CPSC 203 Spreadsheets

Week 2 Lab1

Charts and Visual Design Rules

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Goals

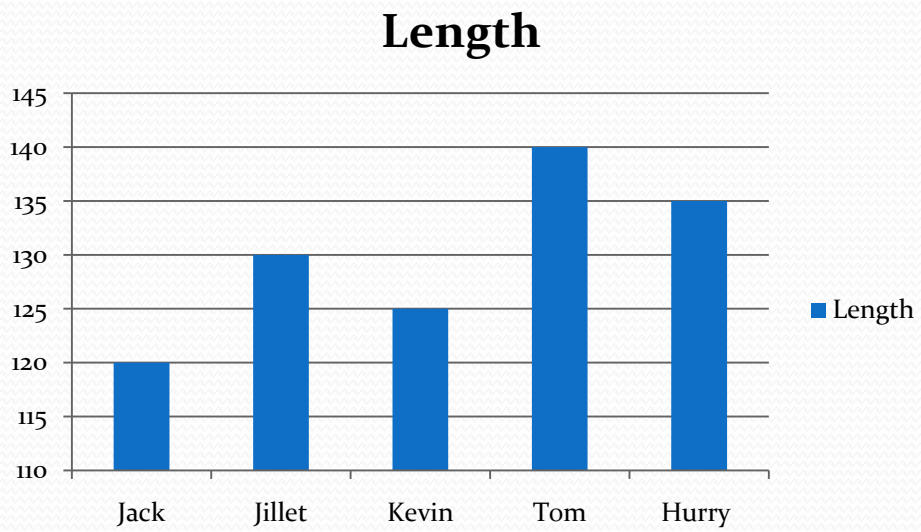
- Using Chart Wizard to create the default chart on a data set
- Customizing a chart according to good chart design principles

Using Chart Wizard

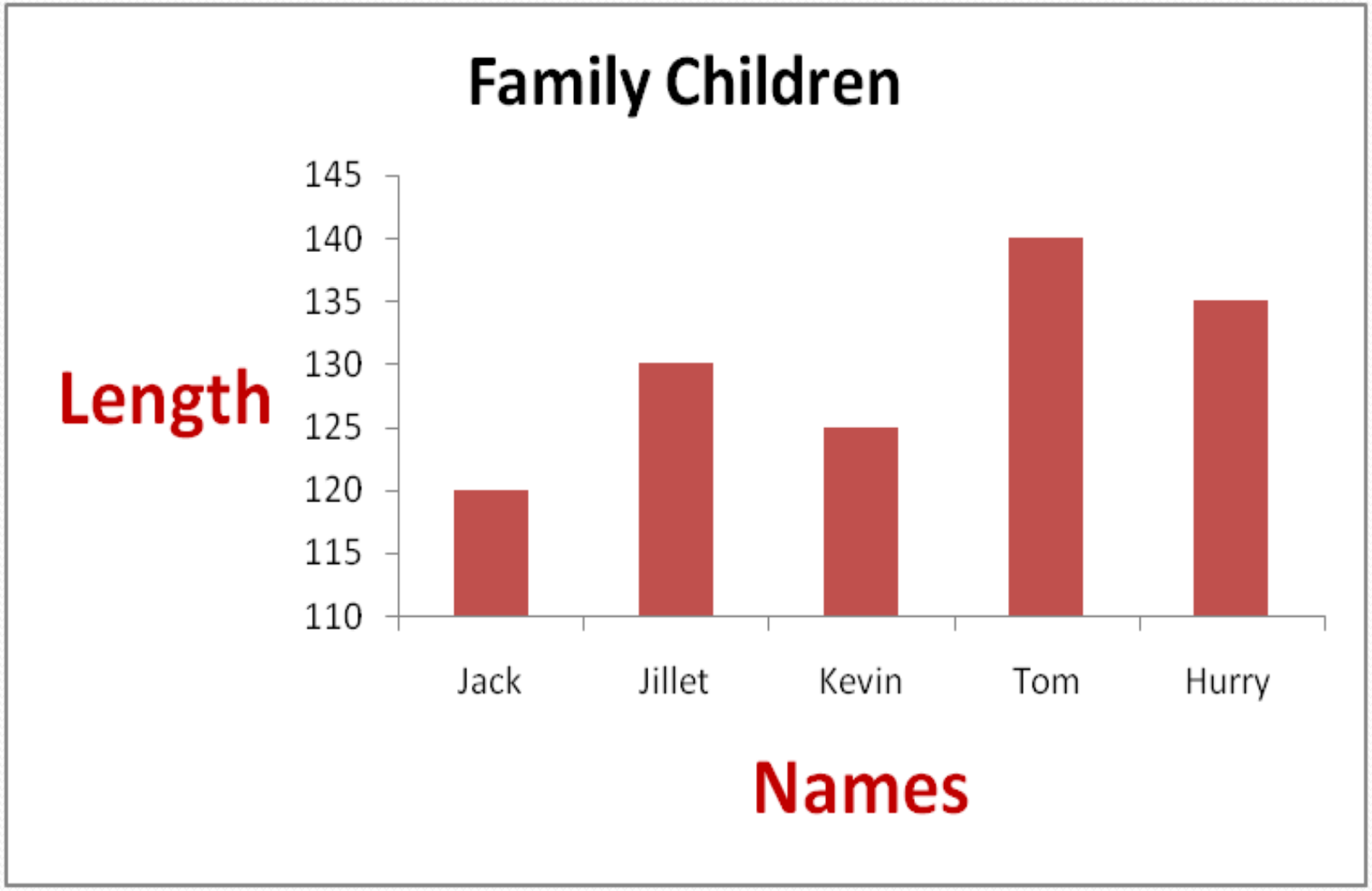
1. Open the attached spreadsheet in Excel
2. In the top menu bar, select 'Insert' using your mouse. You should now see a group of icons labeled 'Charts', under the top menu bar.
3. Select the data to be included in the chart.
4. Use your mouse to select the 'Column' chart. A drop down menu should appear showing the different types of column charts available. Select the type you want
5. A new column chart should have been added to your current worksheet. You can move the new chart by clicking-and-dragging it to a new location in the worksheet.

