One Page Summary - Kurtosis & Skewness Exercise

Problem Statement:

To study students' marks and salaries using Skewness and Kurtosis to understand the balance and shape of the data.

1. Skewness & Kurtosis Table

Feature	Skewness (Shape of Curve)	Kurtosis(Tilt of Curve)
sl_no	-1.20 → very flat shape	0.00 → Perfectly Balanced
ssc_p	-0.61 → flat shape	-0.13 → Slightly Left
hsc_p	0.09 → Normal	0.16 → Slightly right
degree_p	-0.10 → Flat Shape	0.20 → Slightly rig
etest_p	-1.09 → Very Flat Shape	0.28 → Slightly rig
mba_p	-0.47 → Flat Shape	0.31 → Slightly rig
salary	-0.24 → Flat Shape	0.81 → Strongly rig

Kurtosis *→ Negative = flat, 0 = normal, Positive = peaked. /* ***Skewness*** *→ 0 = balanced, Positive = right tilt, Negative = left tilt.*

2. Skewness (Tilt of Data)

- Shows if data is balanced or tilted.
- 0 = balanced, positive = tilted right (few very high values), negative = tilted left (few very low values).
- Marks (10th, 12th, Degree, MBA, test) are almost balanced.
- Salary is tilted right (0.81) → most salaries are low/average, but a few are very high.

3. Kurosis (Shape of Data)

- Shows if data is peaked or flat.
- 0 = normal bell curve, positive = tall curve with extremes, negative = flat curve spread out.
- Most values are negative (flat) → marks are evenly spread, fewer extremes.
- One column (0.09) is close to the normal curve.
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Final Insights

- Marks are **balanced and evenly spread**.
- Salary is **uneven** – only a few students get very high packages.
- Data is **clean and stable**, good for further analysis.