtastic** by clicking into the text **Group1** and typing **Daley & Plumtastic** in its place. Your PivotTable should now look like below

Sum of TOTAL	Column Labels					
Row Labels	440	441	442	444	446	Grand Total
Daley and Plumtastic						
A.Daley Inc	£11,762.73	£1,950.30	£3,227.19	£4,687.30	£8,572.42	£30,199.94
Plumtastic Ltd	£11,230.24	£6,871.13	£10,966.50	£4,107.29	£12,050.72	£45,225.87
Comp. Stores	£1,489.47	£3,912.10	£1,394.91	£3,540.50		£10,336.98
Hardcopy stores	£49,265.16	£7,713.54	£9,007.99	£2,736.33	£27,968.30	£96,691.32
PerfectWord	£10,701.27	£1,054.35		£8,420.80	£5,421.01	£25,597.43
Sitting Pretty	£7,765.29	£6,619.68	£4,502.05	£5,627.68	£6,949.14	£31,463.84
Grand Total	£92,214.16	£28,121.10	£29,098.64	£29,119.90	£60,961.58	£239,515.36

Step 3

Create a second group for **Comp Stores and Perfect World** and a third for **Hardcopy stores and Sitting Pretty**. Collapse the field by selecting a group name and selecting **PivotTable Tools | Analyze | Active Field | Collapse**, so your PivotTable should look similar to below.

Change the Column Labels to display the name Budget Code as shown below.

Sum of TOTAL	Budget Code					
Row Labels	440	441	442	444	446	Grand Total
Daley & Plumtastic	£22,992.97	£8,821.43	£14,193.69	£8,794.59	£20,623.13	£75,425.81
Comp & Perfect World	£12,190.74	£4,966.45	£1,394.91	£11,961.30	£5,421.01	£35,934.41
Hardware & Sitting Pretty	£57,030.45	£14,333.22	£13,510.04	£8,364.01	£34,917.44	£128,155.15
Grand Total	£92,214.16	£28,121.10	£29,098.64	£29,119.90	£60,961.58	£239,515.36

Task 3

Save your work

Exercise 5. Grouping data by date

➤ Group your PivotTable data by date

Task 1

Change the PivotTable to show Date in the Row Labels and group the dates by months and years.

Step 1

Using the file **Sales Date Grouping.xlsx**

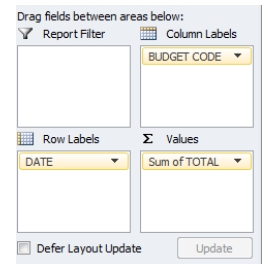
Remove **Company Name** and **Company Name2** (which is the name given to the new group which was created in the previous exercise) from your PivotTable Row Labels and replace with **Date**

You can either drag the **Company Name** and **Company Name2** away from the Row Labels or remove the tick from these fields in the field list. Drag and drop the **Date** to the Row Labels section from the field list.

Your PivotTable field list should look as above.

The first few lines of your PivotTable should now look like below

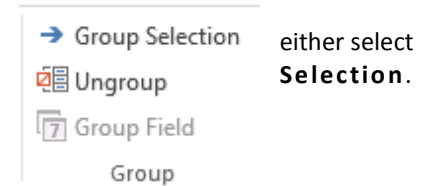
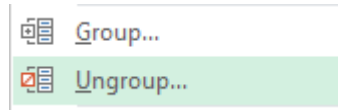
	Sum of TOTAL	Column Labels					
4	Row Labels		440	441	442	444	446 Grand Total
5	04/10/2014					2028.115	2028.115
6	05/10/2014			2550.165			2550.165
7	06/10/2014		2251.71				2251.71
8	08/10/2014		3672.42		3540.5		7212.92
9	09/10/2014	1683.99					1683.99
10	12/10/2014		3663.69				3663.69
11	16/10/2014	2234.965					2234.965
12	17/10/2014				2160.105		2160.105
13	18/10/2014	4326.3					4326.3



Step 2

Click in any cell in the **Date** field of the PivotTable and **PivotTable Tools | Analyze | Group | Group**

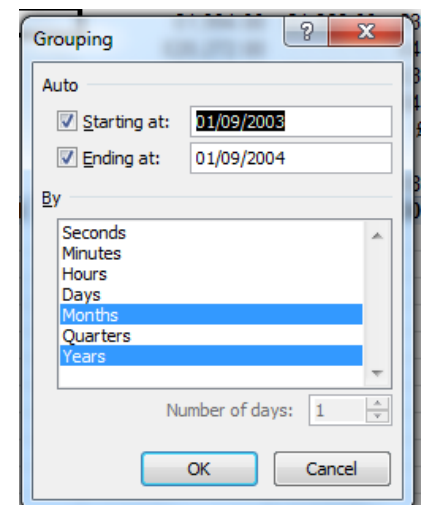
Or alternatively right-click the date and select **Group**



Step 3

In the Grouping dialog box select **Months** and **Years** as shown below then click **OK**

The grouped data should look the same as below



Step 4

Using the same process change your groupings to **Quarters** and **Years**.

Your grouped data should now look as below.

Sum of TOTAL	Column Labels						
Row Labels	440	441	442	444	446	Grand Total	
2014							
Qtr4	16446.785	10642.17	5085.555	10387.905	6146.365	48708.78	
2015							
Qtr1	28883.155	1849.32	7550.53	9113.82	16595.01	63991.835	
Qtr2	24152.01	7321.45	8606.24	2594.49	20816.25	63490.44	
Qtr3	22732.21	8308.155	7856.31	7023.68	15325.6	61245.955	
Qtr4					2078.35	2078.35	
Grand Total	92214.16	28121.095	29098.635	29119.895	60961.575	239515.36	

Task 2

Save your work.

Exercise 6. Grouping data by numeric value

- Group your PivotTable data by numeric value

Task 1

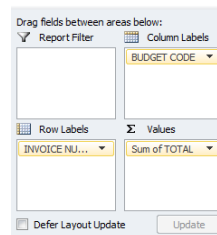
Change the PivotTable to show **Invoice Number** in the Row Labels and group the numeric values in your PivotTable by increments of 30.

Step 1

Use the file **Sales.xlsx** or if you did not complete this task use the file **SalesEx5 completed.xlsx**. Continue to work on the PivotTable on the PivotSales worksheet. You require a Row Label of **Invoice Number**, Column Label of **Budget Code** and the **Total** as the Values.

If you would rather start from a blank PivotTable, select **PivotTable Tools | Analyze | Actions | Clear | Clear All** from the **Ribbon**.

Your PivotTable field list should look as follows

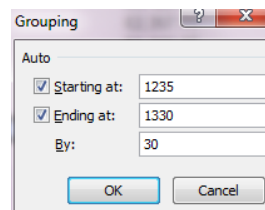


The first few lines of your PivotTable should now look like below

	Sum of TOTAL	Column Labels					
4	Row Labels	440	441	442	444	446	Grand Total
5	1235	£2,984.69					£2,984.69
6	1236	£3,032.22					£3,032.22
7	1237	£3,123.40					£3,123.40
8	1238	£2,357.11					£2,357.11
9	1239	£1,141.47					£1,141.47
10	1240	£4,034.65					£4,034.65
11	1241	£2,642.76					£2,642.76
12	1242	£1,683.99					£1,683.99

Step 2

Group the Invoice Numbers by increments of 30. You will see that Excel automatically selects the first and last number in your Invoice number list for your start and end numbers. Amend the **by** from 1 to 30.



Your PivotTable should now look like below.

	Sum of TOTAL	Column Labels					
4	Row Labels	440	441	442	444	446	Grand Total
5	1235-1264	£40,782.47	£1,950.30	£3,227.19	£17,017.29	£19,922.21	£82,899.46
6	1265-1294	£11,638.14	£21,066.60	£20,413.89	£5,700.61	£17,913.89	£76,733.12
7	1295-1324	£33,178.02	£5,104.20	£5,457.56	£2,736.33	£20,277.85	£66,753.95
8	1325-1354	£6,615.53			£3,665.67	£2,847.64	£13,128.84
9	Grand Total	£92,214.16	£28,121.10	£29,098.64	£29,119.90	£60,961.58	£239,515.36

Task 2: Save your work and close the file.

