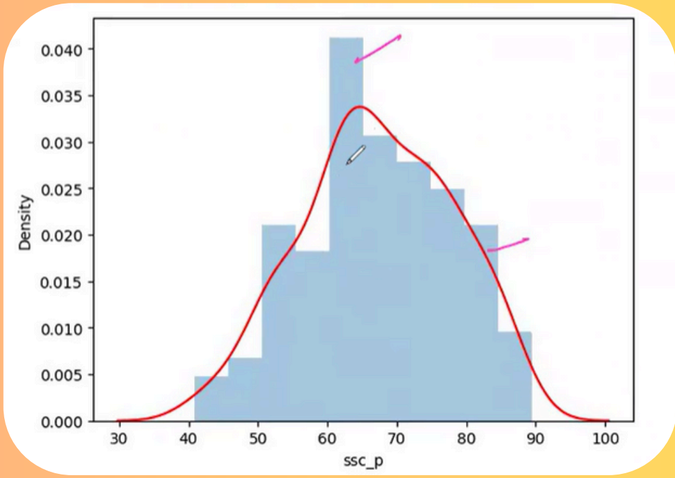
How to read a chart

Histogram with a KDE

Q1: What does this chart show?

This chart shows the distribution of students' SSLC percentages. The X-axis represents the marks in percentage, and the Y-axis represents the proportion of students (in %) who fall into each score range.



Q2: What is the lowest score

Around 30%

Q3: What is the higehst score

Around 100%

How to read a chart

Histogram with a KDE

Q4: Where do most students fall?

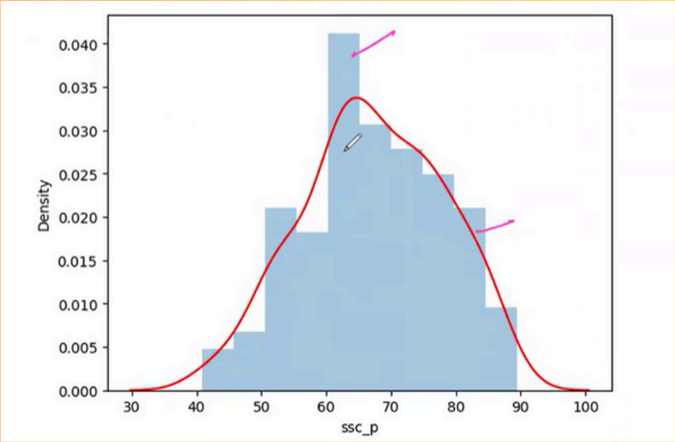
Between 60–70%, where the tallest bar is.

Q5: What does the red line represent?

A: Around 30%

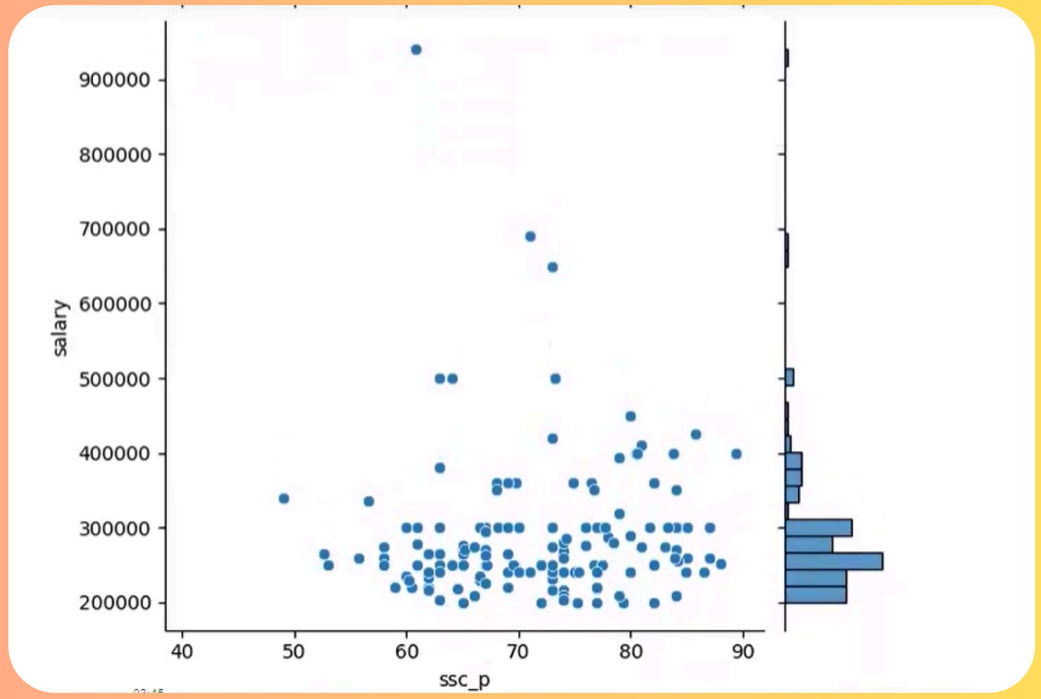
Q6: Is this an upward trend?

