**1.WHAT DOES SYMMETRIC DISTRIBUTION MEAN?**

* A Symmetric distribution occurs when the values of variables appear at regular frequencies and often the **mean**, **median**, and **mode** all occur at the same point.
* If a line were drawn dissecting the middle of the graph, it would reveal two sides that mirror one other.

2.**WHAT IS LEFT SKEWED DISTRIBUTION AND RIGHT SKEWED DISTRIBUTION?**

* A **Skewed right distribution** is one in which the tail is on the right side.
* A **Skewed left distribution** is one in which the tail is on the left side.

**3.WHERE ARE LONG-TAILED DISTRIBUTION USED?**

The Long-Tailed distribution,which is used to model many internet-eraphenomena such as the frequency distribution or frequency of internet search item.

**EXAMPLE: Amazon,Netflix.**

**4.WHAT IS CENTRAL LIMIT THEOREM?**

The **central limit theorem** states that if you have a population with mean and standard deviation and take sufficiently large random samples from the population with replacement, then the distribution of the sample means will be approximately normally distributed.

**5.WHAT ARE THE OBSERVATIONAL AND EXPERIMENTAL DATA IN STATISTICS?**

* **Observational data** correlates to the data that is obtained from observational studies, where variables are observed to see if there is any correlation between them.
* **Experimental data** is derived from experimental studies, where certain variables are held constant to see if any discrepancy is raised in the working.