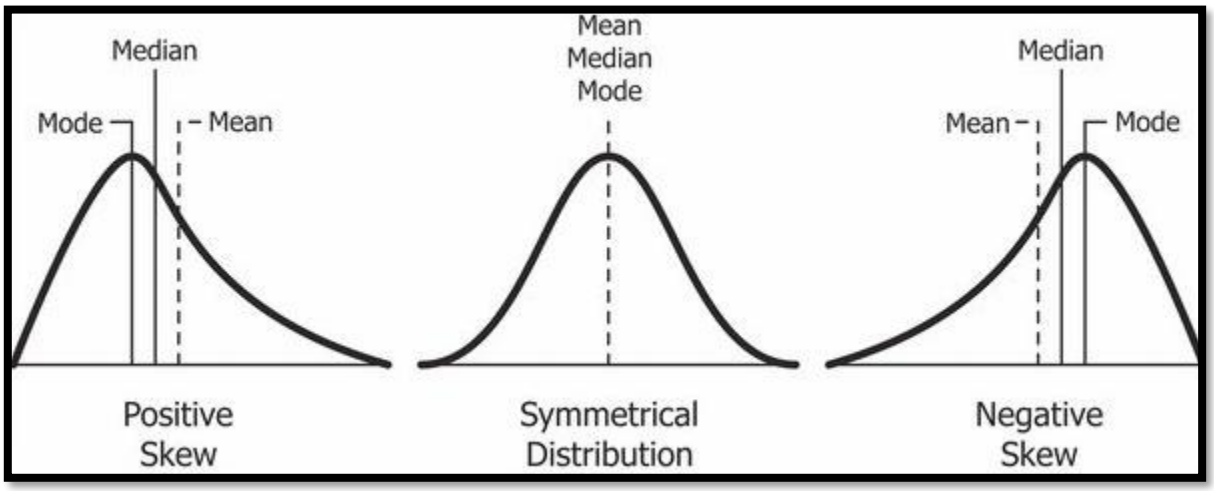
KURTOSIS AND SKEWNESS USING THE STATISTICAL SUMMARY

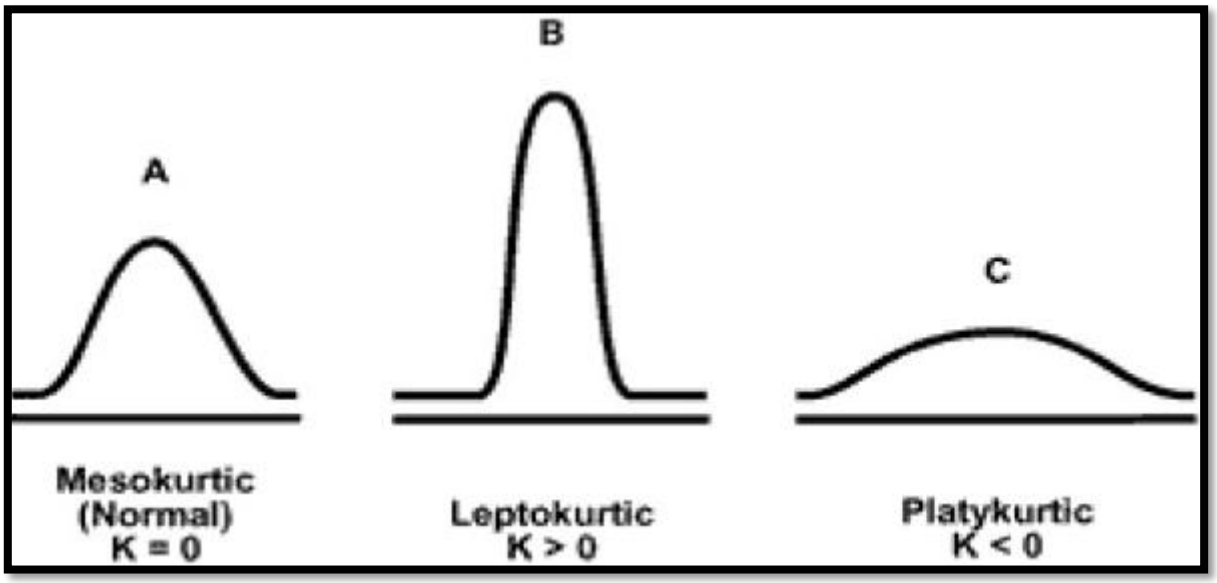
Skewness

- Measures asymmetry of the distribution.
- **Positive skew:** Tail on the right (more low values).
- **Negative skew:** Tail on the left (more high values).
- **Zero skew:** Symmetrical distribution.

Kurtosis

- Measures **tailedness** or **peakedness** of the distribution.
- **Leptokurtic (>3)**: Heavy tails, sharp peak → more outliers.
- **Mesokurtic (~3)**: Normal distribution.
- **Platykurtic (<3)**: Light tails, flat peak → fewer outliers





Kurtosis describes how **peaked** or **flat** a distribution is:

- **Leptokurtic (>3)**: Sharp peak, heavy tails → more outliers.
- **Mesokurtic (~3)**: Normal distribution.
- **Platykurtic (<3)**: Flat peak, light tails → fewer outliers.

Variable	Kurtosis	Interpretation
ssc_p	-0.106021	**Platykurtic**
hsc_p	-0.055896	**Platykurtic**
degree_p	-0.218083	**Platykurtic**
etest_p	-0.438118	**Platykurtic**
mba_p	-0.372526	**Platykurtic**
salary	3.217045	**Leptokurtic (sharp peak)**

Skewness tells us **which side the tail of the distribution stretches toward**:

- **Positive Skew (Right-skewed)**: Tail on the right → **mean > median > mode**
- **Negative Skew (Left-skewed)**: Tail on the left → **mode > median > mean**
- **Zero or Near-Zero Skew**: Symmetrical → **mean ≈ median ≈ mode**

Variable	Skewness	Mean	Median	Mode	Interpretation
ssc_p	-0.132649	67.30	67.0	60.0	**Negatively skewed (mode < median)**
hsc_p	-0.149533	66.33	65.0	60.0	**Negatively skewed**
degree_p	-0.003407	66.36	66.0	60.0	**Nearly symmetrical**
etest_p	-0.013384	72.10	71.0	60.0	**Nearly symmetrical**
mba_p	-0.137276	62.78	62.0	71.0	**Negatively skewed (mode > mean)**
salary	**3.082187**	277648.6	265000.0	300000.0	**Strongly right-skewed (mean > median < mode)**