No — it’s a bell-shaped distribution, similar to a normal distribution.



How to read a chart

Scatter Plot



Q1 What does this chart show?

The relationship between students' secondary school percentage (ssc_p) and their salary.

Q2: What is on the X Axis?

seconday school percentage (ssc_p)

Q3: What is on the Y Axis?

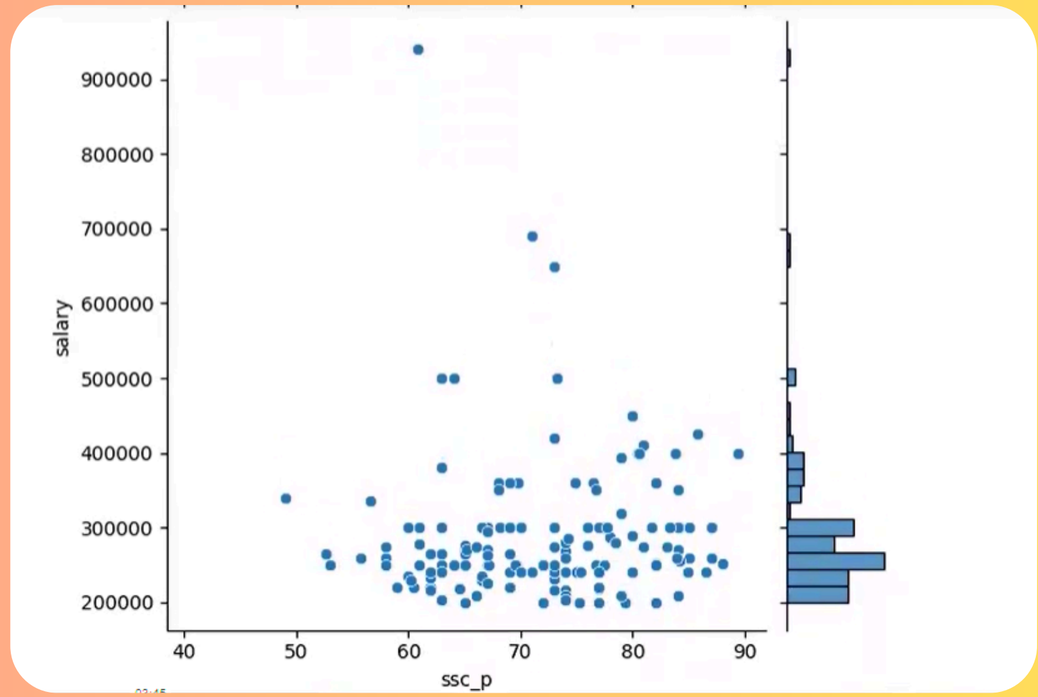
Salary in Rupees

Q4 Do higher percentages always mean higher salaries?

No — scoring higher in SSC does not guarantee a higher salary. The chart shows no stro relationship between percentage and salary, since salaries vary widely even for similar

How to read a chart

Scatter Plot



Q5 Where are most of the students clustered?

Around 60–80% in SSC and 200,000–400,000 salary.

Q6 What does each dot represent?

one student

Q7 What does the small histogram on the right show?