Exercise (Column Chart)

- Use the data in sheet1 to make a 2-D column chart
  - Select Data→ Insert → Columns → 2-D Columns



1. Change the color of the chart bars to be red
   - *Chart Tools → Design*
2. Insert a horizontal title "Names"
   - *Chart Tools → Layout → Axis Titles → Primary Horizontal Axis Title*
3. Insert a vertical title "Length"
4. Format both titles to 20 pt and red
   - *Right click on the title → format*
5. Change the default title of the chart to be Family Children
   - *Chart Tools → Layout → Chart Title*
6. Delete the legend in the chart
   - *Chart Tools → Layout → Legend → None*
7. Remove the Horizontal Gridlines from the Chart
   - *Chart Tools → Layout → Primary Horizontal Gridlines → None*


Family Children
Length
145
140
135
130
125
120
115
110
Jack
Jillet
Kevin
Tom
Hurry
Names

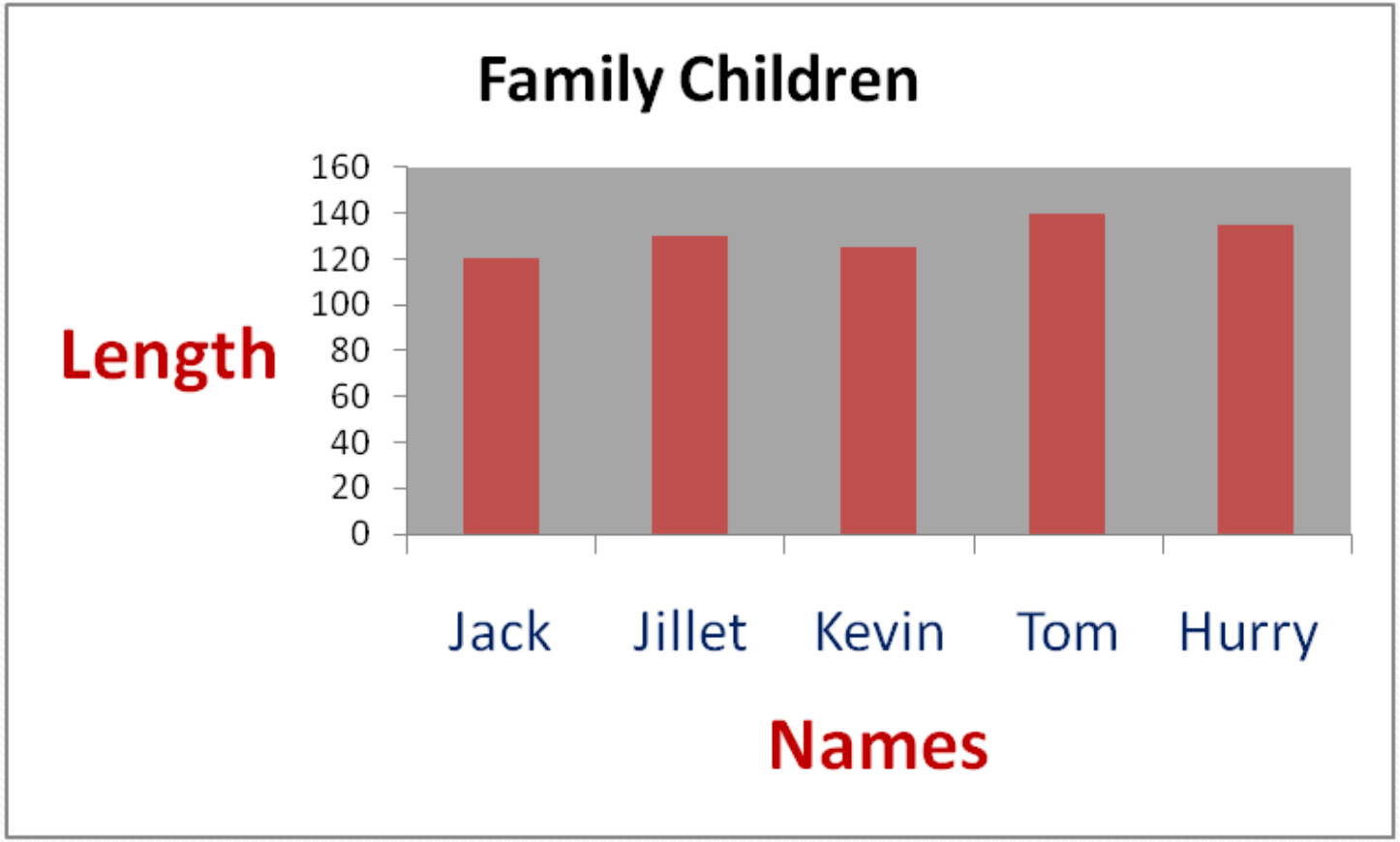
8- Change the minimum value of the vertical axis to be 0

Choose the axis→ right click→ format axis→ minimum (fixed)

