Stem and Leaf Plot

```
4 | 1
5 | 2  7  8
6 | 5  6
7 | 0  5  8  8  8
8 | 0  0
9 | 5
```

"A stem-and-leaf display or stem-and-leaf plot is a device for presenting quantitative data in a graphical format, like a histogram, to assist in visualizing the shape of a distribution. They evolved from Arthur Bowley's work in the early 1900s and are useful tools in exploratory data analysis. Stemplots became more commonly used in the 1980s after the publication of John Tukey's book on exploratory data analysis in 1977. The popularity during those years is attributable to their use of monospaced (typewriter) typestyles that allowed computer technology of the time to easily produce the graphics. Modern computers' superior graphic capabilities have meant these techniques are less often used."

--Wikipedia (retrieved 9/23/2018)

Find on the D2L three "StemAndLeaf" example datafiles. Consider the following specifications.

a) Greets the user.
b) Asks the user to input a 1, 2 or 3.
c) Given the input, reads in the appropriate datafile and displays a stem-and-leaf plot.
    a. Note: This will require you to make several design decisions. I am not looking for a specific format, but the final format should be well thought out.
d) Loops until the user wishes to exit.

Design a top-down structure chart for your program.

Record a three minute video in which you present your design. Specifically, answer the following questions:

- What are the important steps in displaying a stem-and leaf plot?
- How will your main function be organized?
- How many levels does your design have? Choose one of the lower level functions to describe in more detail.

Submission: Submit a single .pdf file containing the top-down design. Do not zip or archive the file. Your document must include your name, date, video link, and the honor statement, "I have not given or received any unauthorized assistance on this assignment."