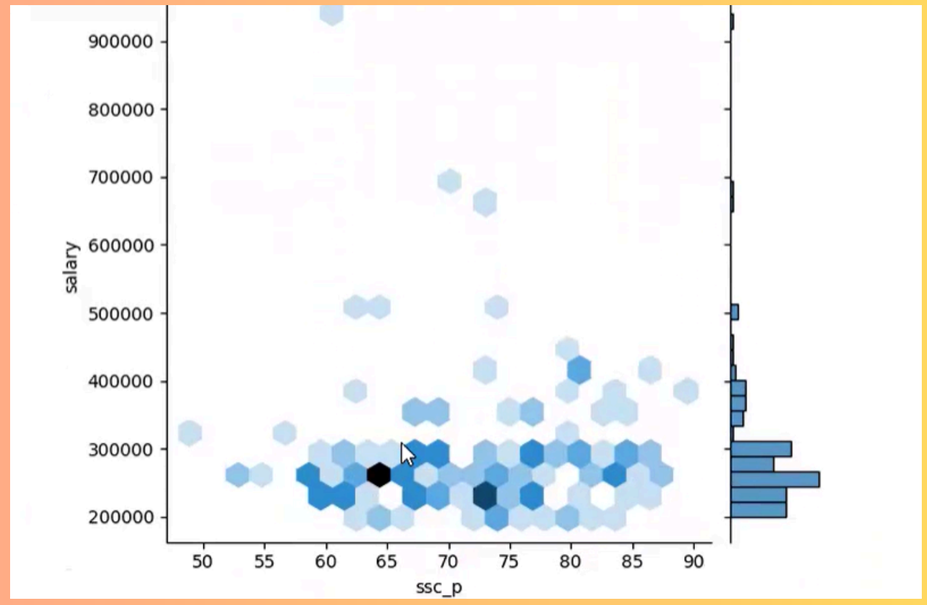
It shows the distribution of salaries. Most students earn between 200L–400L, with only a few earning much higher.

How to read a chart

Hexbin Plot

Q1 What does this chart show?

It shows the relationship between SSC percentage (X-axis) and salary (Y-axis), along with where most students are concentrated.



Q2 why do we see the hexagons instead of dots?

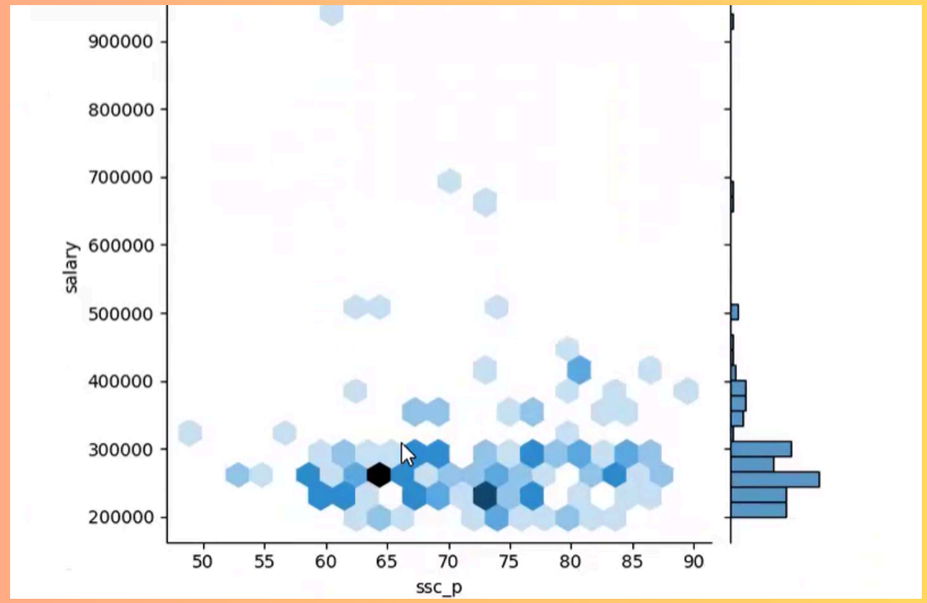
Here, we represent the data using hexagons to make it clearer. This helps us easily identify which group of students has higher density (more data points in that range).

How to read a chart

Hexbin Plot

Q3 what do the darker hexagons represent?

Darker hexagons represent higher density — meaning more students fall in that SSC percentage and salary range. Lighter hexagons represent fewer students.