9- Format plotting area to be grey

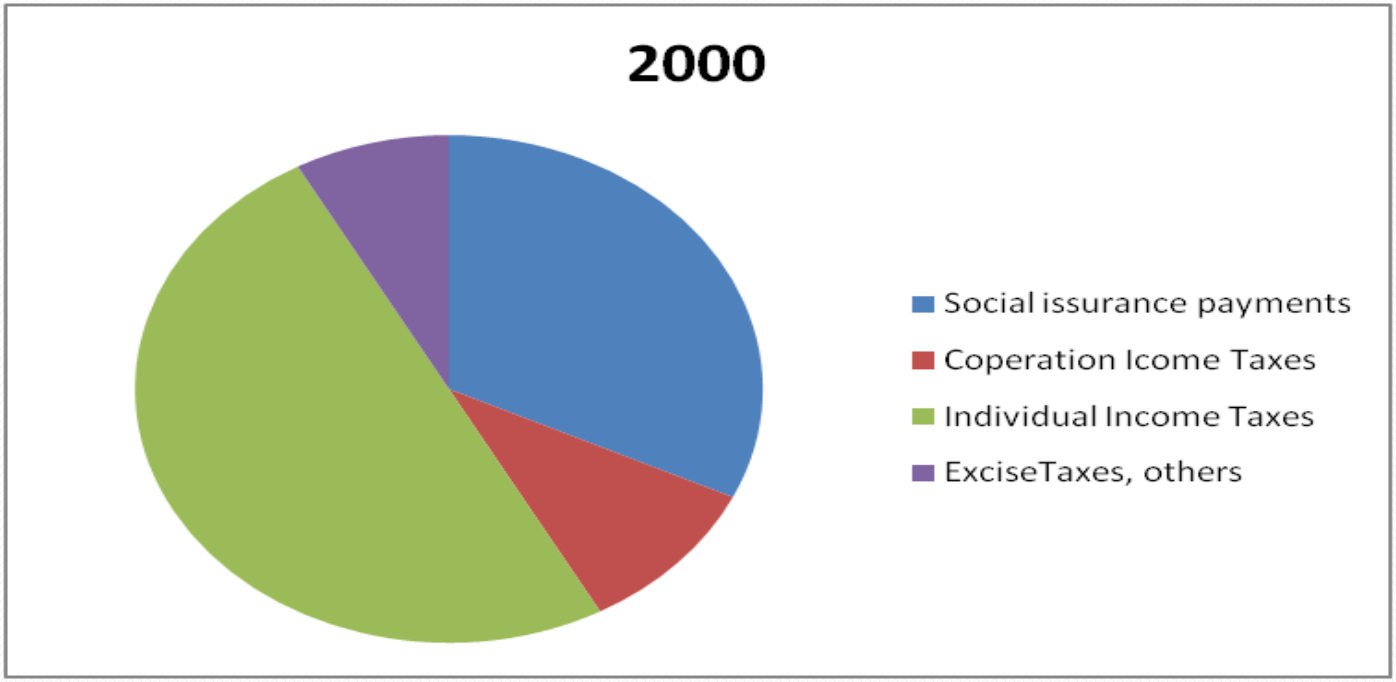
right click on chart → format plot area→ fill→ solid fill

10- Format the tics of the horizontal axis to be of size 16 and color blue

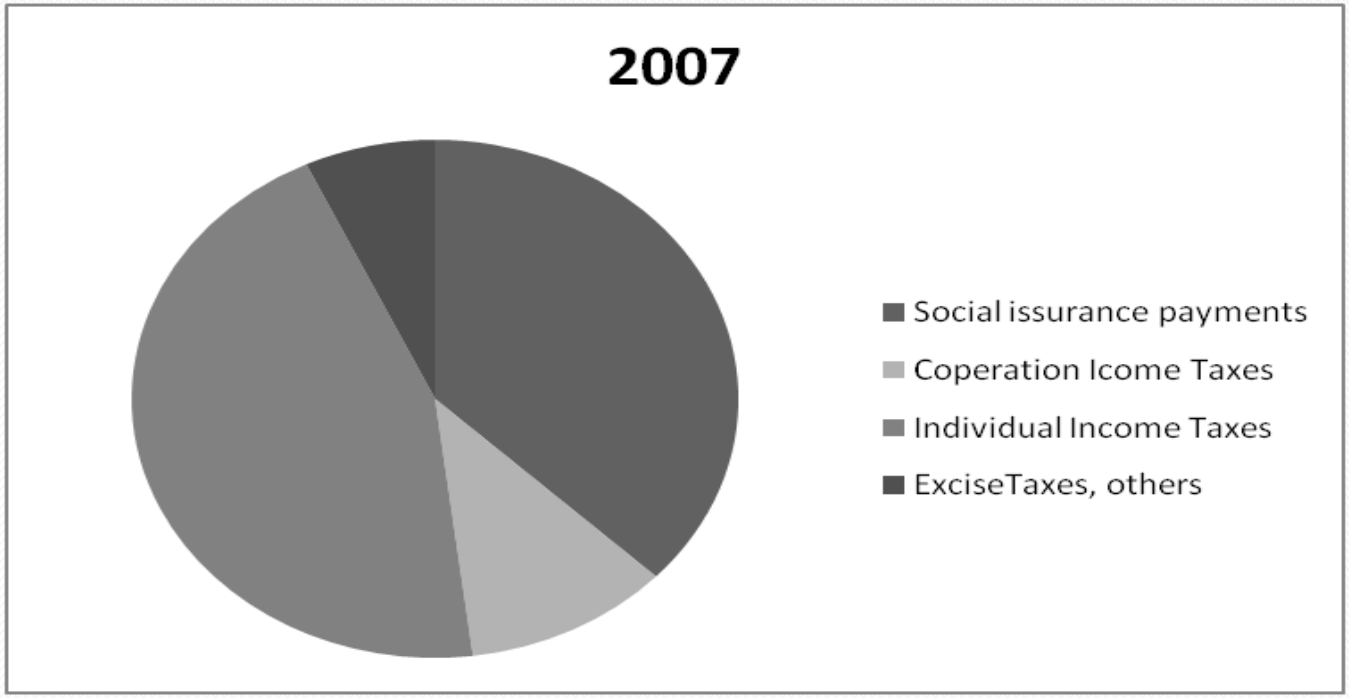

Family Children
Length
160
140
120
100
80
60
40
20
0
Jack
Jillet
Kevin
Tom
Hurry
Names

Exercise (Pie Chart)

