DAY 3

Saturday, May 4, 2024 11:33 AM

SHAPE OF DATA:

- Skewness and Kurtosis are statistics that describe shape and symmetry of the distribution

- For normal distribution, skewness is 0 and kurtosis is 3

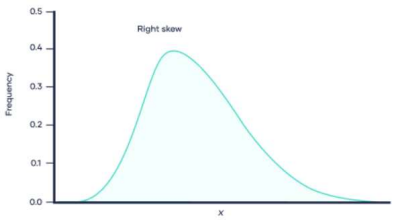
1. **SKEWNESS:**
   - Skewness is a measure of the asymmetry of a distribution. A distribution is asymmetrical when its left and right side are not mirror images.

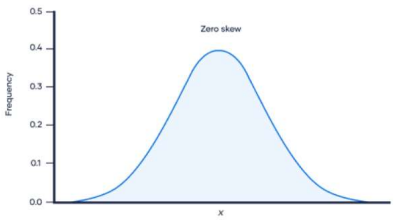
   - A distribution can have right (or positive), left (or negative), or zero skewness.

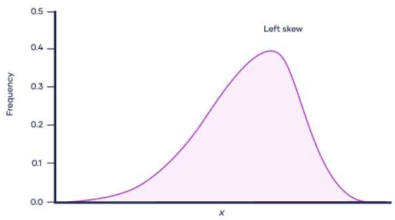
   - A right-skewed distribution is longer on the right side of its peak, and a left-skewed distribution is longer on the left side of its peak

   - Skewness > 0 then Right Skewed / Positive

   - Skewness < 0 then Left Skewed / Negative

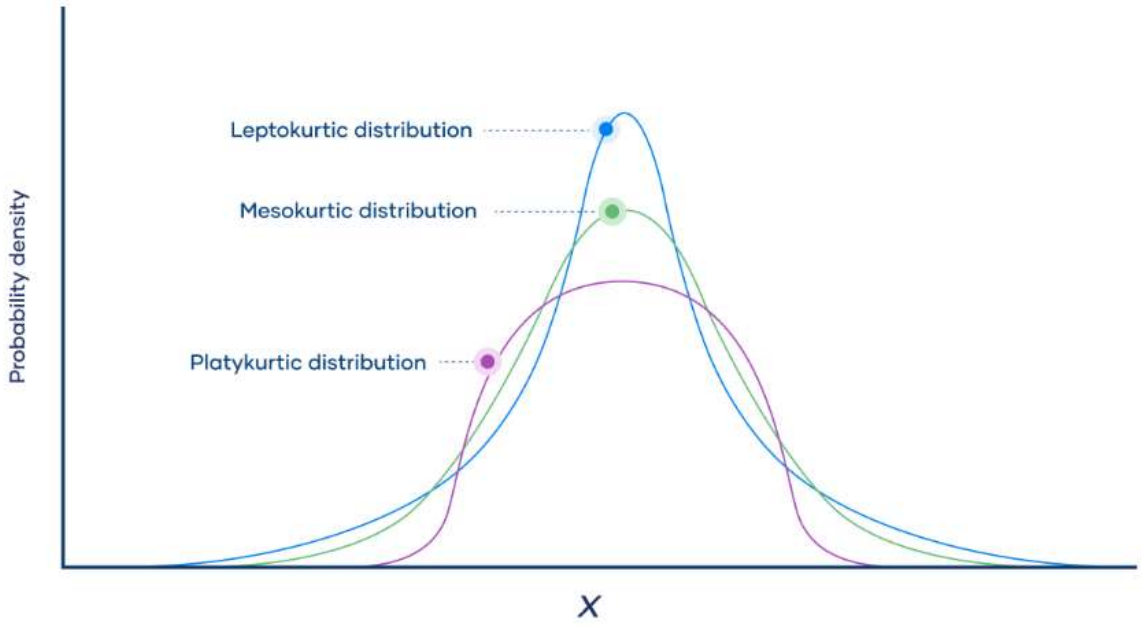






Mean>Median>Mode Mean=Median=Mode Mean<Median<Mode

2. **KUTOSIS:**
   - Kurtosis is a measure of the tailedness of a distribution.
   - If kurtosis>3 = Thinner tail and Higher Peak *Leptokurtic*
   - If kurtosis=3 P= *Mesokurtic*
   - If kurtosis<3 = Thicker tail and Lower Peak *Platykurtic*



TYPE OF SAMPLE:

1. FINITE SAMPLE
2. INFINITE SAMPLE

SAMPLING METHODS:

1. PROBABILITY SAMPLING
2. NON PROBABILITY SAMPLING

TYPES OF PROBABILITY SAMPLING:

1. SIMPLE RANDOM
2. SYSTEMATIC
3. STRATIFIED
4. CLUSTER
5. AREA

TYPES OF NON PROBABILITY SAMPLING:

1. ACCIDENTAL / CONVINENCE
2. QUOTA SAMPLING
3. PURPOSIVE SAMPLING
4. SNOWBALL / REFERAL SAMPLING

HYPOTHESIS:

1. **NULL HYPO H0**
2. **ALTERNATE HYPO H1**

T-TESTS:

1. **ONE SAMPLE T-TEST**
2. **TWO SAMPPLE/ INDEPENDENT**
3. **PAIRED T-TEST**