

Univariate(dataset,quan)

	sl_no	ssc_p	hsc_p	degree_p	etest_p	mba_p	salary
<b>Mean</b>	108.0	67.303395	66.333163	66.370186	72.100558	62.278186	288655.405405
<b>Median</b>	108.0	67.0	65.0	66.0	71.0	62.0	265000.0
<b>Mode</b>	1	62.0	63.0	65.0	60.0	56.7	300000.0
<b>Q1:25%</b>	54.5	60.6	60.9	61.0	60.0	57.945	240000.0
<b>Q2:50%</b>	108.0	67.0	65.0	66.0	71.0	62.0	265000.0
<b>Q3:75%</b>	161.5	75.7	73.0	72.0	83.5	66.255	300000.0
<b>Q5:99%</b>	212.86	87.0	91.86	83.86	97.0	76.1142	671200.0
<b>Q4:100%</b>	215	89.4	97.7	91.0	98.0	77.89	940000.0
<b>IQR</b>	107.0	15.1	12.1	11.0	23.5	8.31	60000.0
<b>1.5Rule</b>	160.5	22.65	18.15	16.5	35.25	12.465	90000.0
<b>Lesser</b>	-106.0	37.95	42.75	44.5	24.75	45.48	150000.0
<b>Greater</b>	322.0	98.35	91.15	88.5	118.75	78.72	390000.0
<b>max</b>	215	89.4	97.7	91.0	98.0	77.89	940000.0

<b>Lesser</b>	-106.0	37.95	42.75	44.5	24.75	45.48	150000.0
<b>Greater</b>	322.0	98.35	91.15	88.5	118.75	78.72	390000.0
<b>max</b>	215	89.4	97.7	91.0	98.0	77.89	940000.0
<b>min</b>	1	40.89	37.0	50.0	50.0	51.21	200000.0
<b>Kurtosis</b>	-1.2	-0.60751	0.450765	0.052143	-1.08858	-0.470723	18.544273
<b>skewness</b>	0.0	-0.132649	0.163639	0.244917	0.282308	0.313576	3.569747

## Summary of Skewness and Kurtosis for Placement Dataset

This summary provides a comparison of skewness and kurtosis values for different columns in the placement dataset. Skewness and kurtosis are statistical measures used to describe the distribution of data.

### 1. Skewness

Skewness measures the asymmetry of the data distribution. The skewness value can be positive, negative, or zero.

- **Positive Skewness:** The tail on the right side is longer or fatter than the left side. The mass of the distribution is concentrated on the left.

- **Negative Skewness:** The tail on the left side is longer or fatter than the right side. The mass of the distribution is concentrated on the right.
- **Zero Skewness:** The data is perfectly symmetrical.

## 2. Kurtosis

Kurtosis measures the "tailedness" of the data distribution. It indicates how much of the data is in the tails and the peak compared to a normal distribution.

- **Positive Kurtosis (Leptokurtic):** Distributions with heavy tails and a sharp peak. More data in the tails and peak.
- **Negative Kurtosis (Platykurtic):** Distributions with light tails and a flat peak. Less data in the tails and peak.
- **Zero Kurtosis (Mesokurtic):** Distributions with kurtosis similar to a normal distribution.

## Comparison Summary

Here is a comparison of skewness and kurtosis values for different columns in the placement dataset.

Column	Skewness	Interpretation of Skewness	Kurtosis	Interpretation of Kurtosis
sl_no	0.0	Perfectly symmetrical	-1.2	Platykurtic (flatter peak)
ssc_p	-0.132649	Slightly left-skewed (negative skew)	-0.60751	Platykurtic (flatter peak)
hsc_p	0.163639	Slightly right-skewed (positive skew)	0.450765	Mesokurtic (normal distribution)
degree_p	0.244917	Right-skewed (positive skew)	0.052143	Mesokurtic (normal distribution)
etest_p	0.282308	Right-skewed (positive skew)	-1.08858	Platykurtic (flatter peak)
mba_p	0.313576	Right-skewed (positive skew)	-0.470723	Platykurtic (flatter peak)

Column	Skewness	Interpretation of Skewness	Kurtosis	Interpretation of Kurtosis
salary	3.569747	Highly right-skewed (positive skew)	18.544273	Leptokurtic (sharper peak, heavy tails)

### Interpretation:

- **sl\_no**: The serial number is perfectly symmetrical (skewness = 0) and has a flatter peak compared to a normal distribution (kurtosis = -1.2).
- **ssc\_p**: Secondary school percentage is slightly left-skewed, meaning most values are concentrated on the right, and has a flatter peak (platykurtic).
- **hsc\_p**: Higher secondary percentage is slightly right-skewed, meaning most values are concentrated on the left, and has kurtosis close to zero, indicating a distribution similar to a normal distribution.
- **degree\_p**: Degree percentage is right-skewed with a normal-like distribution (mesokurtic).
- **etest\_p**: Employability test percentage is right-skewed and has a flatter peak (platykurtic).
- **mba\_p**: MBA percentage is right-skewed and also has a flatter peak (platykurtic).
- **salary**: Salary is highly right-skewed, indicating a significant number of high salary values, and has a very sharp peak with heavy tails (leptokurtic), indicating outliers and extreme values.

### Conclusion

The skewness and kurtosis values provide insights into the shape and distribution of the data in the placement dataset. Most columns are slightly skewed, indicating some asymmetry, while the salary column shows a high degree of skewness and kurtosis, indicating the presence of extreme values and outliers.