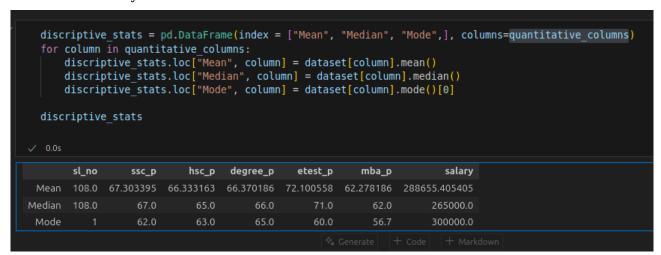## Summary Report on Placement data

Objective:

To understand the central tendencies (Mean, Median, Mode) of the dataset containing academic scores and salary outcomes on quantitative_columns.

Dataset Attributes:

Column	Description
sl_no	Serial number (identifier)
ssc_p	Secondary Education Percentage
hsc_p	Higher Secondary Education %
degree_p	Undergraduate Degree %
etest_p	Employability Test %
mba_p	MBA %
salary	Annual salary (₹)

Statistical Summary

```python
discriptive_stats = pd.DataFrame(index = ["Mean", "Median", "Mode",], columns=quantitative_columns)
for column in quantitative_columns:
    discriptive_stats.loc["Mean", column] = dataset[column].mean()
    discriptive_stats.loc["Median", column] = dataset[column].median()
    discriptive_stats.loc["Mode", column] = dataset[column].mode()[0]

discriptive_stats
```

✓ 0.0s

	sl_no	ssc_p	hsc_p	degree_p	etest_p	mba_p	salary
Mean	108.0	67.303395	66.333163	66.370186	72.100558	62.278186	288655.405405
Median	108.0	67.0	65.0	66.0	71.0	62.0	265000.0
Mode	1	62.0	63.0	65.0	60.0	56.7	300000.0

⚡ Generate   + Code   + Markdown

Observations

- **Consistency in Academic Scores**: The means and medians for ssc_p, hsc_p, and degree_p are very close, indicating a **symmetrical distribution** without significant outliers.

- **Employability Test (etest_p)** shows a slightly higher mean (72.10), but a **lower mode (60.0)**

- **MBA Percentage (mba_p)** has a mean of ~62.28 and mode of 56.7 (some lower scorers).

- **Salary**:
  - Mean salary: ₹2,88,655
  - Median salary: ₹2,65,000
  - Mode salary: ₹3,00,000
    This distribution implying some high-paying offers inflating the average.

Interpretation

- Students with mid-to-high academic scores tend to receive average salaries around ₹2.6–3.0 Lakhs.
- The slight differences between mean and median in `salary` suggest **moderate salary disparity**, possibly due to a few outlier job offers.