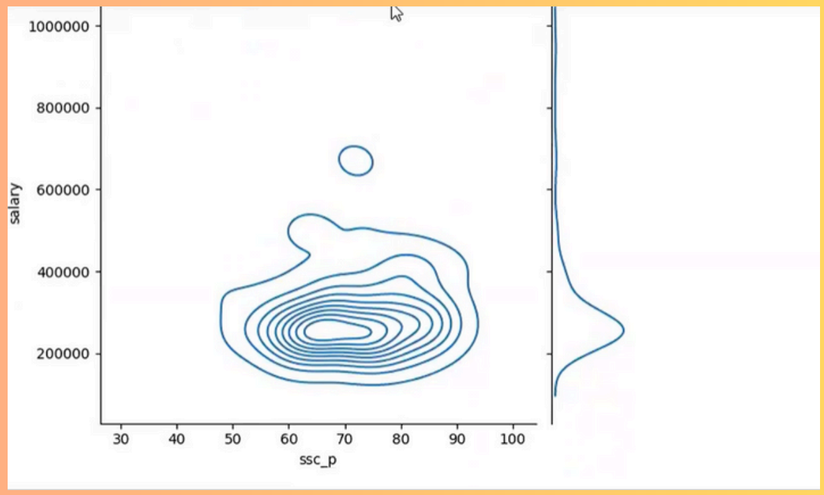


Q4 Do we any see any outliers?

Yes — one student has a salary above 900,000 (much higher than the rest). This point stands out as an outlier in the data.

How to read a chart

Contour Plot



Q1 What does this chart show?

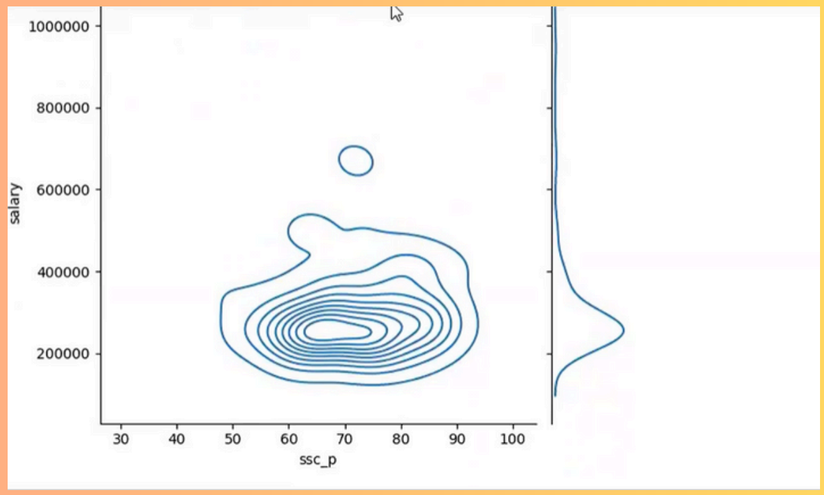
The relationship between SSC percentage (X-axis) and salary (Y-axis), shown using density contours.

Q2 What do the contour lines represent?

Contour lines show density: outer lines = low density, inner lines = peak density.

How to read a chart

Contour Plot



Q3 What does the side curve (marginal plot) show?

The side curve shows the salary distribution — most salaries are between 2–4 Lakhs, while very high salaries are rare (outliers).

Q4 Do we see any outliers?

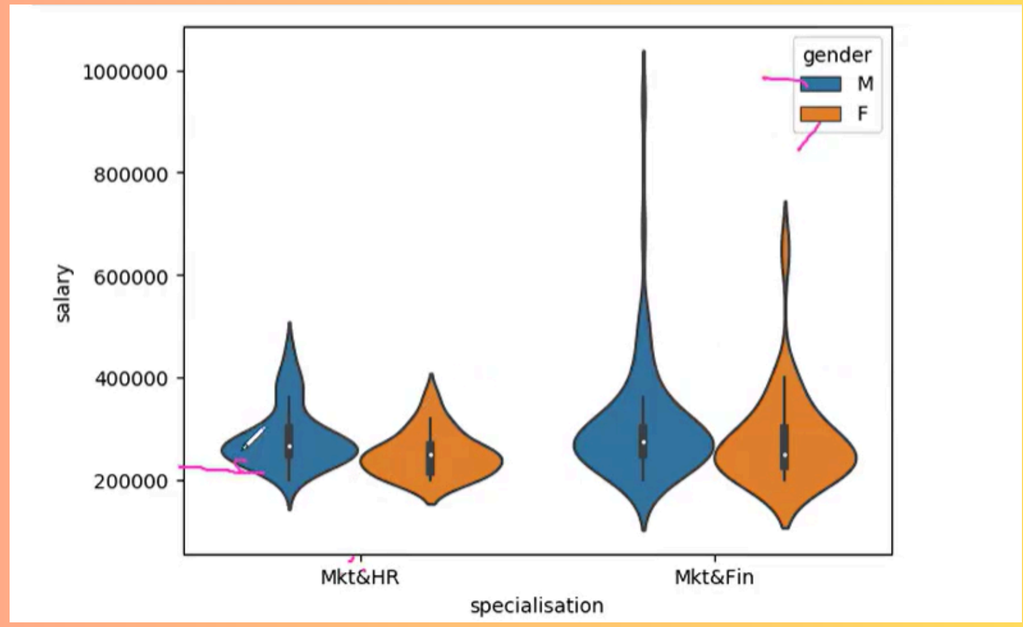
Yes — one student has a salary above 600,000 (much higher than the rest). This point stands out as an outlier in the data.

