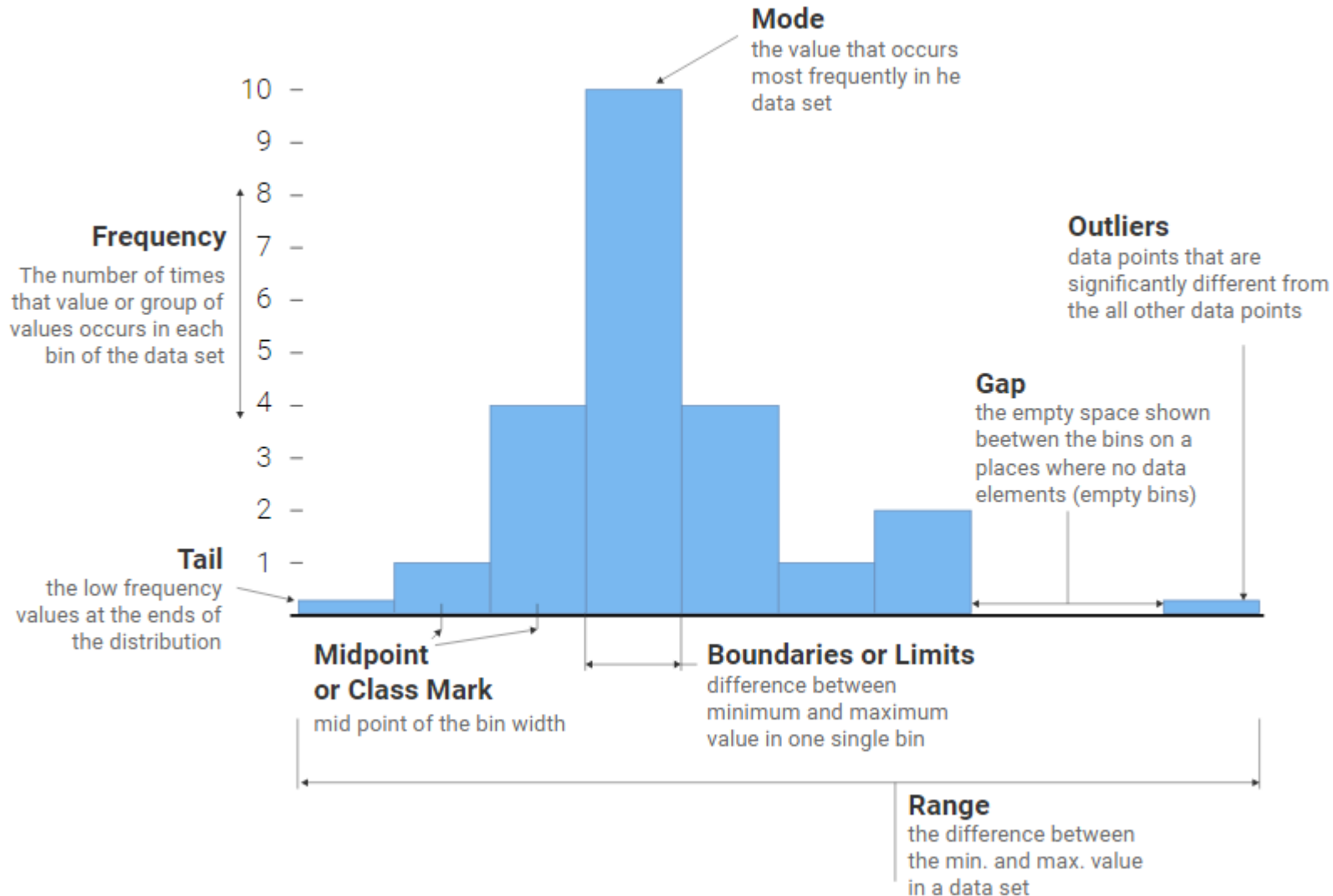


Histogram

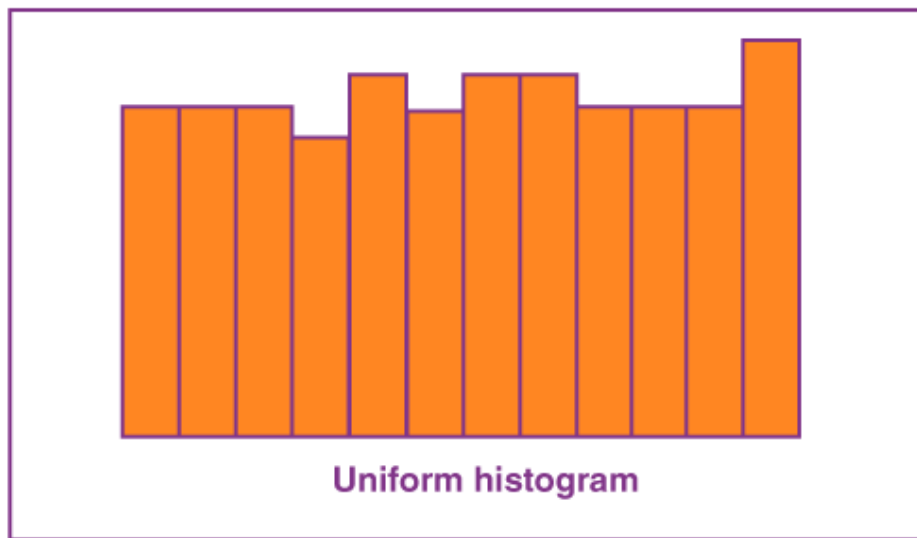
- It is a graphical representation of the distribution of a dataset
- way to display the frequency distribution of a dataset
- allows you to understand the patterns, variations, and characteristics of the data.

