Kurtosis Analysis Report

Introduction:

Kurtosis is a statistical measure that describes the "tailedness" of a probability distribution. Tailedness is how often outliers occur. Excess kurtosis is the tailedness of a distribution relative to a normal distribution.

Kurtosis < 3 → Platykurtic (Flat distribution, fewer extreme values)

Kurtosis = 3 → Mesokurtic (Normal distribution)

Kurtosis > 3 → Leptokurtic (Peaked distribution, more extreme values)

Summary of Kurtosis:

Column name	**Kurtosis values**
Ssc_p	-0.60751
Hsc_p	0.086901
Degree_p	-0.09749
Etest_p	-1.08858
Mba_p	-0.470723
salary	-0.239837

Insights and Observations:

All distributions are platykurtic**,** meaning they have light tails and fewer extreme outliers**.**

Skewness Analysis Report

Introduction:

Skewness is a measure of the asymmetry of the probability distribution of a real-valued random variable about its mean. The skewness value can be positive, zero, negative, or undefined.

The three types of skewness are:

- **Skewness < 0** → Left-skewed or negative skew (more high values, tail on the left).
- **Skewness = 0** → Symmetric distribution.
- **Skewness > 0** → Right-skewed or positive skew (more low values, tail on the right).

Summary of Skewness:

Column name	Skewness values
Ssc_p	-0.132649
Hsc_p	0.162611
Degree_p	0.204164
Etest_p	0.282308
Mba_p	0.313576
salary	0.8067

Insights and Observations:

- ssc_p is slightly left-skewed, meaning most students scored high, with a few low scores pulling the distribution left.

- hsc_p, degree_p, etest_p, and mba_p are slightly/moderately right-skewed, meaning more students had lower scores, with a few high scores pulling the distribution right.
- Salary is strongly right-skewed (0.8067), indicating most people earn lower salaries, but a few earn significantly higher salaries, creating a long right tail.

Conclusion:

- All distributions are platykurtic, meaning they lack extreme outliers and have lighter tails.
- Salary is the most skewed variable, meaning a few people earn significantly higher salaries than the majority.
- ssc_p is the only left-skewed variable, meaning most students performed well in secondary school.
- hsc_p, degree_p, etest_p, and mba_p are slightly right-skewed, showing a tendency for more students scoring lower with fewer high achievers.