

Seminar 7

1. Construct a stem-and-leaf display for the given data set:

Daily Expense (\$)									
23	45	67	39	17	56	59	41	98	23
29	52	58	20	45	73	61	32	40	33

2. The raw data displayed below are the electric and gas utility charges during the month of July 1998 for a random sample of 20 three-bedroom apartments in Manhattan:

Raw Data on Utility Charges (\$)									
96	171	202	178	147	102	153	197	127	172
157	185	90	116	172	111	148	143	130	145

- a. Construct a *Revised* Stem-and-leaf plot for the above data, *with one-digit* leaves.
- b. Construct a *Revised* Stem-and-leaf plot for the above data, *with two-digit* leaves.

An example of *double-stem plot* is as follow:

4L	2	
4H	6 6 9	
5L	1 4	
5H	5 5 8 9	
6L	0 3	
6H	7 7 9	N = 15

*We might use **L** as a place holder for 0, 1, 2, 3, and 4, and **H** as a placeholder for 5, 6, 7, 8, and 9. Where we double the number of stems by cutting the interval cover by each stem in half.*

- c. Construct a double-stem plot for the above data, with one-digit leaves.
- d. Form a frequency distribution having 5 classes.
- e. Which of the two devices, stem-and-leaf display or frequency distribution, seems to give more information? Discuss.