FREQUENCY OF DISTRIBUTIONS

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Techniques for data

- bar char: showing the categories that a categorical variable takes on and the number of observations in each category for the data in the sample. The amount of space between the bars (if any) is arbitary.

- dotplot: showing the distribution of a quantitative variable when the sample size is small

- histogram: like a bar chart, except that histogram displays a quantitative variable. The scale of the variable determines the placement of the bars.(hist)

- stem-and-leaf diagram: useful for small data sets. It can be viewed as a histogram by turning it sideways.(stem)

Shapes of a distribution
symetric, bell-shaped, skewed to the right/left, exponential, unimodal/bimodal

Example Display the following data as a histogram and a stem-and-leaf diagram:
6.1 5.7 6.0 6.5 6.0 5.7 6.1 5.8 5.9 6.1 6.2 6.0 6.3 6.2 6.1 6.2 6.0 5.7 6.2 5.8 5.7 6.3 6.2 5.7 6.2 6.1 5.9 6.5 5.4 6.7 5.9 6.1 5.9 5.9 6.1 6.1.

```
>   x<-c(6.1, 5.7, 6.0, 6.5, 6.0, 5.7, 6.1, 5.8, 5.9, 6.1, 6.2, 6.0, 6.3, 6.2, 6.1,
6.2, 6.0, 5.7, 6.2, 5.8, 5.7, 6.3, 6.2, 5.7, 6.2, 6.1, 5.9, 6.5, 5.4, 6.7, 5.9, 6.1, 5.9,
5.9, 6.1, 6.1)
>   hist(x)
>   stem(x)
```