Components of Histogram



Types of Histogram

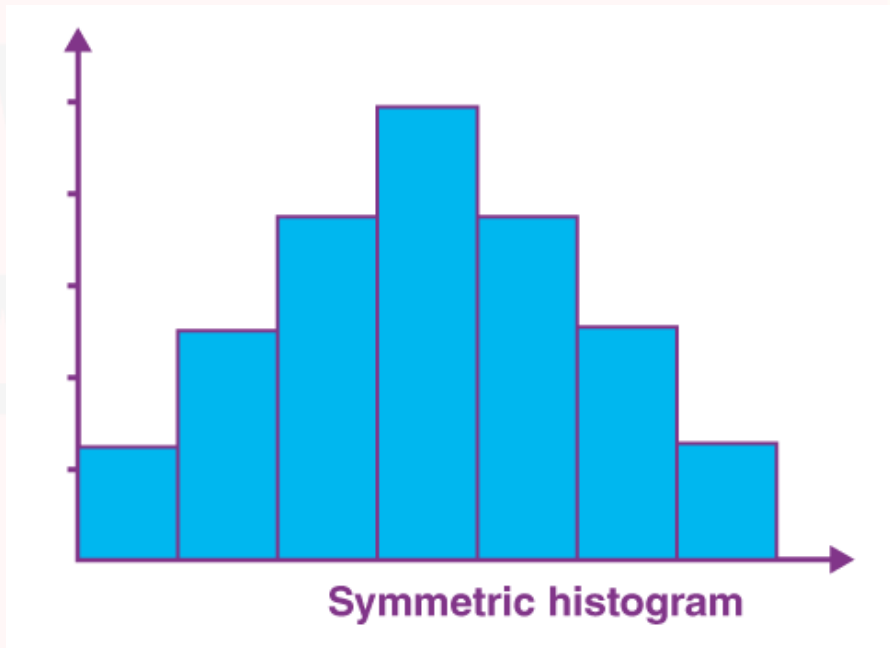
- Uniform histogram



- Number of classes is too small
- Each class has the same number of elements.
- It may involve distribution that has several peaks