Exercise 7. Using the Report Filter field and multiple page reports

- Add and filter data using the Report Filter field
- Create multiple page reports using the Report Filter

Task 1

Add fields to the Report Filter

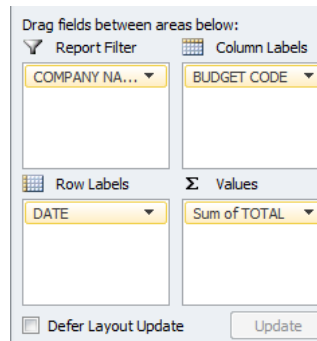
Step 1

Using the file **Sales.xlsx** or if you did not complete this task use the file **SalesEx6 completed.xls**
 Create a new PivotTable by opening **Sales** and clicking into the table. Select **Insert, PivotTable** to a **New Worksheet**

Step 2

Add **Company Name** to Report Filter, **Budget Code** to Column Labels, **Date** to Row Labels and **Total** to Values.

Your PivotTable field list should look as follows



Your PivotTable will now look as below.

1	COMPANY NAME (All)						
2							
3	Sum of TOTAL	Column Labels					
4	Row Labels	440	441	442	444	446	Grand Total
5	04/10/2014					2028.115	2028.115
6	05/10/2014			2550.165			2550.165
7	06/10/2014		2251.71				2251.71
8	08/10/2014		3672.42		3540.5		7212.92
9	09/10/2014	1683.99					1683.99
10	12/10/2014		3663.69				3663.69
11	16/10/2014	2234.965					2234.965
12	17/10/2014				2160.105		2160.105
13	18/10/2014	1326.3					1326.3

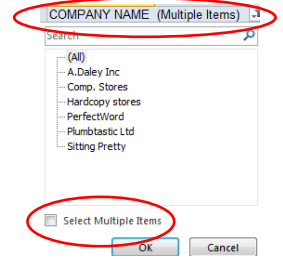
Task 2

Filter your data using the Report Filter button on **A Daley Inc** and **Perfect World**

Step 1

Filter on the Company Name to show only the data for **A Daley Inc** and **Perfect World**

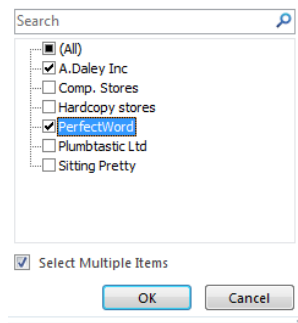
Click on the drop down arrow next to Company Name (ALL). Tick the **Select Multiple Items** above top left corner of the PivotTable located at the bottom of the list.



and

Step 2

This will add tick boxes by each Company Name. Clear the tick from (All) and then tick **A Daley Inc** and **PerfectWorld**



Your PivotTable should now look as follows. You will notice that in the Company Name filter it now shows (Multiple Items). If you select the filter button you will see which companies have been selected.

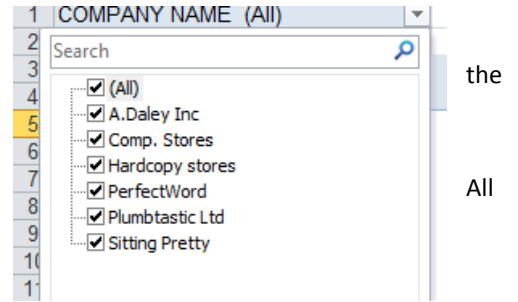
1	COMPANY NAME (Multiple Items) ▾						
2							
3	Sum of TOTAL	Column Labels ▾					
4	Row Labels ▾		440	441	442	444	446 Grand Total
5	04/10/2014					2028.115	2028.115
6	18/10/2014	4326.3					4326.3
7	23/10/2014		1054.35				1054.35
8	02/12/2014				4687.3		4687.3
9	04/12/2014	3123.4					3123.4
10	10/01/2015	3744.095					3744.095
11	24/01/2015	2984.69					2984.69
12	09/02/2015				4133.45		4133.45
13	27/02/2015					2144.345	2144.345
14	26/03/2015					2639.8	2639.8
15	29/03/2015			3227.19			3227.19
16	29/05/2015	1375.11					1375.11
17	15/06/2015	233					233
18	28/06/2015					3904.5	3904.5
19	09/07/2015					3276.66	3276.66
20	02/08/2015			1950.3			1950.3
21	15/08/2015	4034.65					4034.65
22	28/08/2015	2642.755					2642.755
23	11/09/2015					4287.35	4287.35
24	Grand Total	22464	3004.65	3227.19	13108.1	13993.42	55797.36

Task 3
Create multiple report pages for all Company Names

Step 1

First you will need to clear the filters so that all Company Name data is available. If you don't clear filters the reports will be created for those you have selected in the filter.

To do this make sure that you put a tick beside the Box. Notice that all the boxes next to the company names are now ticked, as shown;



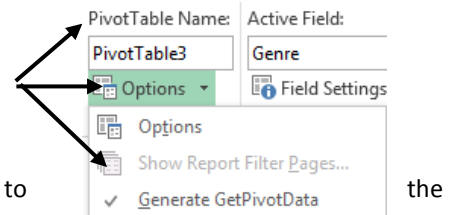
Step 2

Now create the individual reports for each company.

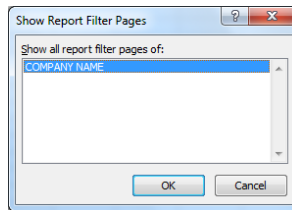
Click into your pivot and then select **PivotTable**

Tools | Analyze | Options from your ribbon.

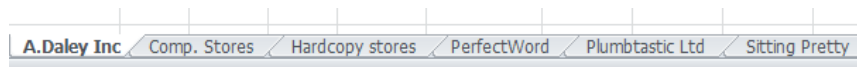
In the **PivotTable** area on the ribbon, click on the arrow to right of **Options** and select **Show Report Filter Pages**



The **Show Report Filter Pages** dialog box will now appear. Select **Company Name** and select **OK**



You should now have individual worksheets with the company names on in your file as shown on the image below



Task 4
Save your work

Exercise 8. Using Report Filters

Task 1

Create a new PivotTable with **Name** as the Report Filter

Step 1

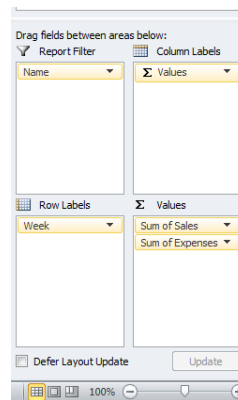
Using the file **Staff Finance.xlsx** or if you did not complete Exercise 2 when this file was last used please open the file **Staff Finance Ex2 completed.xls**

Step 2

Create a new PivotTable in the same sheet by opening the **Staff Sales** sheet and clicking into the table. Select **Insert, PivotTable**.

Add **Name** to Report Filter, **Week** to Row Labels and **Sales and Expenses** to Values.

Your PivotTable field list should look as follows. The **Values** in **Column labels** will be automatically generated



Your PivotTable should now look like below. Format your **Sales** and **Expenses** values to **currency**.

Row Labels	Sum of Sales	Sum of Expenses
21/01/2004	£11,477.00	£278.00
28/01/2004	£9,480.00	£243.00
04/02/2004	£9,307.00	£222.00
11/02/2004	£8,823.00	£249.00
Grand Total	£39,087.00	£992.00

Task 2

Filter your data using the Report Filter, to locate the sales and expenses for Janine and then filter on both Janine and Rob.

Step 1

Filter on **Name** to show the **Sales and Expenses** for Janine Brown. Your result will be similar to below

Row Labels	Sum of Sales	Sum of Expenses
21/01/2004	£3,684.00	£79.00
28/01/2004	£3,798.00	£55.00
04/02/2004	£3,578.00	£98.00
11/02/2004	£1,577.00	£107.00
Grand Total	£12,637.00	£339.00

See what happens if you then filter on both Janine Brown and Rob Roy as multiple items? Can you see which **Sales** and **Expenses** relate to who by looking at the report filter heading?

