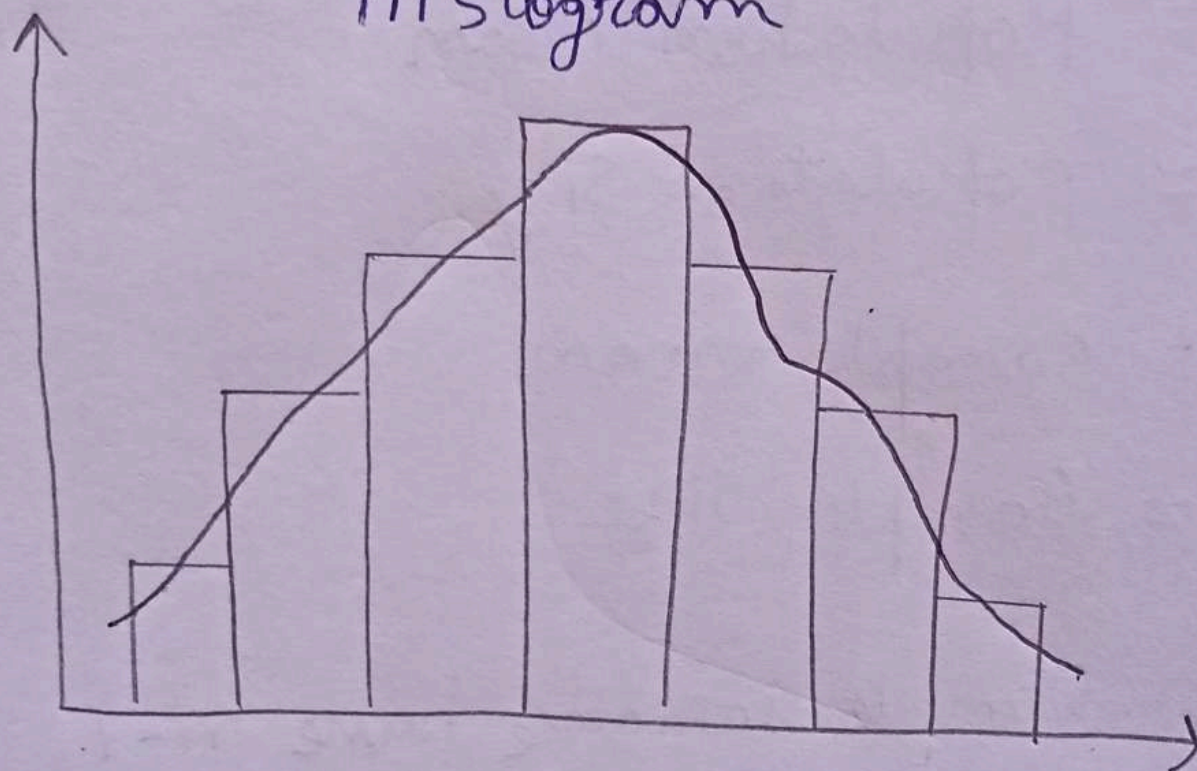
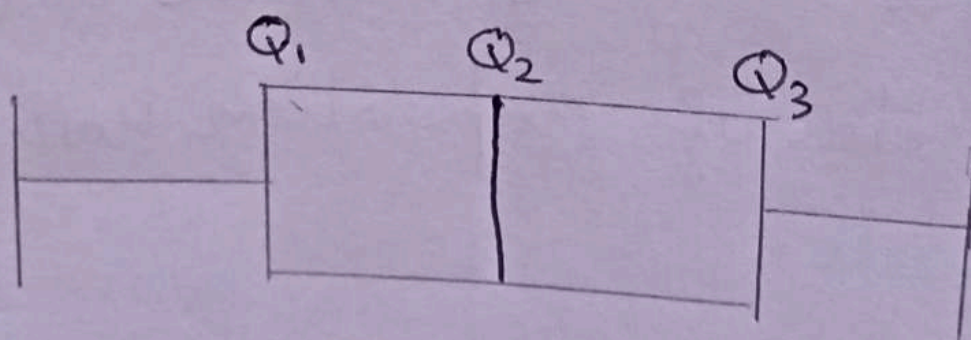


