Lab Assignment # 2
Tabular and Graphical Descriptive Techniques: Quantitative Data
due on: SEE THE COURSE SCHEDULE

GENERAL INSTRUCTIONS:

Although I may provide some assistance and you are encouraged to work with other students, the work you hand in must be your own -- in cases of obvious copying, no credit will be given to all students involved.

HOW TO SUBMIT:

1. Lab assignments must be submitted **on or before the due date specified** on the Course Schedule. **Late submissions will not be accepted**.
2. Submit your lab assignment **electronically** via the ASSIGNMENTS tool on Blackboard.
3. Your lab assignment must be saved as **ONE file in a PDF format** (**not DOC / DOCX / EXCEL!!!**). **Submissions consisting of several files will not be accepted**. In MS-Word, click the "Save As" button, and then click "PDF or XPS". In the File Name window, type a name for the document. The **name of the file** should be **Lab2_Your last name**. For example, Lab2_Smith.
4. The length of your submission **may not exceed 1 page**. Any text or charts that will appear on additional pages will not be considered.
5. The paper size should be **8.5" x 11"** paper (portrait orientation).
6. Write **YOUR NAME** and "**LAB ASSIGNMENT # 2**" in the **upper left-hand (or right-hand) corner** of the page.
7. Use any **11-12 point standard font** (Times New Roman, Garamond, Verdana, Courier New, *etc.*); the main thing is to keep it consistent throughout the entire text. Use **single** line spacing. Allow **one space between** paragraphs. The final version of your assignment should reach the instructor in clear and grammatically correct English. Where necessary authors must ensure that their assignments have been checked for errors of English by a person with perfect command of the language.
8. Remember that each table (graph) should have **a succinct but informative title**, and the table **columns** (graph **axes**) should be **appropriately labeled**.
9. Your **analysis/comments** should be brief (**up to 10 sentences**).
10. In your submission, you only **need to answer the questions asked** (typically labelled *a, b, c, d, ...*). **DO NOT reproduce/attach** the text of this assignment (that is, the text on these pages). **DO NOT attach** the data set(s).
11. Use Excel to do computations and to construct tables and graphs, but **DO NOT submit the Excel spreadsheets**. Transfer (*i.e.*, copy-and-paste) your Excel tables and/or graphs into MS-Word, add your analysis, edit and format your entire report (if needed), and then save it as a PDF file.

EVALUATION CRITERIA:

The lab assignment will be evaluated based upon the following criteria:
- correct numerical results;
- visual and esthetical impression of your tables and graphs;
- reasonable conclusions derived from the examination of the available evidence.

ASSIGNMENT

Use the "**Computer**" Excel file.

The Nielsen Home Technology Report provided information about home technology and its usage. The data are for the hours of personal computer usage during one week for a sample of 50 persons.

Summarize the data by constructing the following:

a. A frequency distribution.

b. A relative frequency distribution.

HINTS:

You can show (a) and (b) in one table.

For (a) and (b), **use a class width of three hours starting from 0.0** in the "Group" function.

Please note that for this data set, the "Pivot Table" and "Group" functions in Excel create **SEEMINGLY overlapping classes**: 0-3, 3-6, 6-9, *etc*. However, Excel treats the lower class limit inclusively and the upper class limit exclusively (for instance, the value of "3.0" is placed in the second class labeled 3-6, and not in the first class labeled 0-3). I recommend that you **manually adjust the class limits in your frequency distribution table** as 0-<3; 3-<6; 6-<9, *etc*. It is easier and faster than 0.0-2.9, 3.0-5.9, ... which is also ok.

c. A histogram.

d. Comment on what the data indicate about personal computer usage at home. In your comments, substantiate your conclusions by referring to the numerical results obtained in (a) – (c).