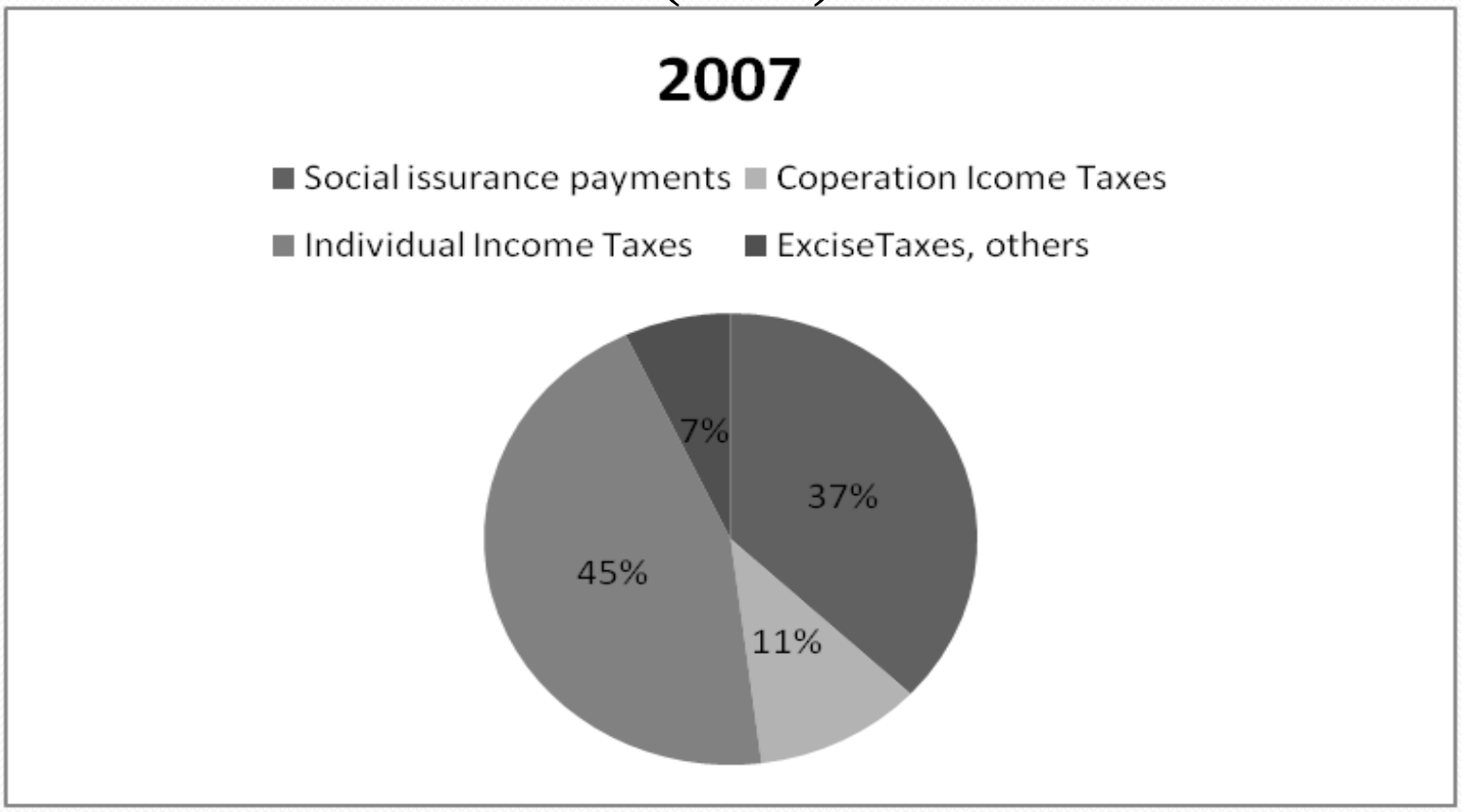
- Use Data in sheet2 to make Pie Chart for year 2000
  - Insert → Pie → 2-D Pie



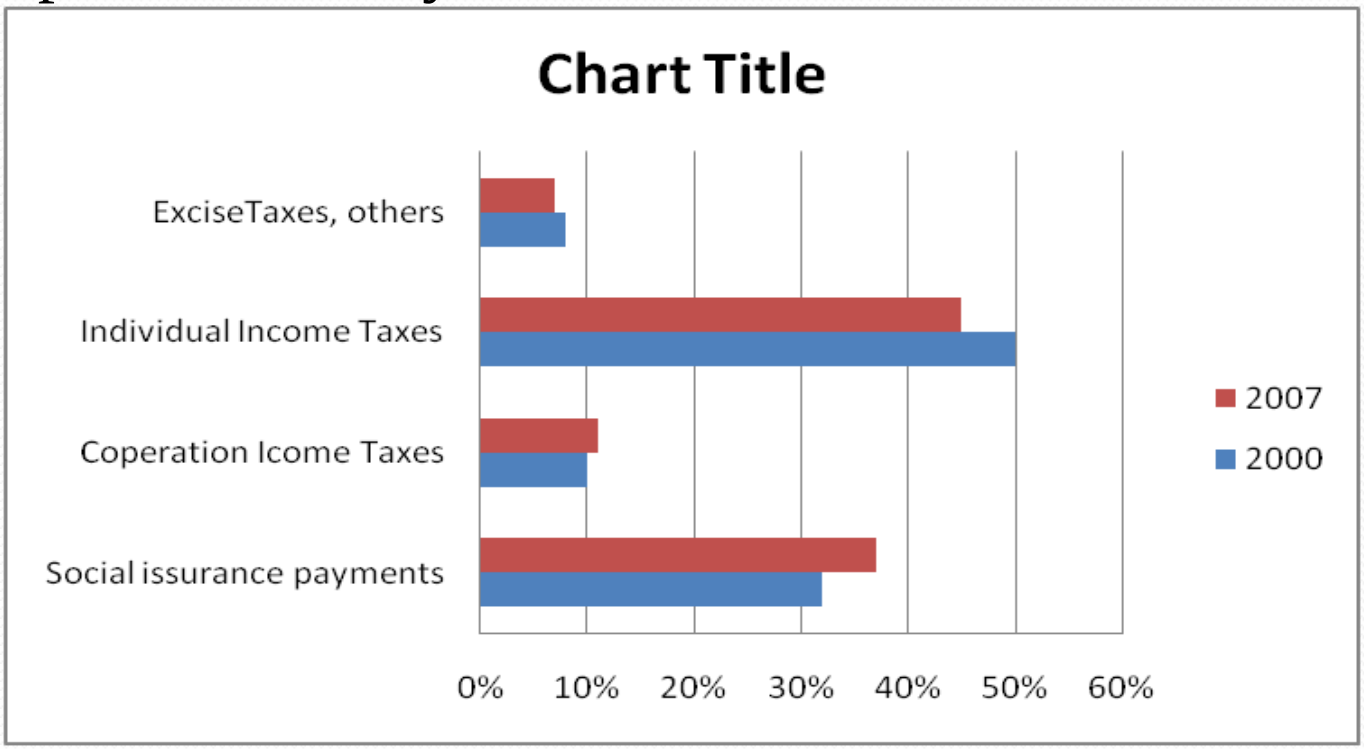
- Insert another Chart for year 2007 and change its color to grey
  - Select Data→ Insert→ Pie→ 2-D Pie