Your result should be similar to below

Row Labels	Sum of Sales	Sum of Expenses
21/01/2004	£7,591.00	£175.00
28/01/2004	£7,779.00	£130.00
04/02/2004	£6,976.00	£168.00
11/02/2004	£5,981.00	£194.00
Grand Total	£28,327.00	£667.00

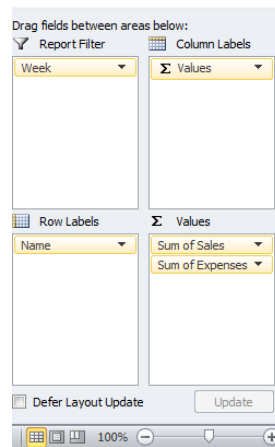
We will look at a more efficient way of displaying filter detail using **Slicers** later on.

Task 3

Change your report filter to Week and locate the sales and expenses for the week of 21/01/2004

Step 1

Remove the filter previously applied to the Name field and drag **Week** to the Report Filter and **Name** to the Row Labels. Your PivotTable Fields List will look like below.



Use the report filter to locate the **Sales and Expenses** for the **Week 21/01/2015**. Your PivotTable will be like below

Week	21/01/2015		
Row Labels	Sum of Sales	Sum of Expenses	
Janine Brown	£3,684.00	79	
Pamela Wright	£3,886.00	103	
Rob Roy	£3,907.00	96	
Grand Total	£11,477.00	278	

Task 4

Save your work and close the file.

Exercise 9. Creating a Pivot Chart

➤ *Creating a pivot chart*

Task 1

Create a pivot chart from the PivotTable in the file **Sales.xlsx**, worksheet **Pivot Sales**.

Step 1

Using the file **Sales.xlsx** or if you did not complete the previous exercises, please open **SalesEx7.xls**. Open the worksheet 'Pivot Sales'. The current PivotTable will be as below.

Sum of TOTAL	Column Labels					Grand Total
Row Labels	440	441	442	444	446	
1235-1264	£40,782.47	£1,950.30	£3,227.19	£17,017.29	£19,922.21	£82,899.46
1265-1294	£11,638.14	£21,066.60	£20,413.89	£5,700.61	£17,913.89	£76,733.12
1295-1324	£33,178.02	£5,104.20	£5,457.56	£2,736.33	£20,277.85	£66,753.95
1325-1354	£6,615.53			£3,665.67	£2,847.64	£13,128.84
Grand Total	£92,214.16	£28,121.10	£29,098.64	£29,119.90	£60,961.58	£239,515.36

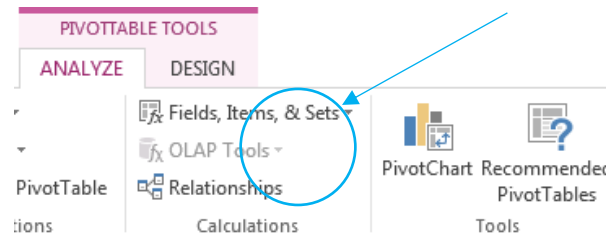
Step 2

Change the current PivotTable to show **Date** in the Row labels and insert **Company Name** to the Report Filter field and remove the **Invoice Number** from the Row Labels. Group your Date by **Quarters** and **Month**, filter the Row Labels to show only **Qtr1** and **Qtr2**. Your PivotTable should now look like below.

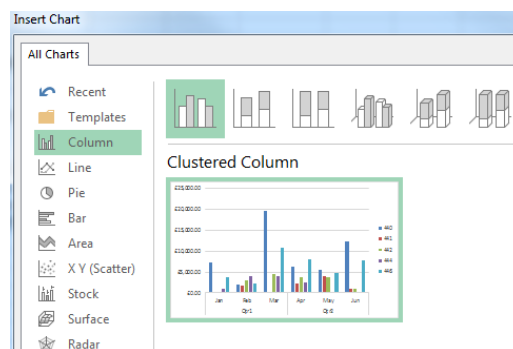
COMPANY NAME (All)						
Sum of TOTAL	Column Labels					Grand Total
Row Labels	440	441	442	444	446	
Qtr1						
Jan	£7,206.79			£1,071.18	£3,710.25	£11,988.22
Feb	£1,974.06	£1,849.32	£2,928.43	£4,133.45	£3,542.23	£14,427.49
Mar	£19,702.31		£4,622.10	£3,909.19	£9,342.54	£37,576.14
Qtr2						
Apr	£6,288.90	£2,324.60	£3,726.74	£2,594.49	£8,120.60	£23,055.33
May	£5,434.46	£4,049.85	£3,885.50		£4,797.35	£18,167.16
Jun	£12,428.65	£947.00	£994.00		£7,898.30	£22,267.95
Grand Total	£93,035.17	£9,170.77	£16,156.77	£11,708.31	£37,411.26	£127,482.28

Step 3

Click within your PivotTable and select **PivotTable Tools | Analyze | Pivot Chart**.



The **Insert Chart** dialog box will appear.

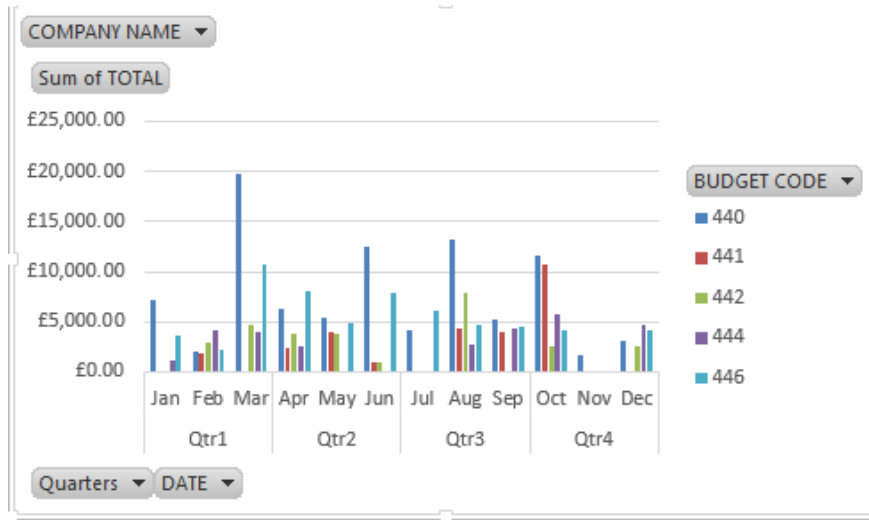


Step 4

Choose the desired chart type, e.g. **Clustered Column** and click **OK**

The completed chart will appear as an embedded chart in the **PivotTable** worksheet.

Note that the **Date** field in the **PivotTable** worksheet is currently grouped by **Quarters**



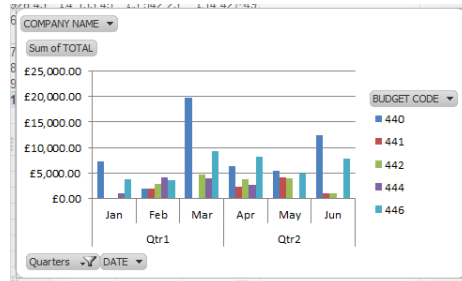
Task 3

Use the Pivot Chart, row and column (Axis) field drop-down boxes to show the results for **Qtr 1** and **Qtr 2** only. Filter now on **Company Name** to show the sales for **Perfect World**

Step 1

Select the **Quarters** drop down box located on the chart.

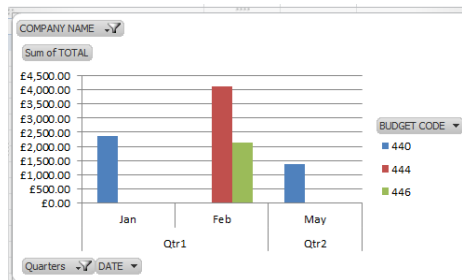
Clear (**Select All**) and select **Qtr 1** and **Qtr 2**. Select **OK**. Your pivot chart will look like below.



Step 2

Using the **Company Name** Report filter, either from the PivotTable for on the Pivot Chart show the sales for just **Perfect World**

Your chart will now look like below

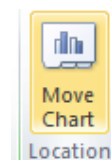


Task 4

Move the chart to its own worksheet.

