Example 1

Make a stem-and-leaf plot of the length of 12 cell phone calls (min.)

	A	B
1	DATE	MINUTES
2	JULY 9	55
3	JULY 9	3
4	JULY 9	6
5	JULY 10	14
6	JULY 10	18
7	JULY 10	5
8	JULY 10	23
9	JULY 11	30
10	JULY 11	23
11	JULY 11	10
12	JULY 11	2
13	JULY 11	36

How to Create a Stem and Leaf Diagram

1 Sort the data in numerical order.

2 Identify the stem for each number.

The stem is every digit except for the last digit.

3 Write out your stems in a vertical column labeled "stem".

Include any numbers that fall between two stems, even if there are no numbers in your data that begin with that stem.

4 Identify the leaves for each stem.

5 Put the leaves in numerical order.

Each row in the leaf column should be sorted in numerical order (lowest number to highest number).

- If a number is repeated, write it down as many times as it appears.

6 Finish by adding a key below or above your diagram to explain it.

Write either the 1st or the last number in your data set as you see it on the stem and leaf diagram, including the vertical line. After it, write **=** and then the number as it looked originally. This tells people how to read your stem and leaf diagram.

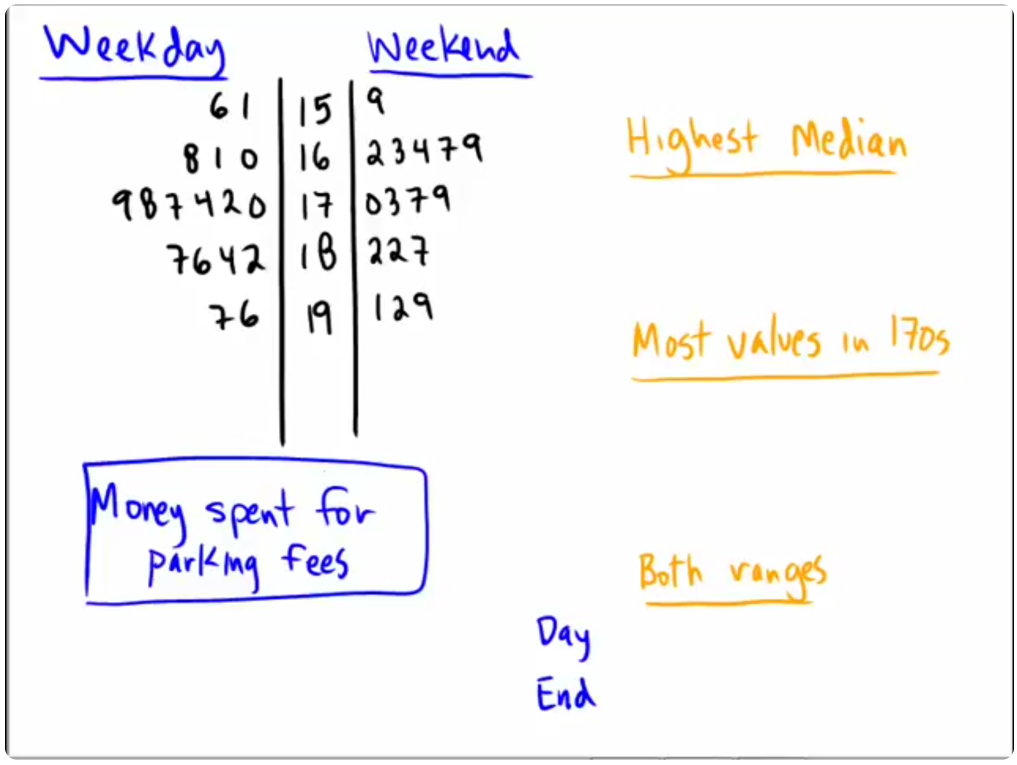
- This may seem unnecessary, but comes in handy when you're using decimal points (or in certain other situations). For example, if one of your values is 4.5, you can write that as 4 l 5 and explain in your key that **4l5 = 4.5**.
- Decimal points are NOT permitted in a stem and leaf diagram.