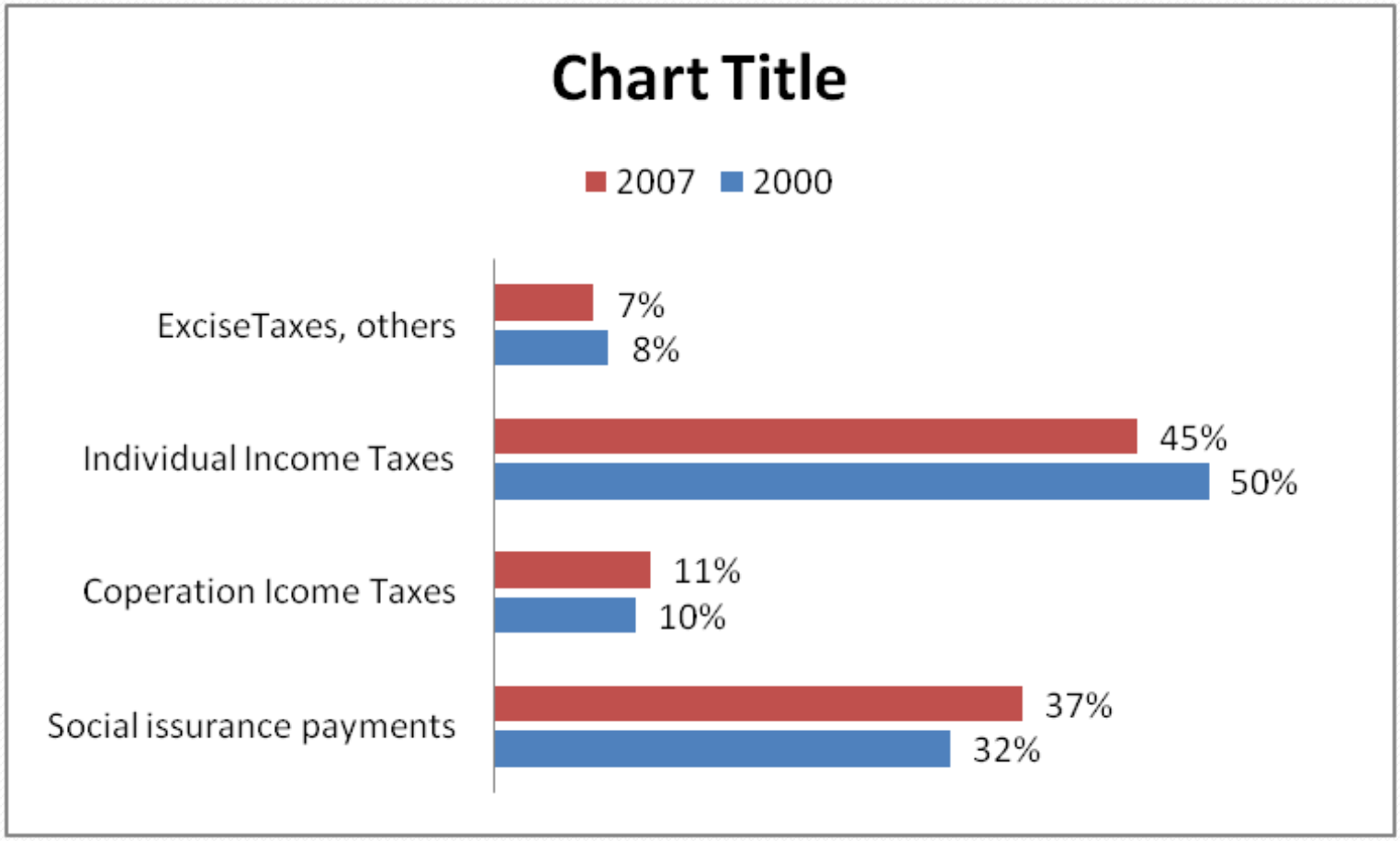
- Change the legend of the second chart (2007) to be shown on the top
- Show Data in second chart (2007) as follows:



- Do you think that Pie Chart is the best type of charts to compare between years 2000 and 2007?