Step 1

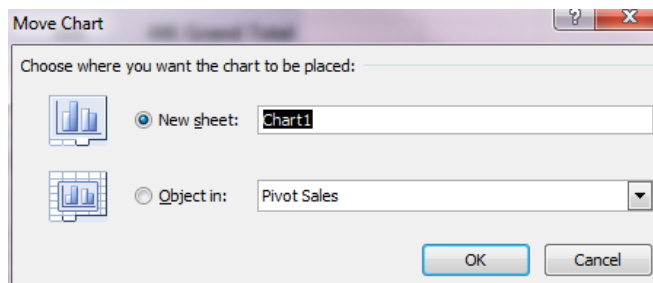
To move the chart to a different worksheet select the chart then **PivotChart Tools | Design | Location | Move Chart.**



select

Step 2

Select **New sheet** from the **Move Chart** dialog box. Change the name from **Chart1** to **Perfect World Sales**. Select **OK**



Task 3

Save your work and close the file

Exercise 10. Add a calculated field

➤ Add a calculated field to show the amount of profit per member of staff

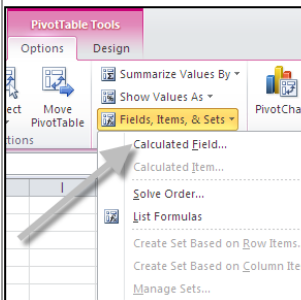
Task 1

Create a PivotTable and use a calculated field to show the amount of profit per member of staff based on the sales minus expenses.

Step 1

Open the file **Staff Finance.xlsx** or if you did not complete **Exercise 8**, when this file was last used, please open the file **Staff Finance Ex8 completed.xls**

Use the data sheet called Staff Sales and create a PivotTable

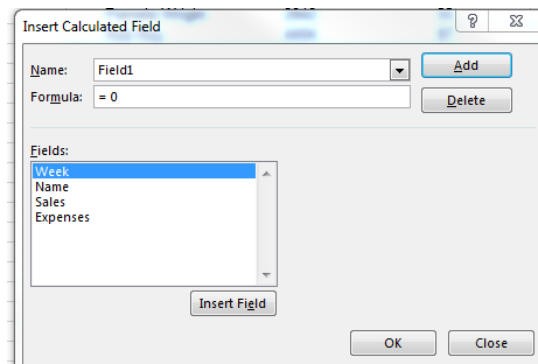


Step 2

Click anywhere within your PivotTable.

From the **PivotTableTools** tab of the **Ribbon**, select **Analyze | Calculations | Fields, Items, & Sets | Calculated Field**

The Insert Calculated Field dialog box will appear



Step 3

In the **Name:** field remove **Field1** and type **Profit**

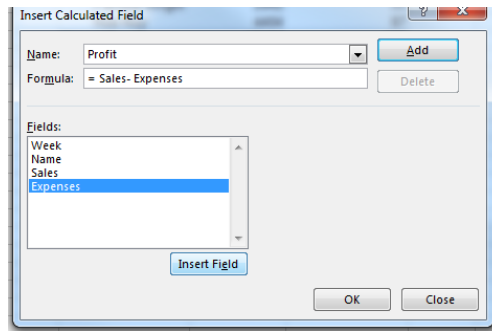
Remove **0** from the **Formula:** field, leaving the (=) sign.

In the **Fields** section select **Sales** and then click the **Insert Field** button.

In the **Formula:** field add a minus sign (-) after **Sales**

In the **Fields** section, double click **Expenses**.

The completed formula should be the same as below



Click **OK** to add the calculated field to the PivotTable.

The Calculated field will appear as a new column in your PivotTable.

Now change the numbers in your PivotTable to display as currency, as shown below.

Week	(All)			
Row Labels	Sum of Sales	Sum of Expenses	Sum of Profit	
Janine Brown	£12,637.00	£339.00	£12,298	
Pamela Wright	£10,760.00	£325.00	£10,435	
Rob Roy	£15,690.00	£328.00	£15,362	
Grand Total	£39,087.00	£992.00	£38,095	

Task 2

Save and close your file.

Exercise 11. Add a calculated field – additional exercise

➤ Add a calculated field to show the percentage of discount

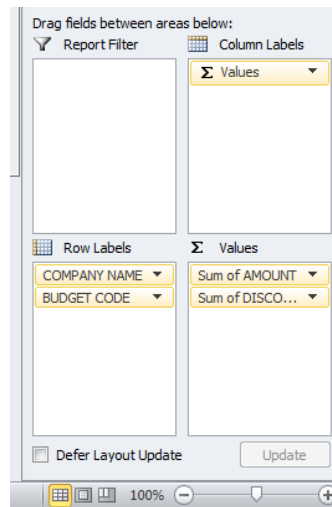
Task 2

Create a PivotTable to show each company with the budget codes they have purchased, the amount purchased and discount applied for their sales.

Step 1

Open the file **Sales.xlsx** or if you did not complete **Exercise 9**, when this file was last used, please open the file **SalesEx10 completed.xlsx**

Create a PivotTable on a new sheet using the table of data in the **Sales** worksheet. It should show **Company Name** and **Budget Code** as the Row Labels, **Amount** and **Discount** as Values. Your field list will look like below. The column label will be created automatically.



The PivotTable will look like below.

Row Labels	Sum of AMOUNT	Sum of DISCOUNT
A.Daley Inc	31258	1058.065
440	12178	415.27
441	1970	19.7
442	3327	99.81
444	4934	246.7
446	8849	276.585
Comp. Stores	10678	341.02
440	1501	11.53
441	4118	205.9
442	1409	14.09
444	3650	109.5
Hardcopy stores	99286	2594.685
440	50258	992.84
441	8040	326.46
442	9176	168.015
444	2778	41.67
446	29034	1065.7
PerfectWord	26503	905.575
440	11019	317.73
441	1065	10.65
444	8864	443.2
446	5555	133.995
Plumbtastic Ltd	46671	1445.13
440	11592	361.76
441	7019	117.87

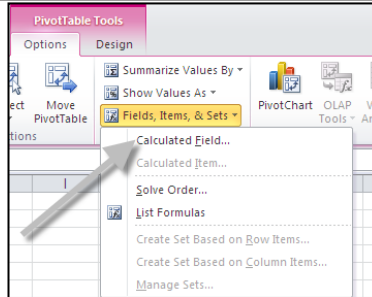
Task 3

Create a calculated field to show the percentage of discount per Budget Code and Company.

Step 2

Click anywhere within your PivotTable.

From the **PivotTable Tools** tab of the **Ribbon**, select **Analyze | Calculations | Fields, Items, & Sets | Calculated Field**



Step 3

In the **Name:** field remove **Field1** and type **% Discount**

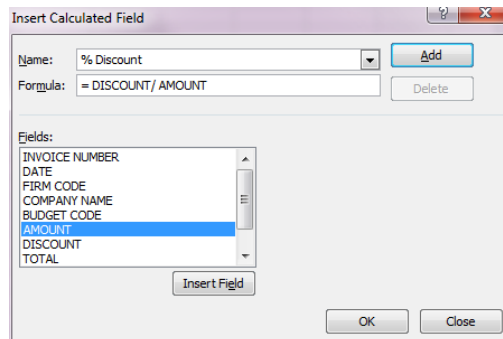
Remove **0** from the **Formula:** field, leaving the (=) sign.

In the **Fields** section select **Discount** and then click the **Insert Field** button.

In the **Formula:** field add a division sign (/) after **Discount**

In the **Fields** section select **Amount** and then click the **Insert Field** button.

The completed formula should be the same as below.



Click the **OK** button to add the calculated field to the PivotTable.

A new column will appear that contains the % Discount. The completed PivotTable is below.

