To plot boxplots in Excel
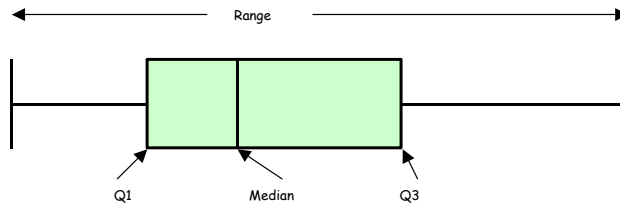

Construct the table shown below in **C1:E11.**

	A	B	C	D	E
1	House Prices South of England £1,000s	House Prices West England £1,000s	Statistics	House Prices South of England £1,000s	House Prices West England £1,000s
2	325	124.9	Minimum	=MIN(A:A)	=MIN(B:B)
3	145	80	Lower quartile Q1	=QUARTILE(A:A,1)	=QUARTILE(B:B,1)
4	230	127.5	Median Q2	=MEDIAN(A:A)	=MEDIAN(B:B)
5	100	158	Upper quatile Q3	=QUARTILE(A:A,3)	=QUARTILE(B:B,3)
6	100	163.5	Maximum	=MAX(A:A)	=MAX(B:B)
7	200	181	Bottom (lower quartile)	=D3	=E3
8	200	197.5	2Qbox (median-Lower quartile)	=D4-D3	=E4-E3
9	187	547.5	3Q Box (upper quartile-median)	=D5-D4	=E5-E4
10	386	66.25	Whisker - (lower quartile-minimum)	=D3-D2	=E3-E2
11	475	93	Whisker + (maximum-upper quartile)	=D6-D5	=E6-E5

Plot a stacked bar chart.
Select **C1:E1** hold down **Ctrl** and select **C7:E9**

	A	B	C	D	E
1	House Prices South of England	House Prices West England	Statistics	House Prices South of England £1,000s	House Prices West England £1,000s
2	325	124.9	Minimum	50.0	66.3
3	145	80	Lower quartile Q1	141.8	92.3
4	230	127.5	Median Q2	200.0	123.7
5	100	158	Upper quatile Q3	287.3	176.6
6	100	163.5	Maximum	480.0	745.0
7	200	181	Bottom (lower quartile)	141.8	92.3
8	200	197.5	2Qbox (median-Lower quartile)	58.3	31.5
9	187	547.5	3Q Box (upper quartile-median)	87.3	52.9
10	386	66.25	Whisker - (lower quartile-minimum)	91.8	26.0
11	475	93	Whisker + (maximum-upper quartile)	192.8	568.4

Select the **Insert tab** then **Column** then **Stacked Column**
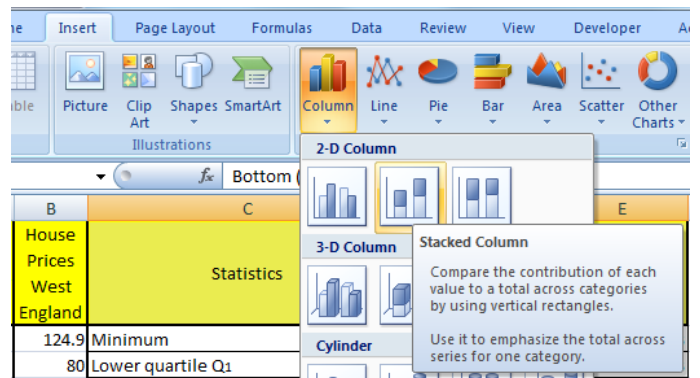
The plot is the wrong way around.
Right click on the chart then **Select Data** then **Switch Row/Column** and **OK**
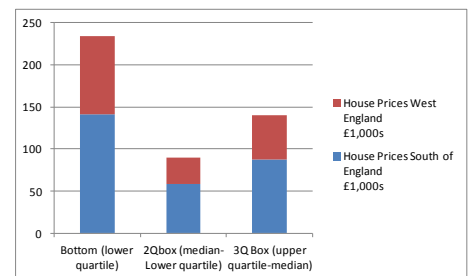
Delete the legend.
Right click on legend and **Delete**

Delete grid lines.
Right click on grid lines and **Delete**

Add a title and vertical axis label.
Click on the graph select the **Layout tab** then **Chart Title** then **Above Chart** type **House Prices for two areas in England in 2012** and **Enter**

Select **Axis Titles** then **Primary Vertical Axis Title** then **Vertical Title** type **House Price** and **Enter**
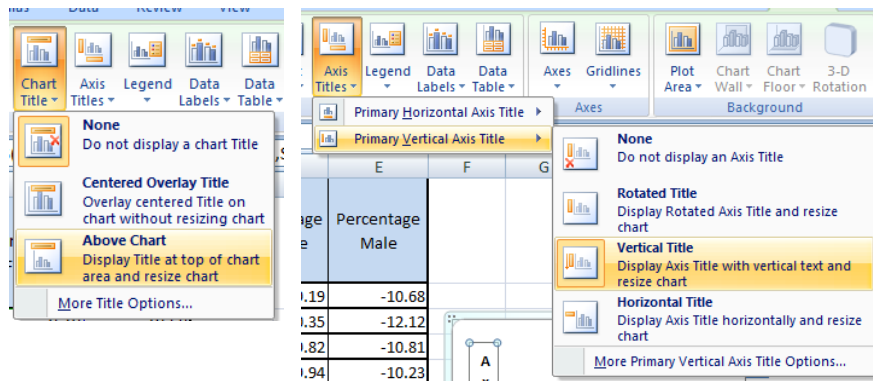

To change the alignment of the text in the vertical title.

