# Statistics: Graphical Representation

**Statistical data can be represented graphically by several ways.**

1. A **histogram** is a graphical representation of a frequency distribution (in continuous form) in the form of rectangles with class intervals as bases and corresponding frequencies as heights, with no gap between any two successive rectangles.

2. **Frequency polygons** are another way of displaying data using straight line segments.

3. The **cumulative frequency** is the accumulated or sum of frequencies up to a particular point. A table showing the cumulative frequencies is called a **cumulative frequency distribution**.

4. Grouped data are also represented by a curve called ogive or cumulative-frequency curve.

5. Construction of Cumulative Frequency Curve or an ogive:
   i. Construct a cumulative frequency table
   ii. Mark the actual class limits along x-axis
   iii. Mark the cumulative frequencies of respective classes along y-axis
   iv. Plot the points corresponding to cumulative frequency at each upper limit point.
   v. Join the points plotted by a free hand curve.

6. An ogive is always started from a point on x-axis representing the lower limit of the first class and is terminated at the upper limit of the last class.

7. An ogive is always a rising curve.