Row Labels	Sum of AMOUNT	Sum of DISCOUNT	Sum of % Discount
A.Daley Inc	31258	1058.065	0.033849415
440	12178	415.27	0.034100016
441	1970	19.7	0.01
442	3327	99.81	0.03
444	4934	246.7	0.05
446	8849	276.585	0.031256074
Comp. Stores	10678	341.02	0.031936692
440	1501	11.53	0.007681546
441	4118	205.9	0.05
442	1409	14.09	0.01
444	3650	109.5	0.03
Hardcopy stores	99286	2594.685	0.026133443
440	50258	992.84	0.019754865
441	8040	326.46	0.040604478
442	9176	168.015	0.018310266
444	2778	41.67	0.015
446	29034	1065.7	0.036705242
PerfectWord	26503	905.575	0.034168773
440	11019	317.73	0.02883474
441	1065	10.65	0.01
444	8864	443.2	0.05
446	5555	133.995	0.024121512
Plumbtastic Ltd	46671	1445.13	0.030964196
440	11592	361.76	0.031207729
441	7019	147.87	0.021067104
442	11390	423.5	0.037181738
444	4151	43.715	0.010531197
446	12519	468.285	0.037405943
Sitting Pretty	32508	1044.165	0.032120247
440	8088	322.71	0.039899852
441	6711	91.325	0.013608255
442	4739	236.95	0.05
444	5761	133.32	0.023141816
446	7209	259.86	0.036046608
Grand Total	246904	7388.64	0.029925153

Step 4

Format the newly created calculated item to **percentage** using the Number Format option. The PivotTable will then look as below.

Row Labels	Sum of AMOUNT	Sum of DISCOUNT	Sum of % Discount
A.Daley Inc	31258	1058.065	3.38%
440	12178	415.27	3.41%
441	1970	19.7	1.00%
442	3327	99.81	3.00%
444	4934	246.7	5.00%
446	8849	276.585	3.13%
Comp. Stores	10678	341.02	3.19%
440	1501	11.53	0.77%
441	4118	205.9	5.00%
442	1409	14.09	1.00%
444	3650	109.5	3.00%
Hardcopy stores	99286	2594.685	2.61%
440	50258	992.84	1.98%
441	8040	326.46	4.06%
442	9176	168.015	1.83%
444	2778	41.67	1.50%
446	29034	1065.7	3.67%
PerfectWord	26503	905.575	3.42%
440	11019	317.73	2.88%
441	1065	10.65	1.00%
444	8864	443.2	5.00%
446	5555	133.995	2.41%
Plumbtastic Ltd	46671	1445.13	3.10%
440	11592	361.76	3.12%
441	7019	147.87	2.11%
442	11390	423.5	3.72%
444	4151	43.715	1.05%
446	12519	468.285	3.74%
Sitting Pretty	32508	1044.165	3.21%
440	8088	322.71	3.99%
441	6711	91.325	1.36%
442	4739	236.95	5.00%
444	5761	133.32	2.31%
446	7209	259.86	3.60%
Grand Total	246904	7388.64	2.99%

Task 4

Save and close the file

Exercise 12. Create an additional field in a PivotTable to show % of totals using the ribbon options

Task 1

Using the Sales spreadsheet show the % of the grand total discount for each company and budget code using **Show Values As**

Step 1

Open the file **Sales.xlsx** or if **Exercise 10** was not completed then use the file **Sales Ex11 completed.xlsx**

Step 2

Add the field Discount to the Values area of your PivotTable, to do this drag the field Discount to the values so it shows as Discount2. You will now have Discount in the Values section 3 times. The newly inserted Discount field is likely to be named **Sum of DISCOUNT2**

Click on the down arrow to the right of the newly added column **Sum of DISCOUNT2** from the **Values** section of the PivotTable Fields and select **Show Values As**

Then select the % of Column Total. Your PivotTable will look as below.

Row Labels	Sum of AMOUNT	Sum of DISCOUNT	Sum of % Discount	Sum of DISCOUNT2
A.Daley Inc	31258	1058.065	3.38%	14.32%
440	12178	415.27	3.41%	5.62%
441	1970	19.7	1.00%	0.27%
442	3327	99.81	3.00%	1.35%
444	4934	246.7	5.00%	3.34%
446	8849	276.585	3.13%	3.74%
Comp. Stores	10678	341.02	3.19%	4.62%
440	1501	11.53	0.77%	0.16%
441	4118	205.9	5.00%	2.79%
442	1409	14.09	1.00%	0.19%
444	3650	109.5	3.00%	1.48%
Hardcopy stores	99286	2594.685	2.61%	35.12%
440	50258	992.84	1.98%	13.44%
441	8040	326.46	4.06%	4.42%
442	9176	168.015	1.83%	2.27%
444	2778	41.67	1.50%	0.56%
446	29034	1065.7	3.67%	14.42%
PerfectWord	26503	905.575	3.42%	12.26%
440	11019	317.73	2.88%	4.30%
441	1065	10.65	1.00%	0.14%
444	8864	443.2	5.00%	6.00%
446	5555	133.995	2.41%	1.81%
Plumbtastic Ltd	46671	1445.13	3.10%	19.56%
440	11592	361.76	3.12%	4.90%
441	7019	147.87	2.11%	2.00%
442	11390	423.5	3.72%	5.73%
444	4151	43.715	1.05%	0.59%
446	12519	468.285	3.74%	6.34%
Sitting Pretty	32508	1044.165	3.21%	14.13%
440	8088	322.71	3.99%	4.37%
441	6711	91.325	1.36%	1.24%
442	4739	236.95	5.00%	3.21%
444	5761	133.32	2.31%	1.80%
446	7209	259.86	3.60%	3.52%
Grand Total	246904	7388.64	2.99%	100.00%

Exercise 13 Create an additional field in a PivotTable to show % of totals using the PivotTable Field List option

Task 1

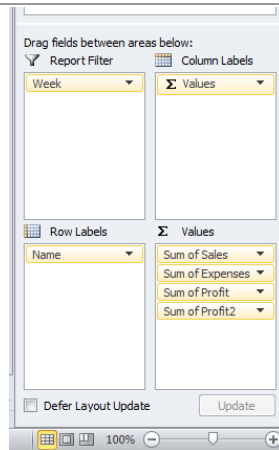
Show the % of Profit generated per member of staff

Step 1

Open the file **Staff Finance.xlsx** or if you did not complete the Exercise 10 then open the file **Staff Finance Ex10 completed.xlsx**

On Sheet1, click anywhere in the PivotTable.

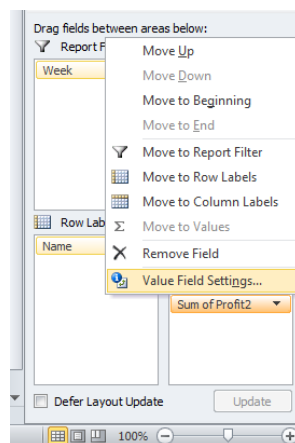
From the **PivotTable Field List** window drag **Profit** to the **(Values)** part of the PivotTable task pane. You may notice that the field has been named **Sum of Profit2**. See below



Step 2

In the PivotTable field list click on the drop down arrow to the right of the field **Sum of Profit2** and select **Value Field Settings**.

From the menu select **Value Field Settings**.

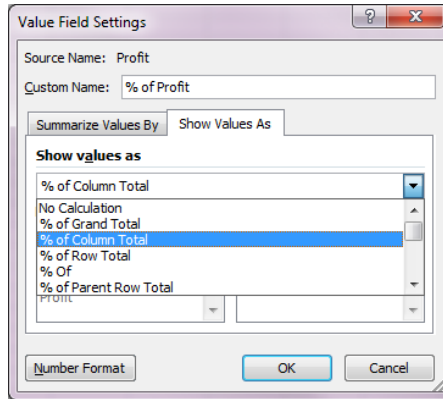


Step 3

In the **Value Field Settings** dialog box change the **Custom name** to **% of Profit**, see **below**

Select the **Show Values As** tab.

From the **Show Values As** drop down list select **% of Column Total**. Click **OK**



Your PivotTable should now look like the one below

	A	B	C	D	E
1					
2	Week	(All)			
3					
4	Row Labels	Sum of Sales	Sum of Expenses	Sum of Profit	% of Profit
5	Janine Brown	£12,637.00	£339.00	£12,298	32.28%
6	Pamela Wright	£10,760.00	£325.00	£10,435	27.39%
7	Rob Roy	£15,690.00	£328.00	£15,362	40.33%
8	Grand Total	£39,087.00	£992.00	£38,095	100.00%
9					
10					
11					
12					

Task 2

Save your work and close the file

Exercise 14. Create a PivotTable from a MS Access query.

➤ *Create a PivotTable from a MS Access database*

Task 1

Create a PivotTable from a MS Access database query to show Products by Category.

The PivotTable will also show the number of orders by product and the total orders placed for each product.