Types of Histogram

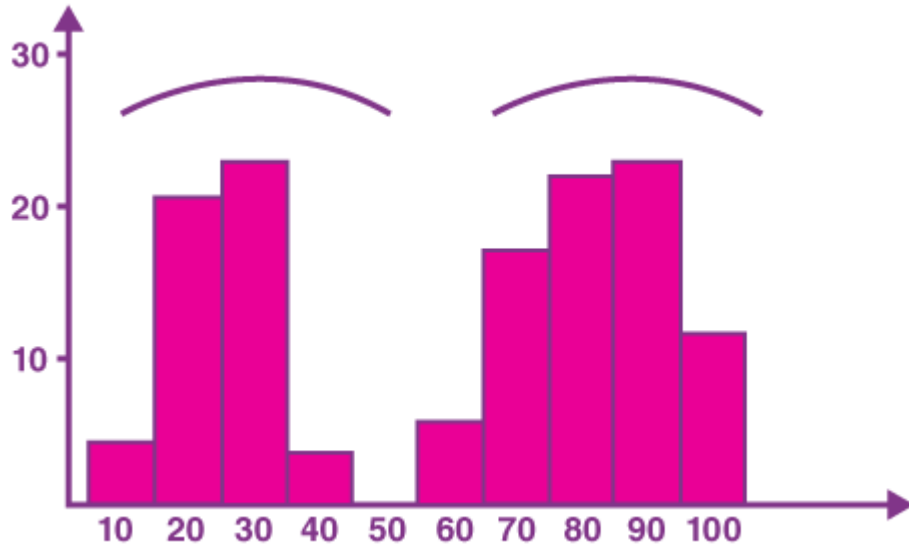
- Symmetric histogram



- also called a bell-shaped histogram
- two sides are identical in size and shape
- histograms that are not symmetric are known as skewed

