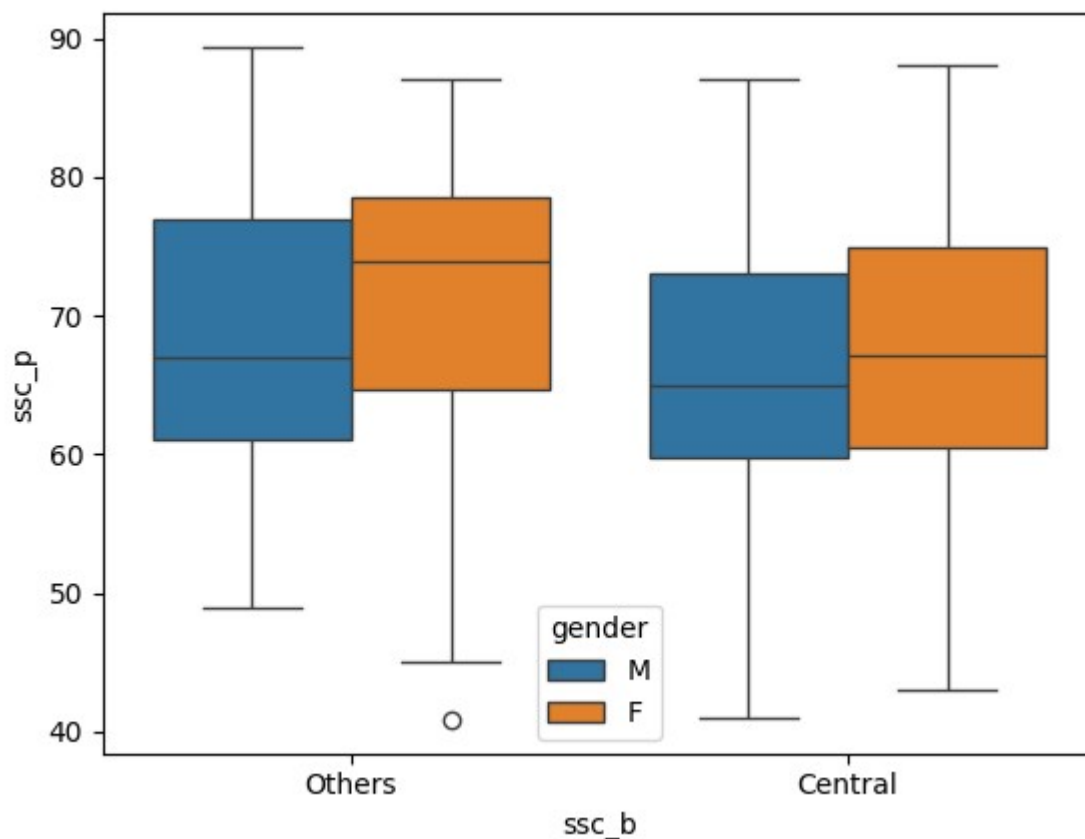# BOX PLOT AND POINT PLOT

1) Interpretation of Box Plot: Male vs Female

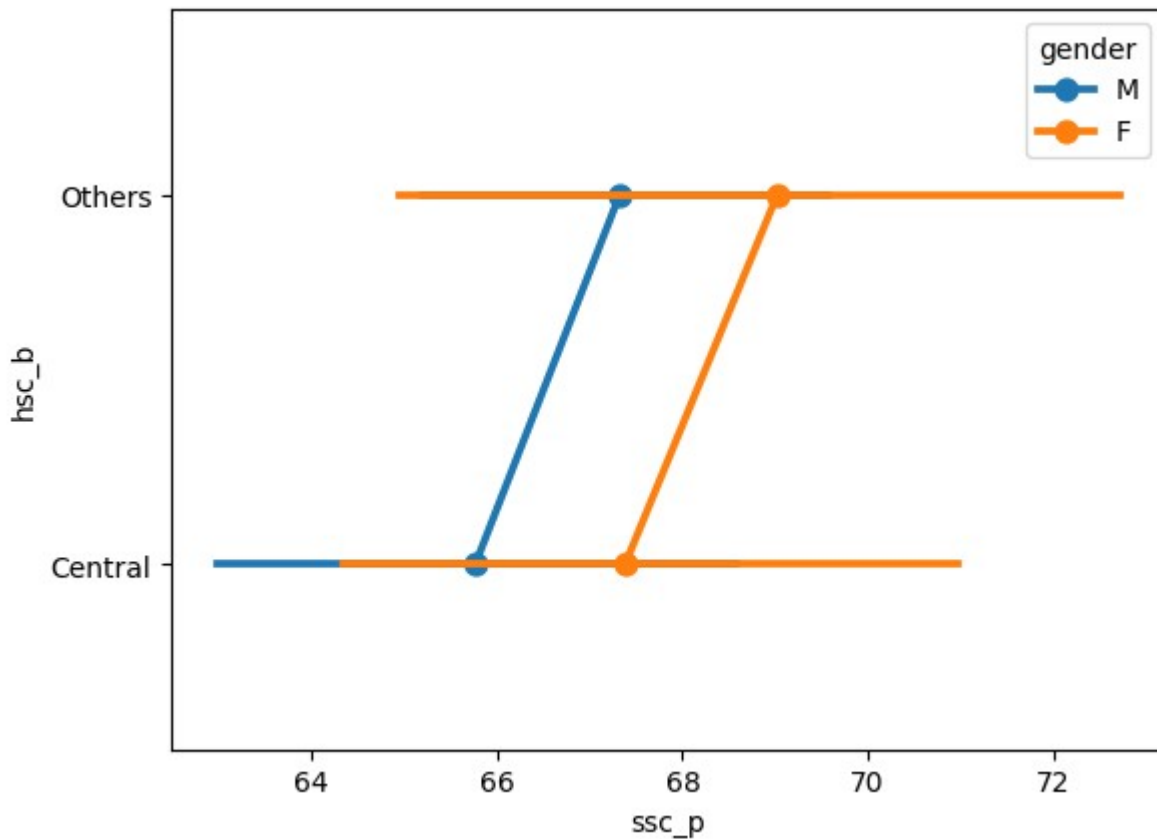Comparison of SSC Board("Central" vs "Others") with ssc_p by Gender

What the box plot typically shows:

● Both males and females are distributed across both boards (Central and Other boards).

● There is no major difference in board choice between males and females.

● Comparatively higher proportion of females from the Central Board.

- Comparatively higher proportion of males from the other Board.

- Median SSC percentage for females is higher than males.

- Central board male median is less & low performance is high comparing others.

- Female scores often appear more consistent, with slightly less spread (less variability).

- Arrangement of Highest performance in ascending order is

- Male of other board > Female of central board > Female of other board > Male of central board .

- Male scores show a wider spread, including more low and high extremes.

- Overall difference is small, but female performance appears more consistent.

2) **Interpretation of Point Plot**

- A point plot is a statistical plot used to show the mean (average) value of a numerical variable for each category of a categorical variable.

- It also usually shows confidence intervals, so you can visually compare groups.

- To compare average performance between groups

- To see trends or differences quickly

- To check which category performs better

Variables:

- ssc_p → SSC Percentage (numerical)
- hsc_b → HSC Board ("Central" or "Others") (categorical)
- A vertical line on each point indicates a confidence interval (how much the average can vary).

Summary

- Students from Other board tend to have a slightly higher average SSC percentage.
- Students from Central boards show a slightly lower or average SSC percentage.
- Female average performance is higher in both of the boards.
- The difference may not be very large, but the point plot makes it very easy to compare.