Step 1

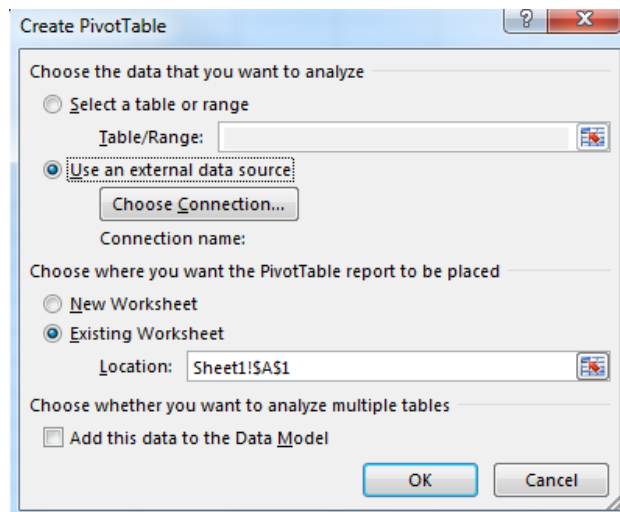
Create a **new workbook** and name it **Import Query.xlsx**

Select **PivotTable** from the **Insert** tab

In the **Create PivotTable** window select **Use an external data source**, see **below**

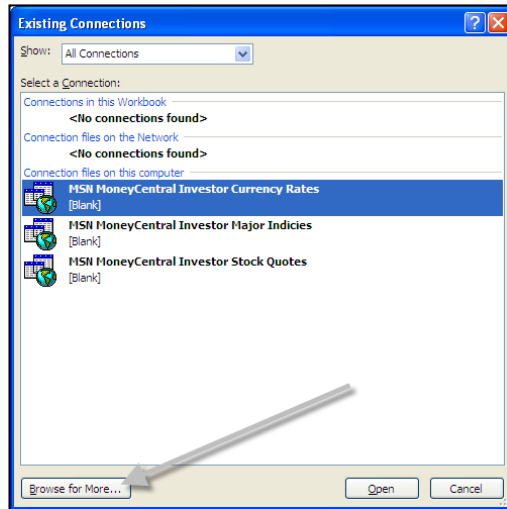
Choose **Existing Worksheet** to place the new PivotTable and cell **B3** for the location

Click the **Choose Connection** button

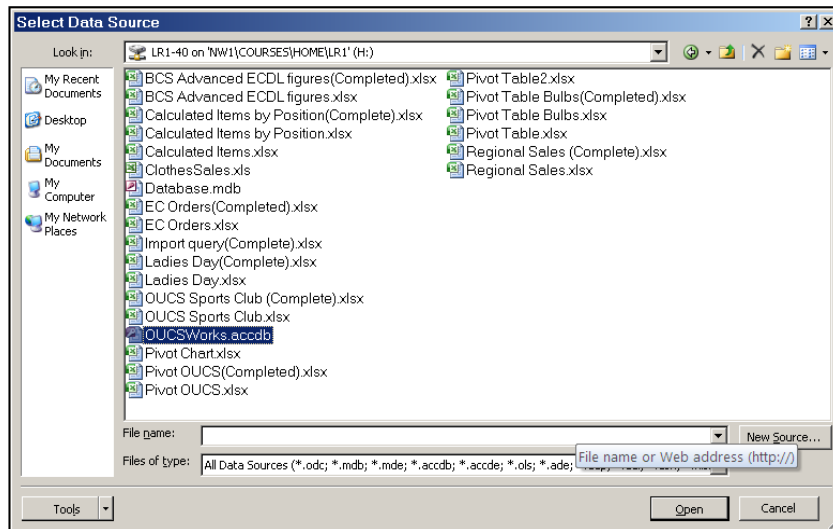


Step 2

In the **Existing Connections** window click the **Browse for More** button, see below.



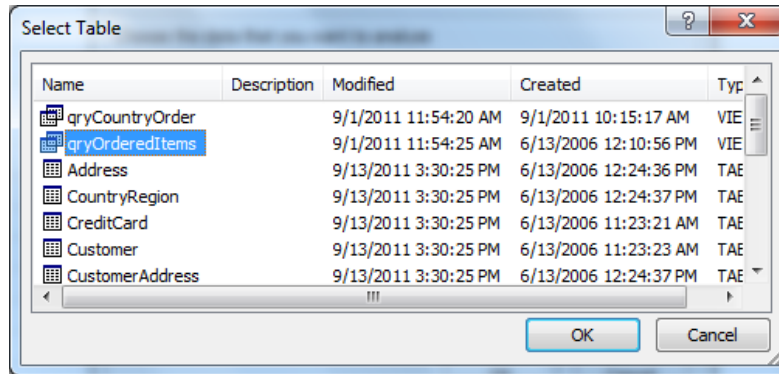
Navigate to the **H:** drive and select **OUCSWorks.accdb**, see
Click the **Open** button



Step 3

From the **Select Table** window select **qryOrderedItems**, see below

Click **OK**



Click **OK** again when back in the **Create PivotTable** window to add the **PivotTable** fields to the worksheet.

Step 4

Create a PivotTable using the available fields to show a Report Filter of **Country** and **Product Category** and **Product name** as Row labels with the **Quantity Ordered** and the **Total Cost** as Values. Your PivotTable should then look the same as that shown below

Note that the some of the data **Product Category** fields have been collapsed in this figure.

When the source data changes select **PivotTable Tools | Analyze | Refresh** on the ribbon to update the PivotTable.

	A	B	C	D	E
1	Country	(All)			
2					
3	ProductCategory	ProductName	Qty Ordered	Total Cost	
4	Accessories				
5		Bike Wash - Dissolver	2428	£11,381.06	
6		Cable Lock	1111	£16,624.00	
7		Hitch Rack - 4-Bike	2852	£201,085.20	
8		Hydration Pack - 70 oz.	2035	£66,253.05	
9		Minipump	1155	£13,828.68	
10		Patch Kit/8 Patches	674	£925.53	
11		Sport-100 Helmet, Black	4516	£90,500.08	
12		Sport-100 Helmet, Blue	4702	£94,030.12	
13		Sport-100 Helmet, Red	4131	£82,718.58	
14		Water Bottle - 30 oz.	2588	£7,605.01	
15	Accessories Total		26192	£584,951.31	
16	Bikes		76612	£68,559,479.59	
17	Clothing		65643	£1,831,738.04	
18	Components		50239	£12,126,216.36	
19	Grand Total		218686	£83,102,385.30	
20					
21					

Task 2

Extra Task – altering the data in the original database table

Step 1

Open the Database using Access and edit some values.

Re-visit your PivotTable to see if the values you have entered into the database have updated automatically.

If they have not updated then you must click on the refresh button and check your data one final time.

Task 3

Save your work and close the file.

Exercise 15. Creating and using slicers.

- Create a slicer to filter data in a single PivotTable
- Move, resize and format slicers
- Filter your data using slicers

Task 1

Create a PivotTable.

Step 1

Open the file **Staff Finance.xlsx** or if you did not complete Exercise 13 then open the file **Staff Finance Ex13 completed.xlsx** from the **H:** drive

Open the worksheet '**Data Spending**' and using the table of Staff Spending create a new PivotTable on a new worksheet. Show **Name** in the Row labels, **Spending** in Column labels and **Amount** in the Values box. Your PivotTable will look like below. Name your worksheet '**Slicers**'.

Sum of Amount	Spending			
Name	Car	Food	Rent	Grand Total
Janine Brown		29	51	80
Pamela Wright	48	30	51	129
Rob Roy	20	77	81	178
Grand Total	68	136	183	387

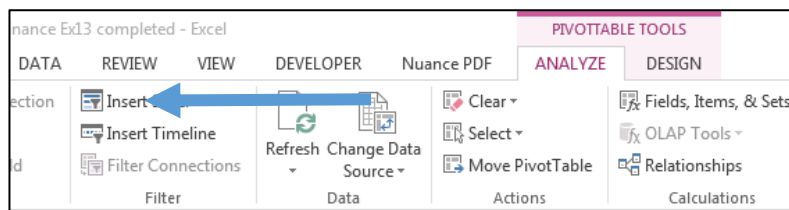
Task 2

In this task you will create a slicer to filter data in a single Pivottable.

