Name: **GW ID No.**:
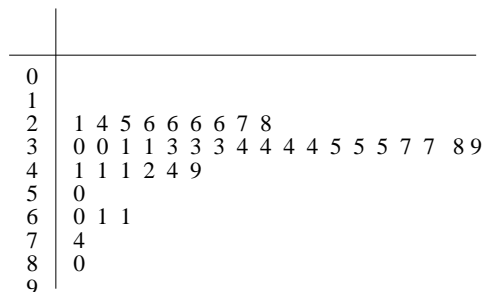
STAT 1051: QUIZ 1

1. (10 pts) The heights in inches of four fifth grade pupils are $58, \ 56, \ 60, \ 62$, and those of five sixth grade pupils are $66, \ 59, \ 63, \ 61, \ 66$ inches. Which grade has a higher standard deviation? What are the standard deviations?

2. The weights in grams of 10 Common Yellowthroat Warblers (*Geothlypis trichas*) follow:

   $\mathcal{S} = \{9.1, \ 9.5, \ 9.7, \ 9.1, \ 9.8, \ 9.1, \ 9.4, \ 9.8, \ 9.5, \ 9.7\}$. By using this data, find:

   (a) (5 pts) The sample mean:

   (b) (5 pts) The sample median:

3. Given the following leaf and stem plot.

   ```
   0
   1
   2 | 1 4 5 6 6 6 6 7 8
   3 | 0 0 1 1 3 3 3 4 4 4 4 5 5 5 7 7  8 9
   4 | 1 1 1 2 4 9
   5 | 0
   6 | 0 1 1
   7 | 4
   8 | 0
   9
   ```

   (a) (5 pts) Find the range.
   (b) (5 pts) Find 1st quartile.
   (c) (5 pts) Find 2nd quartile.
   (d) (5 pts) Find 3rd quartile.

4. Suppose sales in millions of dollars are listed below by members of two sales teams.

Team I	Team II
$30	$1
32	1
28	1
30	1
30	146

Compute:

  (a) (10 pts) Sample mean for each team:

  (b) (10 pts) Sample median for each team:

  (c) (10 pts) Which team would you hire based only on the data? Explain.

5. (20 pts) Write the Greek letter below each name. Note: A name which begins with a capital letter requires an upper case Greek letter.

omicron	Theta	omicron	upsilon	kappa	upsilon	delta	iota	delta	eta	sigma
eta	Kappa	lambda	epsilon	omicron	pi	alpha	tau	rho	alpha	

6. (10 pts) What's wrong? Explain what is wrong with the following selection procedure.

A list of a population of students is put into alphabetical order, and the first ten students on the list are selected for the sample.

BONUS (5 pts) (McClave page 108)

Frequency of collisions of large marine vessels operating in European waters over a span of five years is given in the table below and displayed in the accompanying figure. May we conclude that *In Port* collisions far exceed the number of collisions in *Restricted Waters*? Explain your answer.

At Sea	376
Restricted Waters	273
In Port	478

Chart at Location