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

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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.
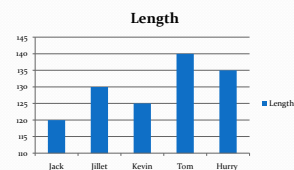

Exercise (Column Chart)

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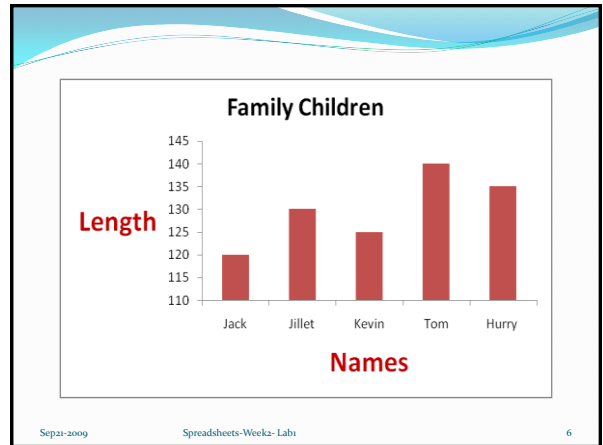
8- Change the minimum value of the vertical axis to be 0

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
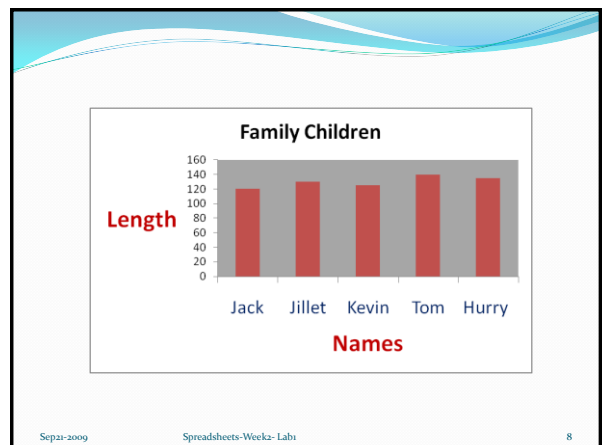
Exercise (Pie Chart)

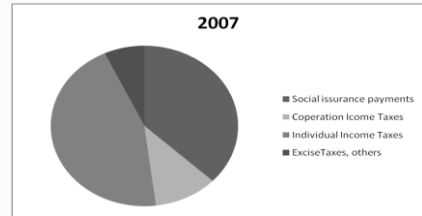- Use Data in sheet2 to make Pie Chart for year 2000
  - Insert → Pie → 2-D Pie
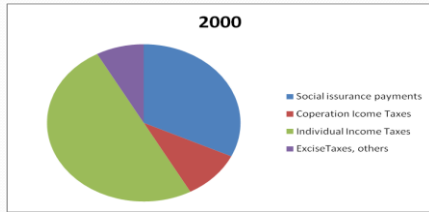
- Insert another Chart for year 2007 and change its color to grey
  - Select Data→ Insert→ Pie→ 2-D Pie
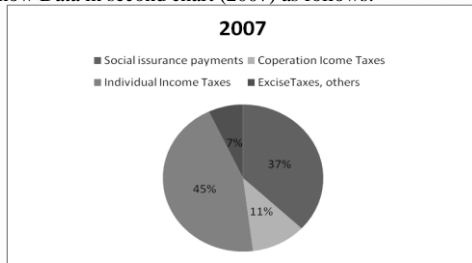
- Change the legend of the second chart (2007) to be shown on the top
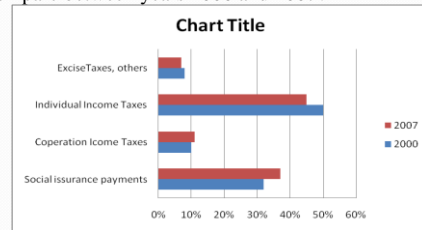- Show Data in second chart (2007) as follows:

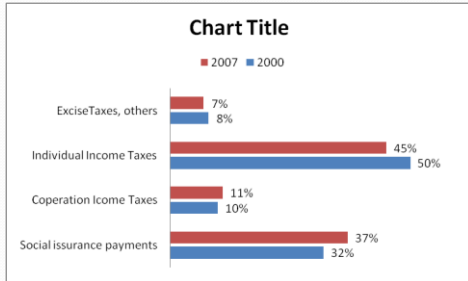- Do you think that Pie Chart is the best type of charts to compare between years 2000 and 2007?

3

- What about this one?

Chart Title

■ 2007 ■ 2000

ExciseTaxes, others	7% / 8%
Individual Income Taxes	45% / 50%
Coperation Icome Taxes	11% / 10%
Social issurance payments	37% / 32%

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

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Some Bad Examples

CHART 8
AGE AND WEALTH
The New Arithmetic of Poverty

Poverty rate (percent)

Persons 65 years and older

Related children under 18

All persons

'60   '65   '70   '75   '80   '85   '87
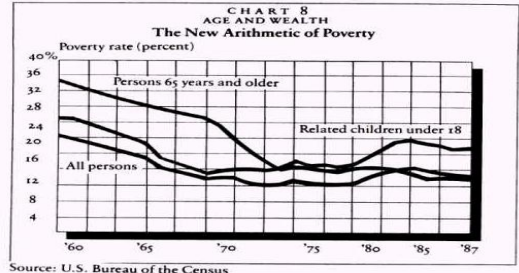
Source: U.S. Bureau of the Census

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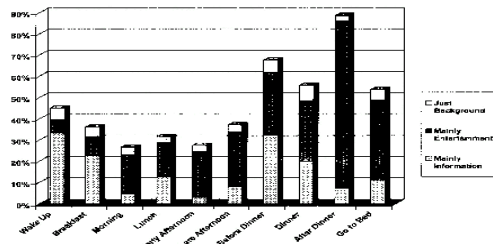
Figure 59: America Watches TV All Day Every Day

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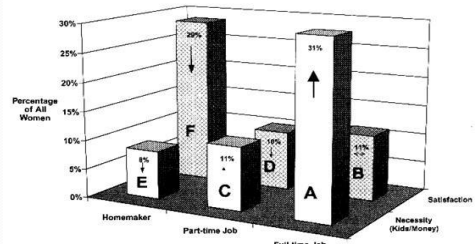
Figure 47: Working by Choice and by Necessity Among American Women, 1978–1999

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

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Small Multiple

http://en.wikipedia.org/wiki

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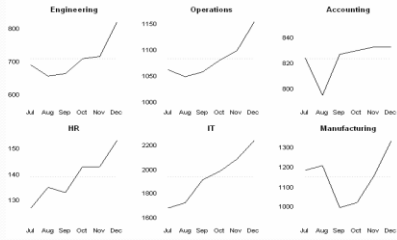
Exercise, sheet3

- Create a chart from the data set provided

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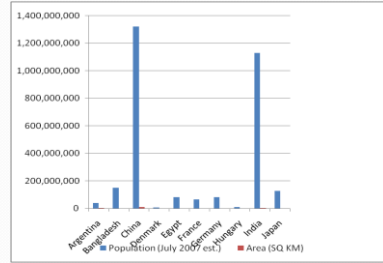
- Think what to do to make the chart looks better

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