# Skewness :

① Symmetric distribution  
Histogram



Box plot



$$\leftarrow \quad Q_2 - Q_1 \approx Q_3 - Q_2 \quad \rightarrow$$

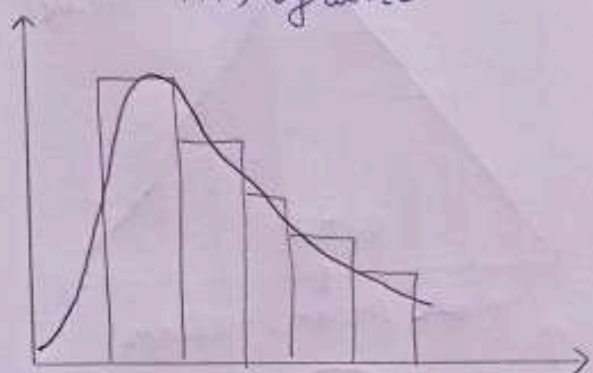
- No Skewness

- Mean, median, mode are perfectly at center

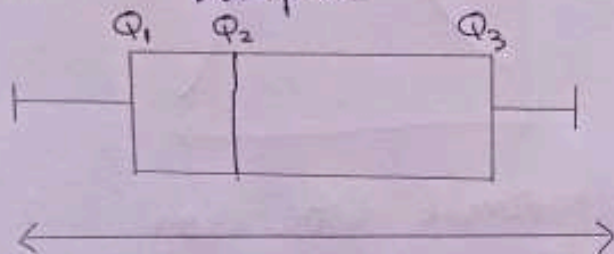
Example of Symmetric distribution is normal / Gaussian distribution

② Right Skewed: [⊕ Skewed]

Histogram

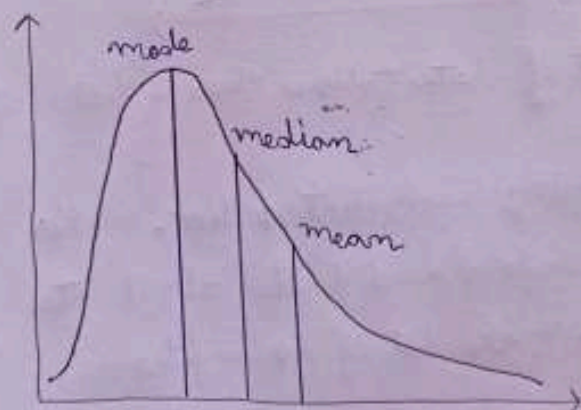


Box plot



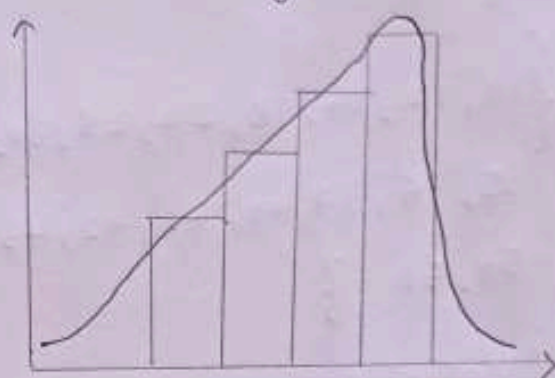
$$Q_3 - Q_2 > Q_2 - Q_1$$

mode < median < mean

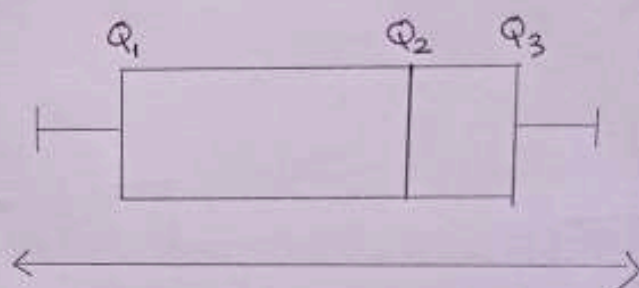


③ Left Skewed: [⊖ Skewed]

Histogram

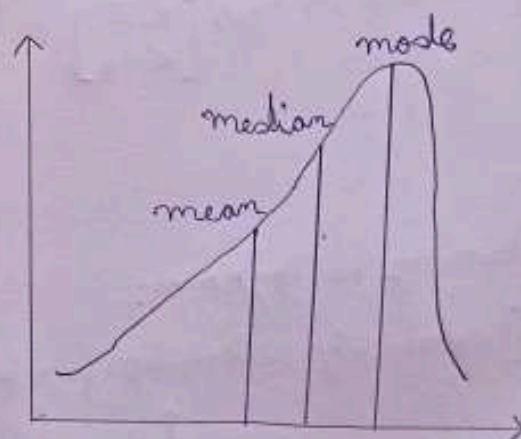


Box plot



$$Q_3 - Q_2 < Q_2 - Q_1$$

mean < median < mode



Most of data that exist in universe follow right skewed distributions

or

specifically log normal distribution