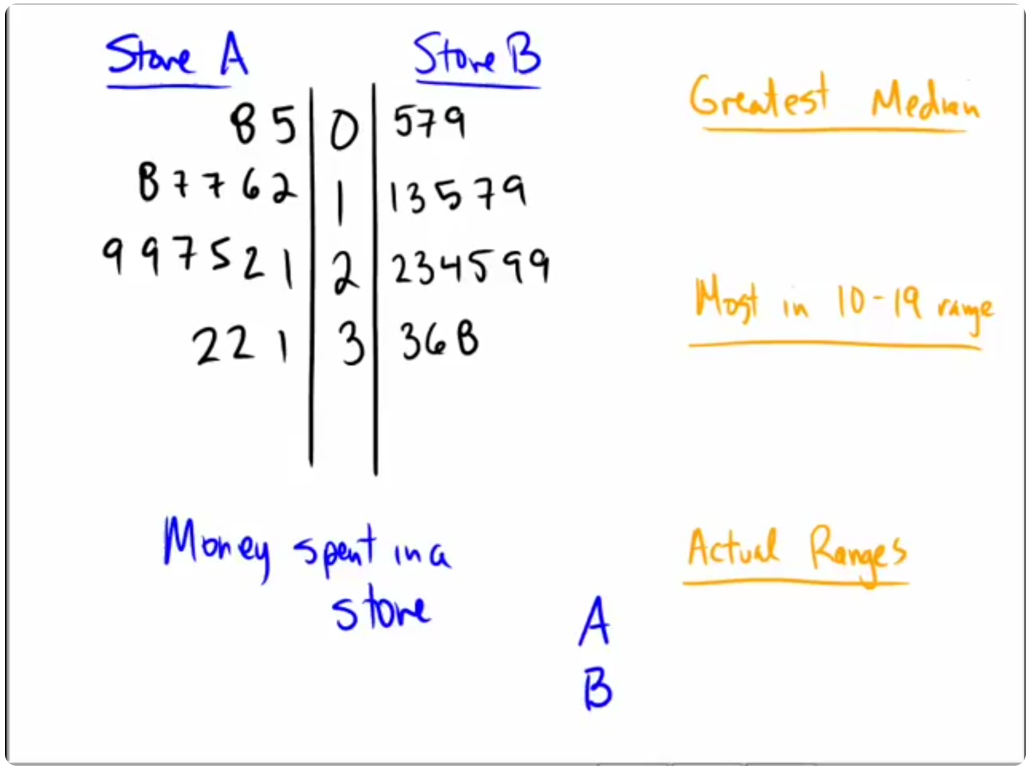
Here are the weights, in kilograms, of 15 parcels.

1.1 1.7 2.0 1.0 1.1 0.5 3.3 2.0

1.5 2.6 3.5 2.1 0.7 1.2 0.6

Draw a stem and leaf diagram to show this information.


Weekday
Weekend
61 | 15 | 9
810 | 16 | 23479
987420 | 17 | 0379
7642 | 18 | 227
76 | 19 | 129
Money spent for parking fees
Highest Median
Most values in 170s
Both ranges
Day
End


Store A
Store B
85 | 0 | 579
87762 | 1 | 13579
997521 | 2 | 234599
221 | 3 | 368
Money spent in a store
Greatest Median
Most in 10-19 range
Actual Ranges
A
B

Example 2

a) How many students scored less than 80 pts?

b) How many students scored at least 90 pts?

Test Scores (points)

Stem	Leaf
6	6
7	0 5 7 8
8	1 1 3 4 4 6 8 8 9
9	0 2 9
10	0

Key 9|2 = 92 points

2. Use the grading scale at the right.

a. How many students received a B on the test?

b. How many students received a C on the test?

A: 90–100
B: 80–89
C: 70–79
D: 60–69
F: 59 and below

Anil counted the number of letters in each of 30 sentences in a newspaper.

Anil showed his results in a stem and leaf diagram.

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

Key 4 | 1 stands for 41 letters

(a) Write down the number of sentences with 36 letters. .....

(1)

(b) Work out the range. .....

(1)

(c) Work out the median.

.....

(2)