How to read a chart

Violin Plot

Q1 What does this chart show?

This chart uses a Violin Plot to show salary (Y-axis) across different specialisations (X-axis).



Q2 Why is it called a violin plot?

The shape of this chart looks similar to a violin, which is why it is called a Violin Plot

Q2 What do the wide parts of the violin mean?

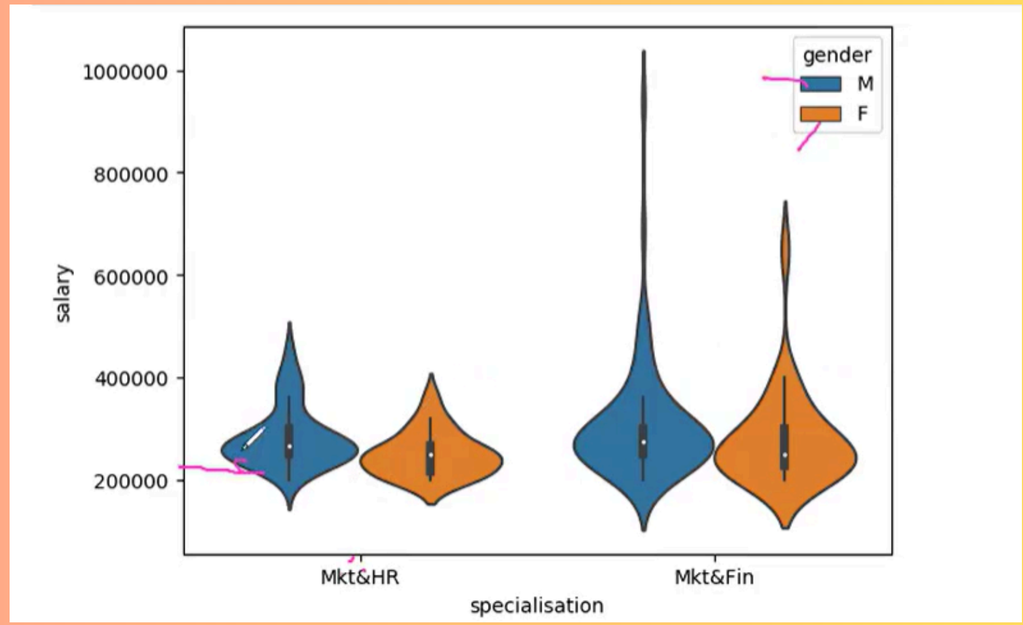
The wide parts of the violin show where more data points are concentrated (higher density), while the narrow parts show fewer data points.

How to read a chart

Violin Plot

Q4 What does the thin middle box inside the violin show?

The box inside each violin shows the median salary and the interquartile range for that specialization.



Q5 Which group shows the widest salary spread?

The widest salary spread is for Mkt&Fin (Male), ranging from about 2 Lakhs to nearly 9–10 Lakhs.

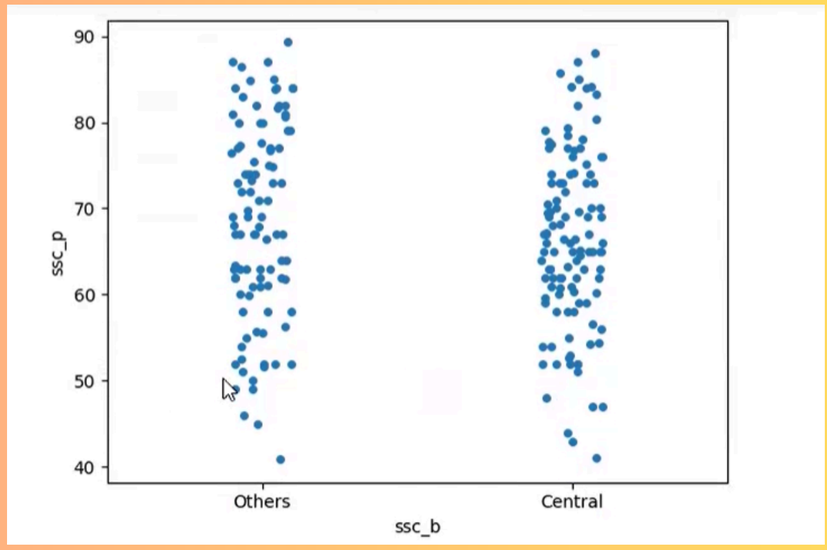
Q6 Where is the median salary for each group?