Right click on the vertical title s**elect Format Axis Title** then **Alignment** then click on the arrow next to **Text direction** click on one of the options and **Close**
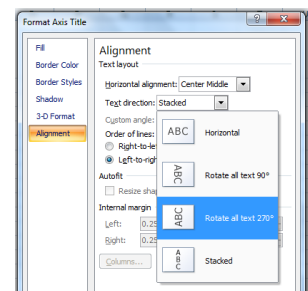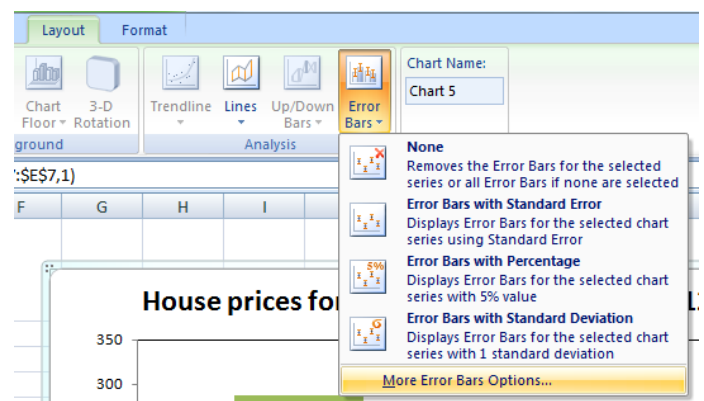

Add a chart border.
Right click on the chart select **Format Plot Area** then **Border Color** select **Solid line** open up the **Color** arrow select the colour and **Close**
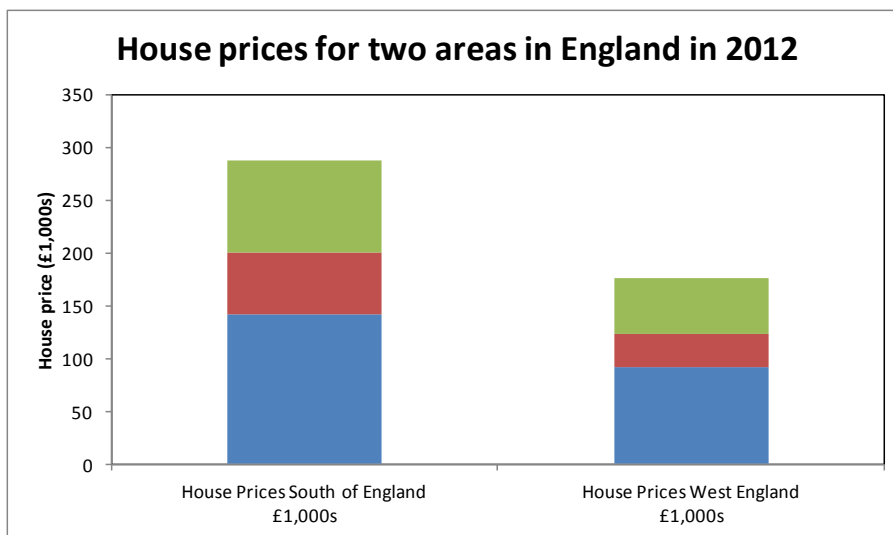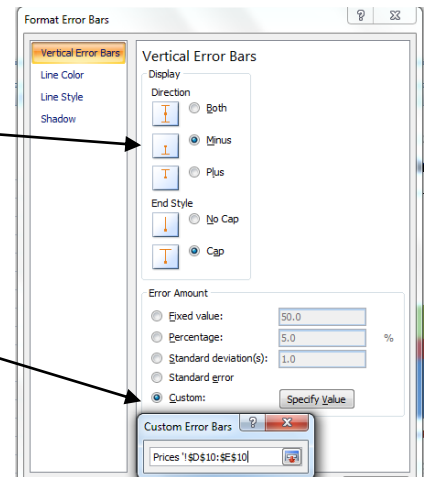

To add lower whiskers.

Click on the bottom box of bar chart (blue)

Select the **Layout tab** then **Error Bars** then **More Error Bar Options**

Select **Minus** and
Custom and **Specify Value**

In **Custom Error Bars** click into **Negative Error Value** delete =**{1}** select
D10:E10 then **OK** and **Close**

Change colour of bottom box.

Right click on bottom box and select **Format Data Series**
then **Fill** then **No fill** and **Close**

To add upper whiskers.
Click on the top box of bar chart (green)
Select the **Layout tab** then **Error Bars** then **More Error
Bar Options** select **Plus** and **Custom** and **Specify Value**
In **Custom Error Bars** click into **Positive Error Value** delete =**{1}** select **D11:E11** then **OK** and **Close**
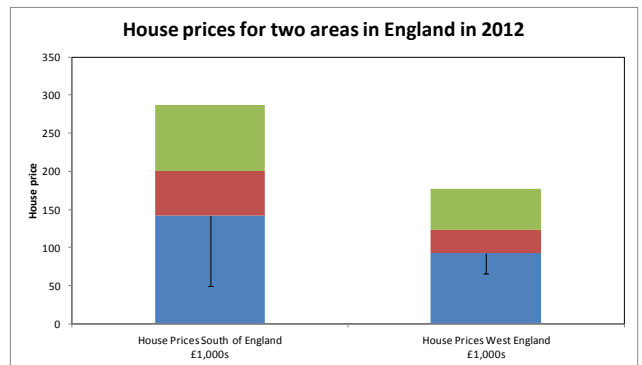
Change the centre box to one colour and to add borders.
Right click on one of the red boxes select **Format Data Series** then **Fill** then **Solid fill** open the **Colour** choices and select **grey** then select **Border Colour** then **Solid line** and select **black** from the colour choice
Click on a green box and do the same then **Close**