How to use SPSS

- Logon/logoff
- Enter data
- Plot data
- Analyze data
- Store results
Logon SPSS

- From Start menu open Programs, General applications, SPSS v11.0, SPSS, then you will see SPSS for Windows
- Click SPSS for Windows
- A dialog box appears; click Cancel
- You will see the SPSS Data Editor window
Organization of Data Entries

- Make sure you are in *Data View* by clicking the appropriate tab at lower left.
- Each row is a *case* containing observations on the same individual.
- Each column represents a different *variable*.
Exercise 1

- Enter data about a football team into SPSS
- The data will look like this

<table>
<thead>
<tr>
<th>ID</th>
<th>Weight</th>
<th>Speed</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>166</td>
<td>60.4</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>168</td>
<td>58.1</td>
<td>2</td>
<td>3</td>
<td>1</td>
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</tr>
<tr>
<td>C</td>
<td>168</td>
<td>57.9</td>
<td>1</td>
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</tbody>
</table>
Specifying the variables

• Name the variables
  – Go to *Variable View* (click tab at lower left)
  – In first column enter names of the variables
    • *ID* = Participants' identification code
    • *Weight* = in pounds
    • *Speed* = in seconds
    • *Q1* to *Q4* = answers to five items assessing attitude towards retirement, with a range from 1 to 7
Data Characteristics

- **Variable Type**: Numeric or String or …
- **Width**: the width of the column of the table
- **Decimals**: only for Numeric
- **Labels**: will be displayed in reports and charts.
- **Measure**: states whether variable is Nominal, Ordinal, or Scale
Data Characteristics

- *SPSS* tries to guess the variable types but is often wrong
- Enter the correct information
  - *Type* for *ID* is *String*
  - Measure for *Q1* to *Q4* is *Ordinal*
  - Enter appropriate info in *Labels*
- Go back to *Data View* to enter data by hand
Enter Data by Hand

<table>
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Sort data

- Go to *Data* menu and choose *Sort cases*
- The *Sort cases* dialog appears
  - Select variable “*speed*” on left
  - Put variable into *Sort by* box by clicking arrow
  - Choose *Ascending* or *Descending*
  - OK
- Data is resorted
Perform a simple analysis

- Go to Graphs then Bar (makes bar graphs)
- Bar Charts dialog
  - Choose Clustered and Values of Individual Cases
  - Click Define
- Define Clustered Bar dialog
  - Put q1 to q4 in Bars Represents box
  - Put ID in Category Labels box
  - OK
- The SPSS Viewer appears with bar graphs
Logoff SPSS

- Select File, then Save as
  - Give a name “Football_data”
  - Save as type: *.sav for data
    *.spo for output
- Exit after saving
Exercise 2

• Navigate to

http://www.carleton.ca/~bhutcheo/3000

• Transfer data found in Football.txt to a file in a location you can find again…
  – Save directly (right click: save target as or save link as….*.txt)
  or
  – Open a word processing program to copy and paste
Exercise 2

• Use SPSS to open the file you just saved
  – Go to File, then Read Text Data
  – Find your file
  – OK

• Text Import Wizard appears
Text Import Wizard

• Step 2 …
  – *Are variable names included at the top of your file?*
  – Choose *Yes*

• Step 4 …
  – *Which delimiters appear between variables?*
  – Choose *Tab*…clear all other choices
  – Look at preview…there is a problem with format
  – choose *Space*

• *Finish*
Correcting Problems

- For successful entry into SPSS, data needs to be delimited in some consistent way

- *Text Import Wizard* can accommodate many different formats

- If *Text Import Wizard* doesn’t work you may need to open your data in a text or spreadsheet editor and work on it directly

- Your data should now look like this…..
<table>
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<tr>
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<td>174</td>
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<td>2</td>
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<td>6</td>
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</tbody>
</table>
A Simple Graphical Analysis

- Go to *Graphs*, then *Boxplot*

- *Boxplot* dialog
  - Choose *Simple*, and then *Summaries for separate variables*
  - Click *Define*
  - Put *q1* to *q4* in *Boxes Represent box*
  - Put *id* in *Label Cases by box*

- *OK*
A Simple Numerical Analysis

- Go to Analyze, Reports, Case Summaries
- Summarize Cases dialog appears
  - Put Q1 to Q4 in Variable box
  - Click Statistics
  - Summary Report: Statistics dialog appears
    - Put what you want in Cell Statistics box
  - Continue
- OK
Make Plots Readable

• Font sizes on the boxplots are too small
  – Double-click plot to activate Chart Editor
  – Click plot element you want to change
  – Click Text tool on tool bar
  – Make font larger

• Close Chart Editor
Put Results in a File

- Open MSWord or another text processor
- Cut and paste Boxplots and Summary data
- Insert text explaining data, plots, summaries…etc.
- Save as *.rtf….NOT AS *.doc or *.wpd
Assignments

• Upload completed assignments as *.rtf files
• Make sure all axes and relevant notations are large enough to be readable...if we can’t read it we can’t award you marks
• Download Assignment 1 on WebCT site after 5PM on Friday October 4.
• You must upload completed assignment by midnight Friday October 18.
If you want to know what it is, **right click** the word or the number.

If you have questions, select *Help, Tutorial*.

In the computer labs on campus, Netscape Communicator does not work. You should try to use Internet Explorer to open:

*C:\Program Files\SPSS\tutorial\spsstut\introtut2.htm*