The white dot inside each violin marks the median salary.

- In Mkt&HR, the median is around 2–3 Lakhs.

How to read a chart

Strip Plot



Q1 What does this chart show?

Distribution of SSC percentages by board type (Central vs Others).

Q2 Where are most students from Central boards clustered?

Most students fall between 60–85%.

Q3 Where are most students from Other boards clustered?

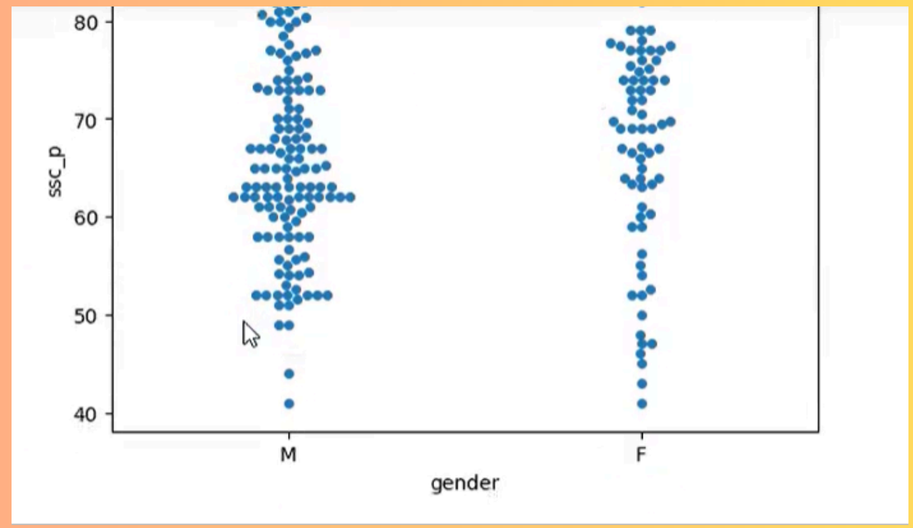
Also fall mostly in 55–80%, but distribution looks slightly wider

How to read a chart

Swarm Plot

Q1 What does this chart show?

Distribution of SSC percentages by gender



Q2 Do females have tighter clustering (more consistency) compared to males?

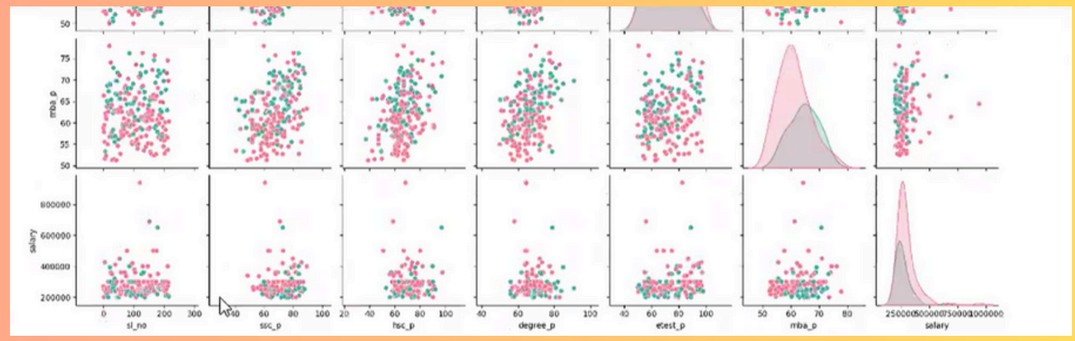
Yes, females' scores are more consistent, with less spread compared to males.

Q3 Does one gender show a wider spread of percentages?

Males have a wider spread, ranging from low 40s up to 80+, while females are slightly narrower.

How to read a chart

Swarm Plot



Q1 What does this chart show?

Pairplot shows pairwise relationships between all variables.

Q2 Do higher SSC/HSC percentages lead to higher salaries?

Do higher SSC/HSC percentages lead to higher salaries?

Q3 Which variables look most correlated?

Correlation: Degree %, MBA %, and Etest % show some positive relationships.