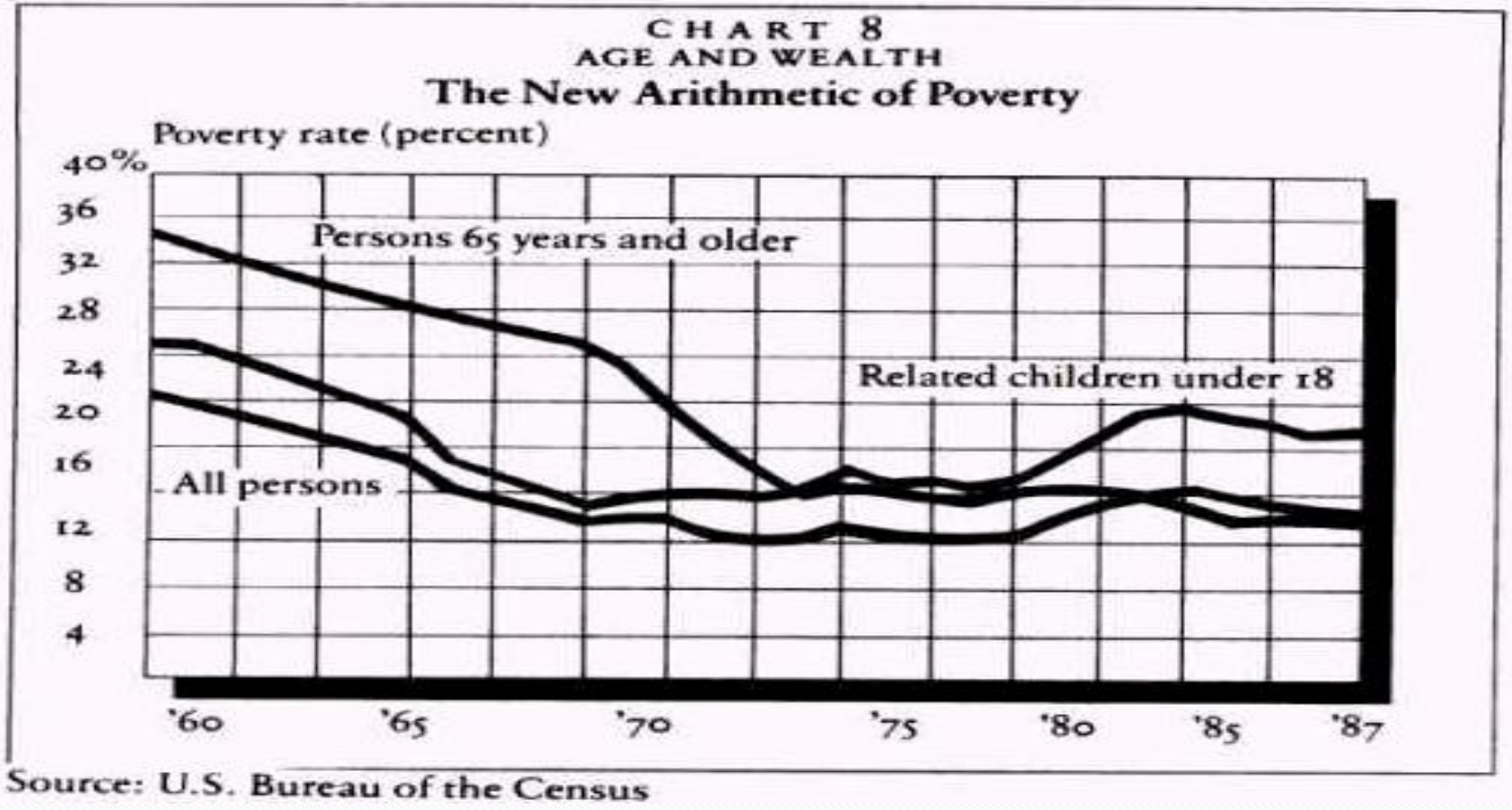


- What about this one?