Step 1

Select the **Slicers** worksheet. Click anywhere in the PivotTable to select it.

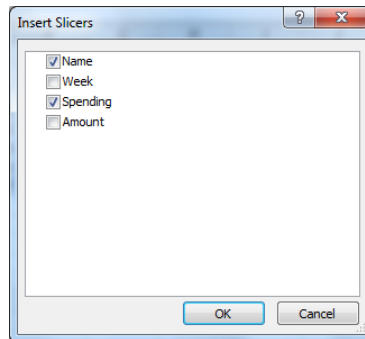
Select **PivotTable Tools | Analyze | Insert Slicer** see below



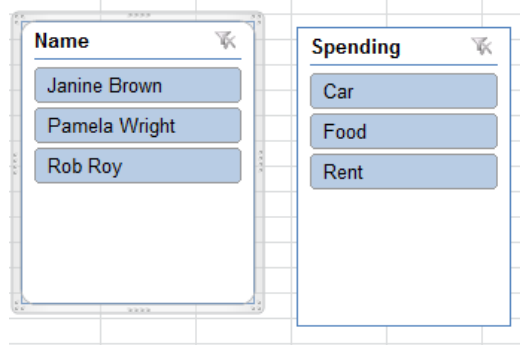
Step 2

The **Insert Slicers** dialog box will appear where you can select the field names (dimensions) you want to the Slicers to filter out.

Select **Name** and **Spending** and click **OK** See below



Slicer windows will appear as below



Task 3

Move, resize and format your slicers.

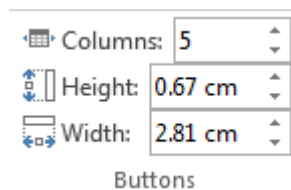
Step 1

Move and re-size your Slicers.

Click into the **Name** slicer, a four headed arrow will appear. Drag the top left corner of your Name slicer to cell G3 then resize it to approximately fit in cells G3 to M7.

Change the number of columns in the slicer

With the Name slicer selected click on **Slicer Tools | Options | Buttons** then use the up arrow in **Columns** to increase the number of columns to 3 to allow you to view all your slicer items in one window.

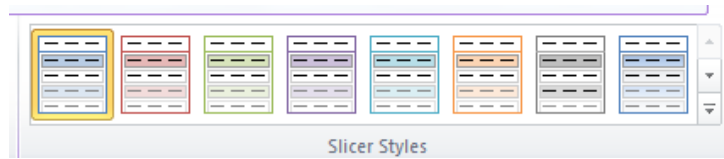


Your Name slicer should now look like below



Step 2

Format your slicer, with your Name slicer selected, click on **Slicer Tools | Options | Slicer Styles**



Select a style, I picked purple. Move, resize and apply a style to the Spending slicer to fit underneath the Name slicer. Your worksheet should now look like below. I have formatted **Name** to purple and **Spending** to green

Sum of Amount	Spending	Food	Rent	Grand Total
Name	Car			
Janine Brown		29	51	80
Pamela Wright		48	30	129
Rob Roy		20	77	178
Grand Total		68	136	387

Name
Janine Brown
Pamela Wright
Rob Roy

Spending
Car
Food
Rent

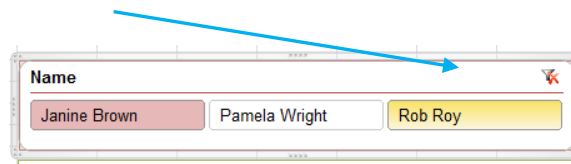
Task 4

Filter your PivotTable using your slicers

Step 1

Filter your PivotTable by selecting a field, to select multiple fields select other fields holding the <Ctrl> key down.

To clear the Slicer and display all records filter click the **Clear Filter** icon at the top of the Slicer.



Step 2

View all expenses for **Janine Brown** and **Pamela Wright**.

Clear the filters and view spending on **Car**. Here you will see that Janine Brown does not appear in the PivotTable result and her button is also shaded out in the slicer. Your PivotTable and slicers will look like below.

Sum of Amount	Column Labels	Grand Total
Row Labels	Car	
Pamela Wright		48
Rob Roy		20
Grand Total		68

Name
Pamela Wright
Rob Roy
Janine Brown

Spending
Car
Food
Rent

Task 5

Save your file.

Exercise 16. Insert multiple pivot tables to a worksheet and connect multiple slicers

- Add multiple PivotTables to one worksheet
- Connect multiple slicers to multiple PivotTables
- Filter multiple PivotTables using multiple slicers

Task 1

Insert multiple PivotTables in one worksheet

Step 1

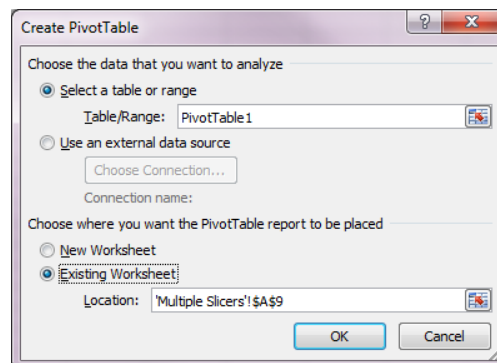
Using **Staff Finance.xlsx** or if Exercise 15 was not completed then use the file **Staff Finance Ex15 completed.xlsx** from the **H:** drive

Open the **Data Spending** worksheet and insert a new PivotTable into a new worksheet with **Name** as the Row labels and **Amount** as the Values. The first pivot will be as below. Name the new worksheet '**Multiple Slicers**'

Row Labels	Sum of Amount
Janine Brown	80
Pamela Wright	129
Rob Roy	178
Grand Total	387

Step 2

Move back to your **Data Spending** worksheet and insert a second pivot this time specifying the location as an **Existing Worksheet with the Location 'Multiple Slicers'!\$A\$9**. (You can do this by clicking on the worksheet and then the cell reference). See below



The second pivot should look like below. Add **Week** as the Row labels and **Amount** as the Values

Row Labels	Sum of Amount
21/01/2004	101
28/01/2004	104
04/02/2004	98
11/02/2004	84
Grand Total	387

Step 3

Add a 3rd pivot to the same worksheet this time with **Spending** as the Row labels and **Amount** as the Values and insert it to cell A16 as below.

Row Labels	Sum of Amount
Car	68
Food	136
Rent	183
Grand Total	387

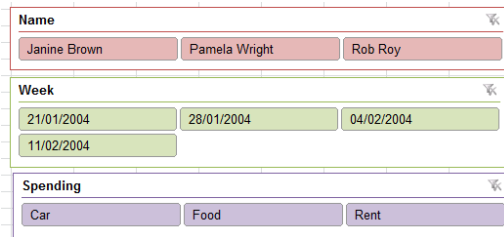
Task 2

Add multiple slicers

Step 1

Select the first PivotTable and add slicers to your worksheet for **Name**, **Week** and **Spending**.

Move, resize and format your 3 slicers to a suitable view, example below. (I have formatted **Name** to red, **Week** to green and **Spending** to purple).



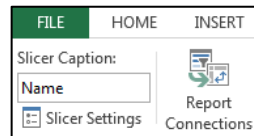
Task 3

Link the slicers to multiple pivot tables.

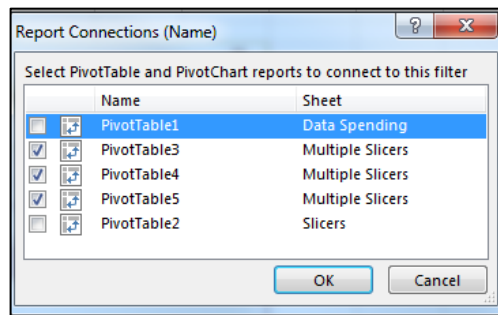
Step 1

Currently your slicers are only connected to the first PivotTable showing **Name** and **Amount**. Click on fields in each slicer and see how only the first PivotTable changes. The slicers need to be connected to all 3 pivot tables.

Select your first slicer. Select **Slicer Tools | Options | Slicer | Report Connections** see below



Link the slicer to the other two pivot tables in **Multiple Slicers** by inserting a tick next to **PivotTable3**, **PivotTable4** and **PivotTable5** click on **OK**.