Types of Histogram

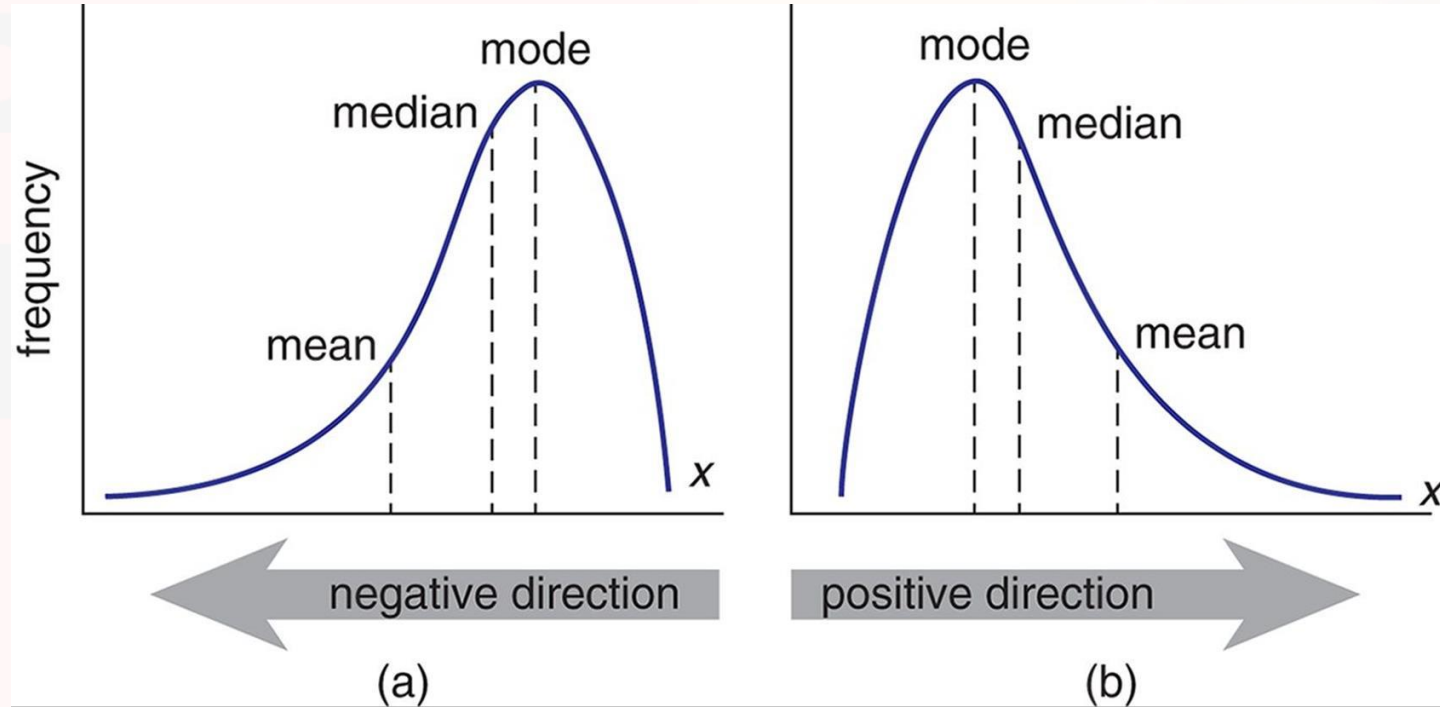
- Bimodal histogram



- If a histogram has two peaks
- data set has observations on two different kinds
- centers of the two separate histograms are far enough

Types of Histogram

- Skewed Distribution



How to construct Histogram

Age of people

16	21	33	26	35	67
78	31	39	36	37	23
34	41	40	86	81	43
32	64	42	25	58	38

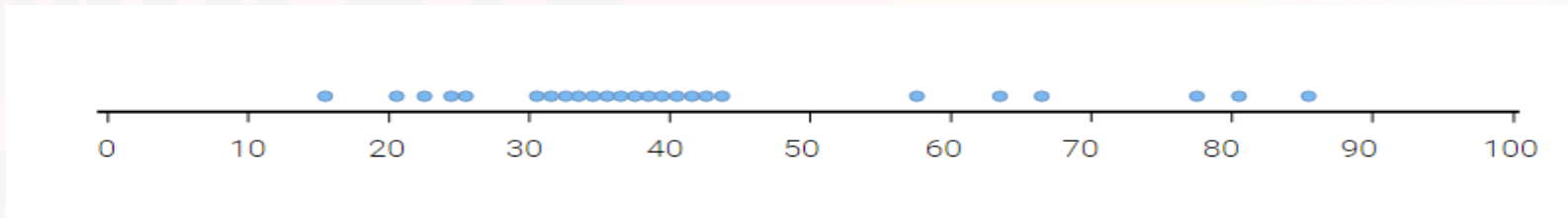
The data

Suppose we have a group of people of a different age and we need to evaluate a distribution of it.

The dataset contains twenty-four numbers that will be used to build the graph.

How to construct Histogram

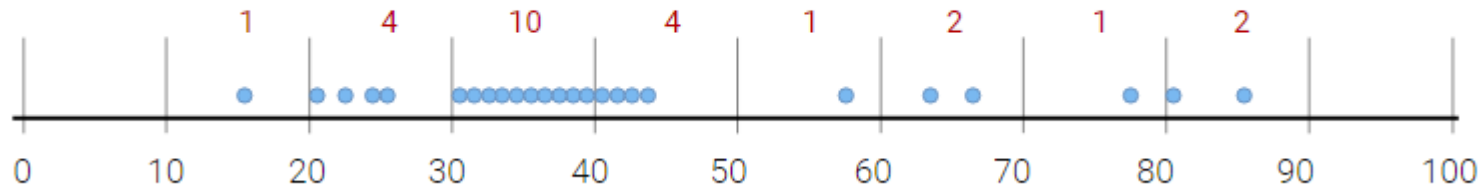
- One-Axis Data Distribution Graph



How to construct Histogram

- To solve the problem of overlapping and in the same time quantify the distribution lets divide the axis into the equal intervals called bins (sometimes classes, groups, cells)

Number of data elements in each bin



How to construct Histogram

- display the count of frequency in each bin using the joined bar graph