To add labels of data points, choose the data in the chart → add data labels

Some Bad Examples



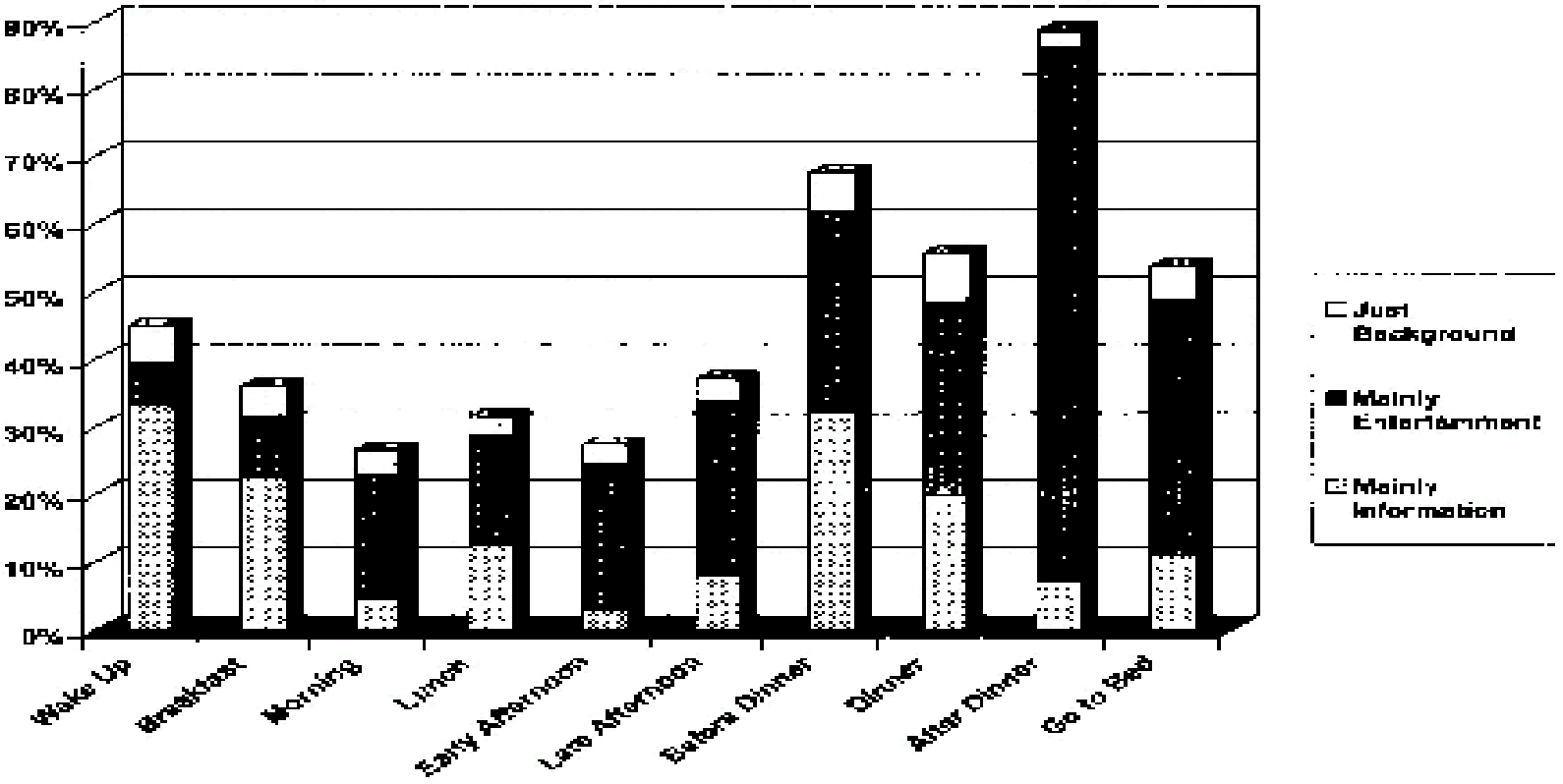


Figure 59: America Watches TV All Day Every Day

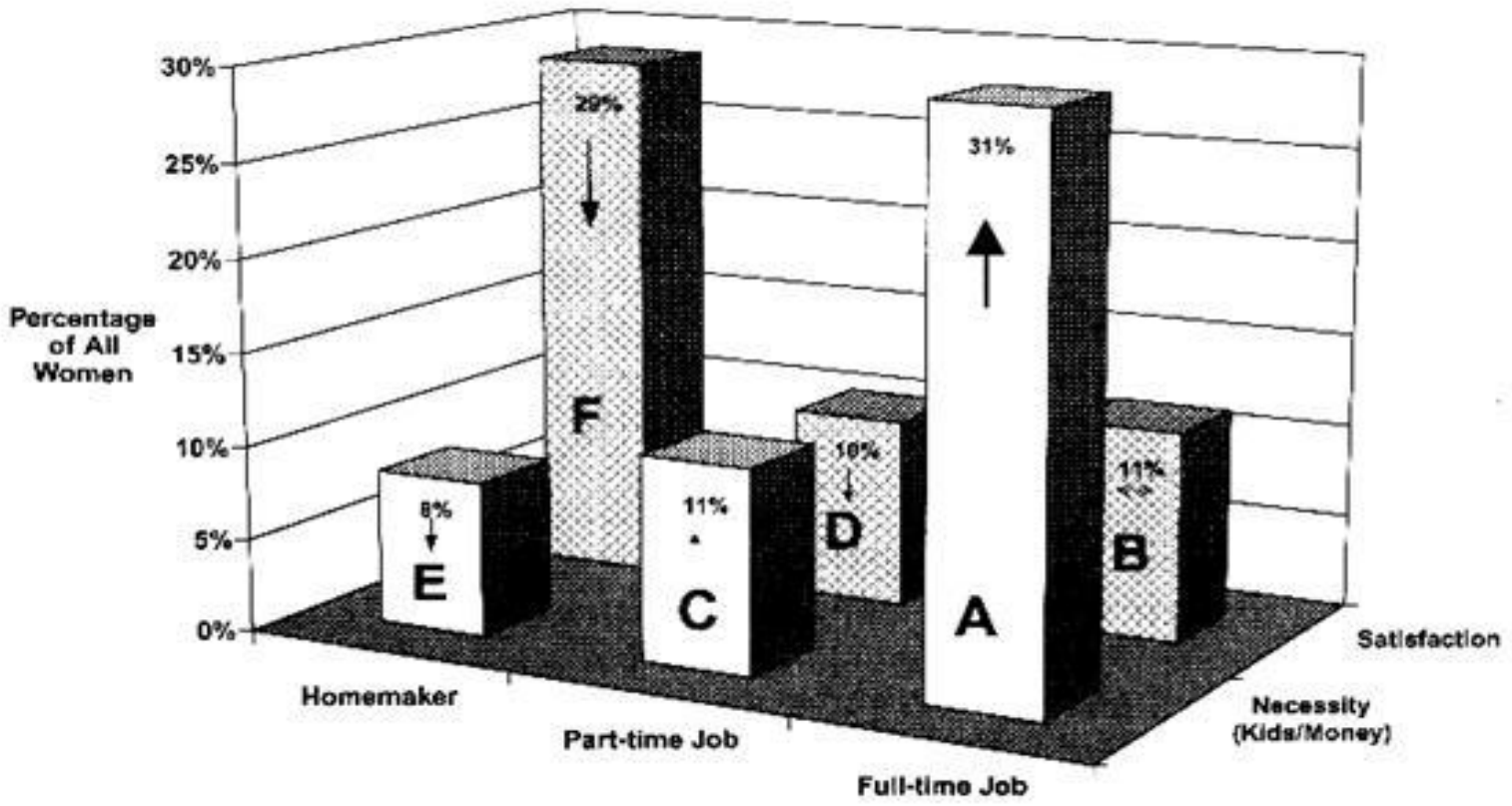
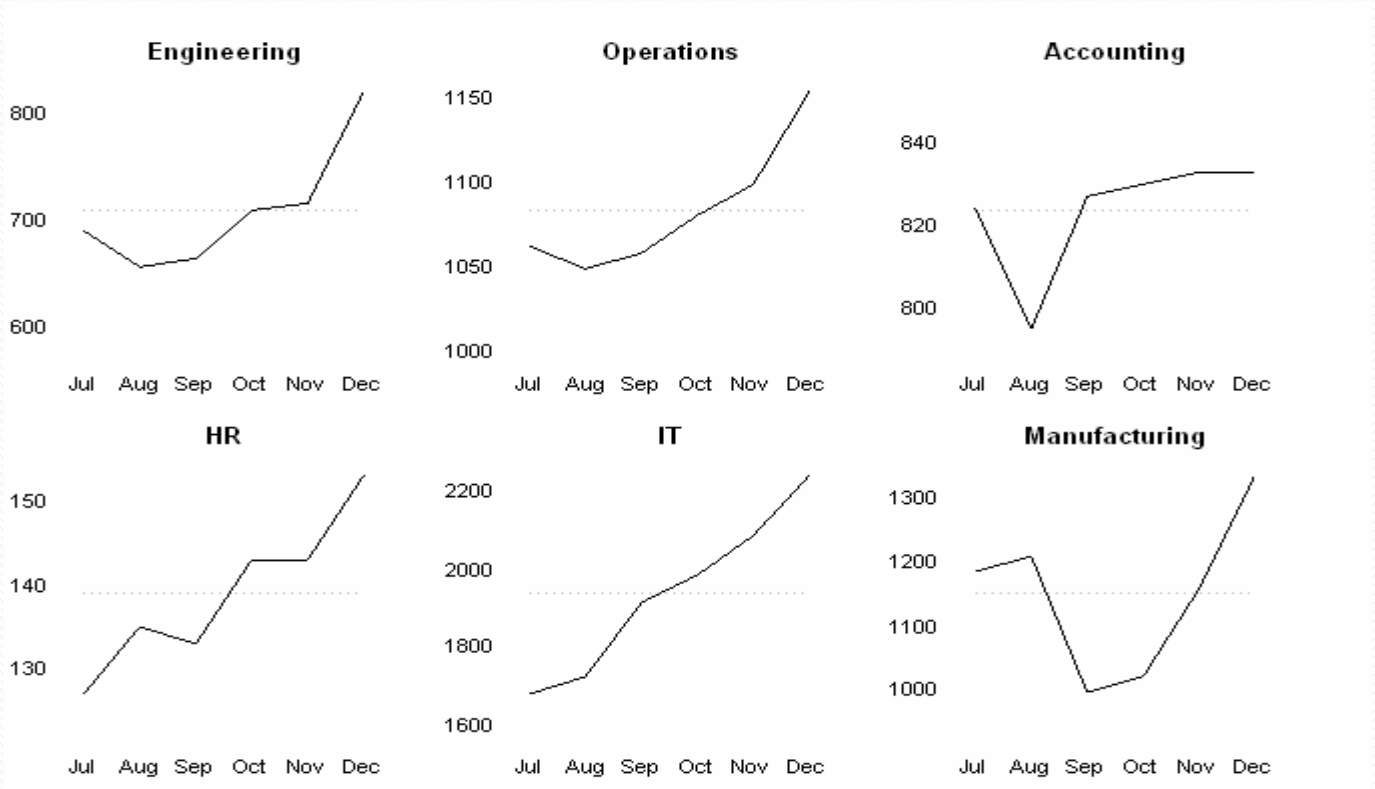


