How To Create a Stem and Leaf Plot by Hand

1. Divide the range of the data equally to make the stems. We want to use the first one or two digits of the number to create about 6-15 stems.
2. Attach leaves to the stems for each data point. The leaves can only be one digit. So, if you have more than one digit left, use the next digit and drop the rest.

Ex: Suppose we have the following data set: 15, 24, 26, 35, 36, 30, 18, 19, 44, 49, 40, 11, 12, 50, 48, 22, 26. The smallest data point is 11 and the largest is 50. So, we can have stems staring at 1, incrementing by 1 and ending at 5.

So, we will start with

1|
2|
3|
4|
5|

Now we have to attach the leaves. The first data point we have is 15, so we attach a leaf of 5 to the 1|.

1|5
2|
3|
4|
5|

We will continue to do this for all of the data points.

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

In order to be able to discuss specific values for this distribution, we need to order the leaves. So, for each stem, we will put the leaves in order from smallest to largest.

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

Note: Our data set contains two 26's. Notice that they are both represented in the stem and leaf plot. You must include every data point; even it is the same value as another data point.