Step 2

Select each of the other two slicers in turn and repeat Step 1 above to connect all three slicers to all three PivotTables.

Task 4

Filter using your slicers to show **Janine Brown** payments for **Rent**

Step 1

Filter to see when **Janine Brown** paid her **Rent**, all three pivots should now change.
Practice using the slicers to filter various options.

Task 5

Save and close your file.

Exercise 17. Consolidation Task.

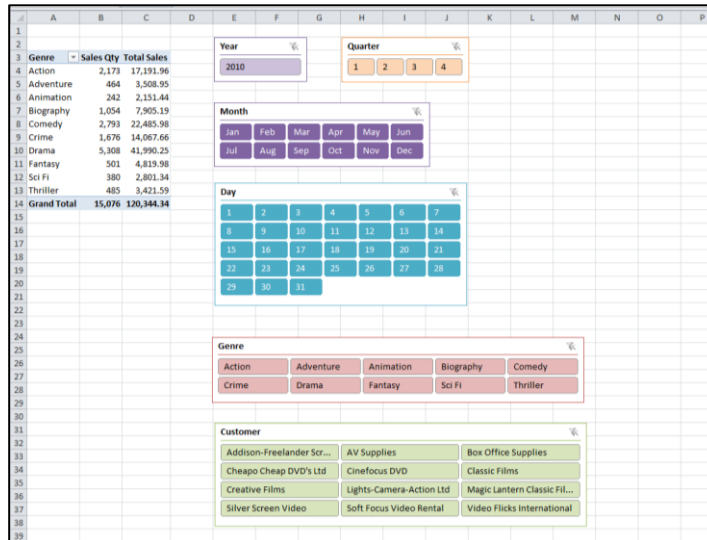
- Create a date-driven interface
- Create a custom Pivot Table Style

Task 1

Create a PivotTable using the file Transactions.

Step 1

A date-driven interface is one of the most impressive and useful implementations of Excel's slicer features.



Before you can add a date-driven interface to a PivotTable you must make sure that you have the correctly underlying data in your table for Year, Month, Day and Quarter – this has already been created for you in the file Transactions.

Open the file **Transactions.xls** from the **H:** drive

Step 2

Firstly create a PivotTable to display the following fields;

Row Labels: Genre

Values: Sales Qty and Total Sales

Task 2

Create slicers

Step 1

Insert Slicers for the following; **Year, Quarter, Month and Day.**

Select **PivotTable Tools | Analyse | Insert Slicer**



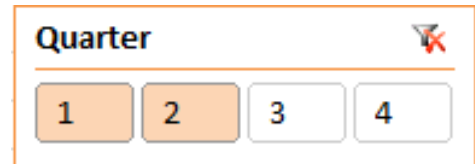
Notice that a year has been included even though the data only has a single year of 2010. When you are creating slicers to create a date-driven interface, it is good practice to always include a Year slicer because you can never be sure that more data will not be added to the underlying data table.

For example if 2011 sales data were added to the table, selecting Jan would show sales for both Jan 2010 and Jan 2011 if the year slicer was not included.

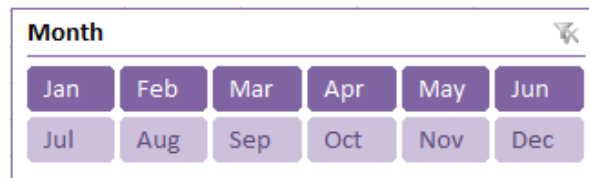
Step 2

Use the slicers to show sales for the first two quarters of 2010 in the Action, Animation and Comedy genres.

Click the 1 button in the Quarter slicer and then hold down the <CTRL> key and click the 2 button.



Notice that the months Jan-Jun are now selected in the Month slicer;

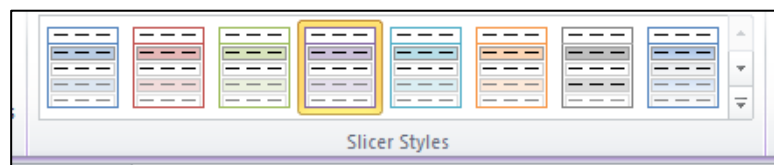


Click the Action button in the Genre slicer and then hold down the <Shift key> key and click the Animation and Comedy buttons.

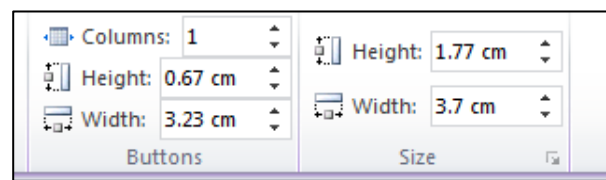
Sales are now shown for the first two quarters of 2010 in the Action, Comedy and Animation genres.

Step 3

Use the **Slicer Tools Option** to format your slicers to display in different colours.



Use the **Slicer tools** to also change the display of your slicers by changing the column number and the height and width so that all the slicers fit nicely onto the spreadsheet.



Task 3

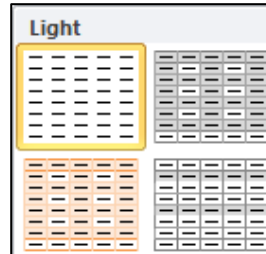
Creating a custom PivotTable Style.

Step 1

In this section you are going to learn how to create a custom Pivot Table style you need to open the file Transactions-2

Click into the PivotTable to activate it

Click on **PivotTable Tools | Design | PivotTable Styles | Light | None**

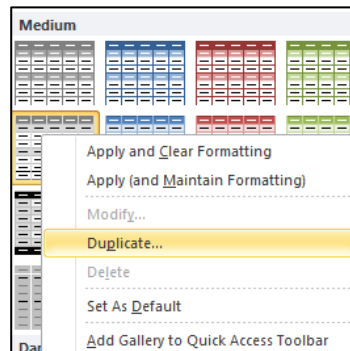


Notice that this style is different from the default style. The default PivotTable style is Light 16.

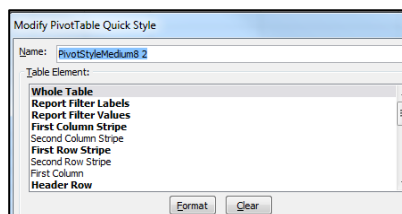
Create a custom PivotTable style called Corporate by duplicating the Medium8 built in style. You will find that modifying a duplicate of an existing style is easier than crating a style from scratch.

Right click on **PivotTable | Design | PivotTable Styles | Medium | Pivot Style Medium 8**. As you hover your mouse over the different styles you will see all the styles are named by Excel.

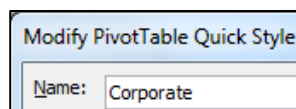
Click **Duplicate** from the shortcut menu



Notice that some of the Table Elements are shown in bold face. These are the elements that have had formatting applied to them:



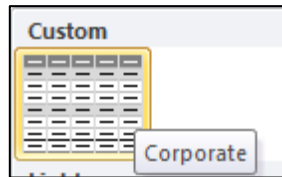
Type the name **Corporate** into the Name text box



Click **OK**

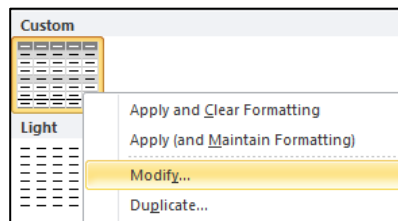
Now apply the new Corporate style to the PivotTable

Click **PivotTable Tools | Design | PivotTable Styles | Custom | Corporate**



Modify the Corporate style so that it shows the Grand Total column is both Bold and Italic

Right click on **Corporate style** and click **Modify**



Select **Grand Total Column** from the **Table Element list**.

Click on **Format**, Select the **Font tab** then Select the **Font Style: Bold Italic**



Click **OK** then click **OK** again, The Grand Total column is now shown in bold and italic;

Sum of Total	Column Labels	Adventure	Animation	Grand Total
Row Labels	Action			
West, Chuck		861.84	44.77	677.02
Spears, Julie		1032.11	284.58	109.37
Armstrong, Dan		1199.7	195.56	218.1
Grand Total		3093.65	524.91	1004.49

Now experiment with the Custom PivotTable Styles and make some other changes to the new Corporate style you have created.