Figure 47: Working by Choice and by Necessity Among American Women, 1978–1999

http://lilt.ilstu.edu/gmklass/pos138/datadisplay/sections/goodcharts.htm

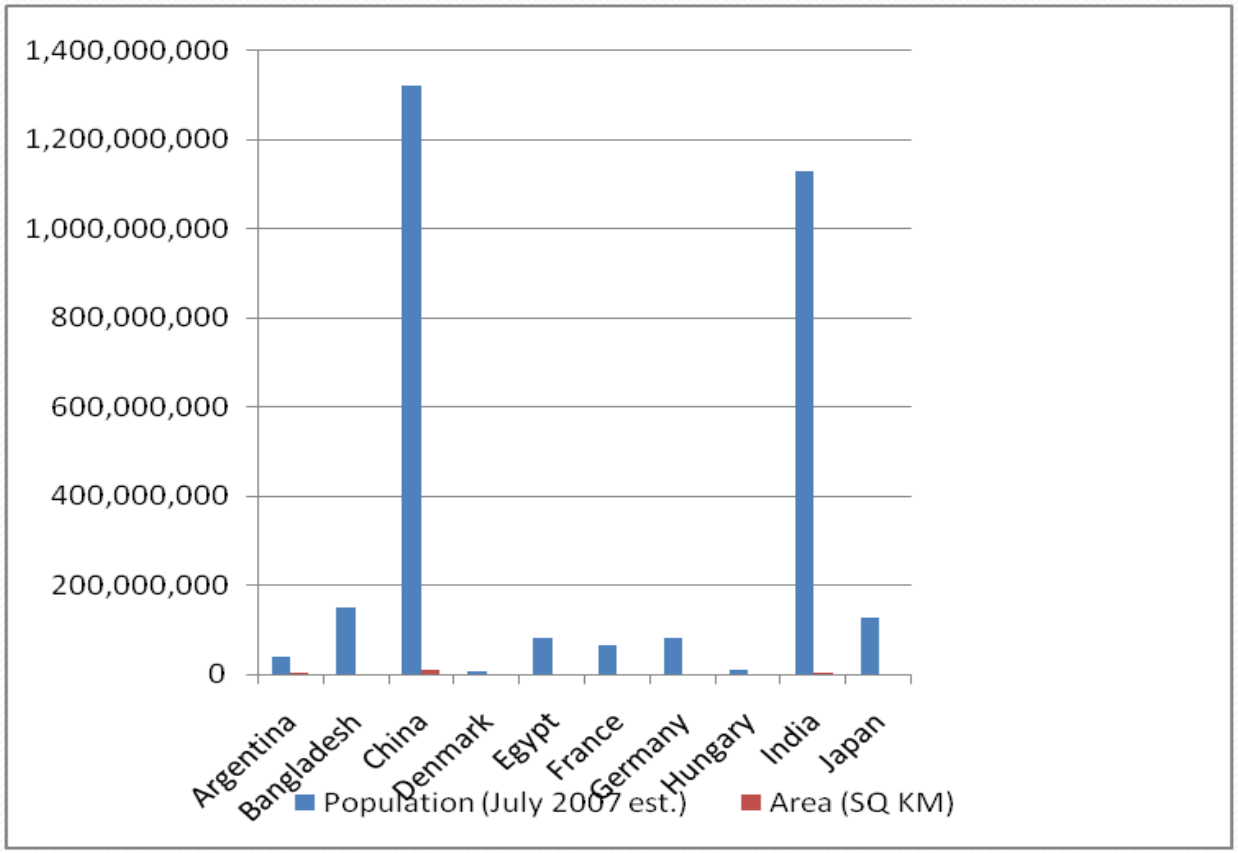
Small Multiple



http://en.wikipedia.org/wiki

Exercise, sheet3

- Create a chart from the data set provided



- Think what to do to make the chart looks better