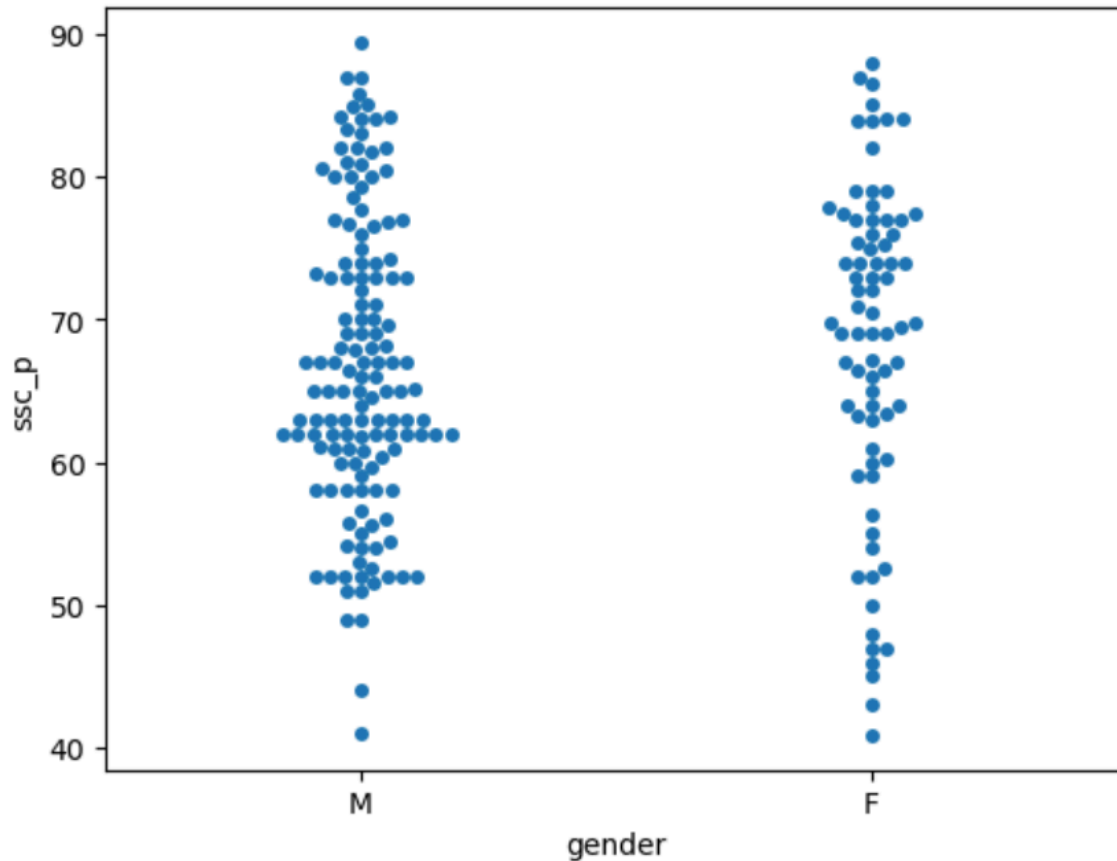
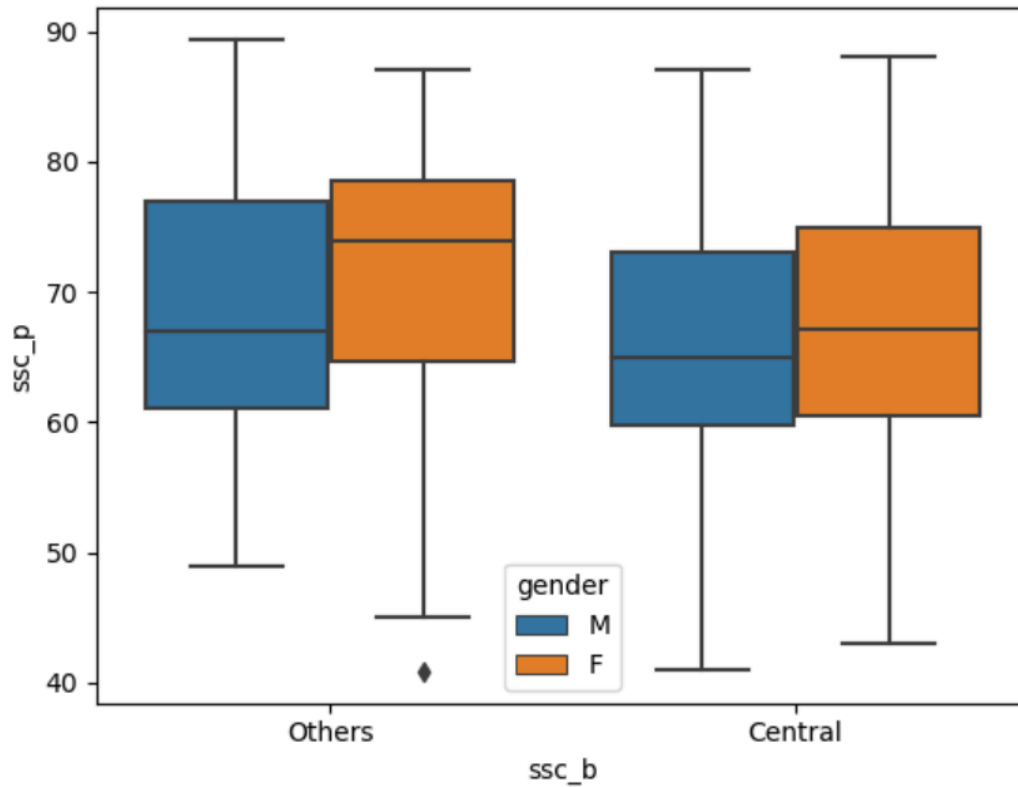


# SwarmPlot



- SwarmPlot is used to Visualize Categorical data with numerical values
- This graph is sometimes also called as “BeesWarm”
- Swarmplot is probably similar to stripplot, only the points are adjusted so it won't get overlap to each other as it helps to represent the better representation of the distribution of values.
- When the dataset is very large, Swarm plot will not function well.

## BOX\_Plot Summary :



The Box Plot can be interpreted like the concept of percentile

The above graph has “ssc\_b” as x axis and “ssc\_p” as Y axis separated wrt gender

For the **Other Boards**, the minimum mark is around 48 for males and around 45 for females

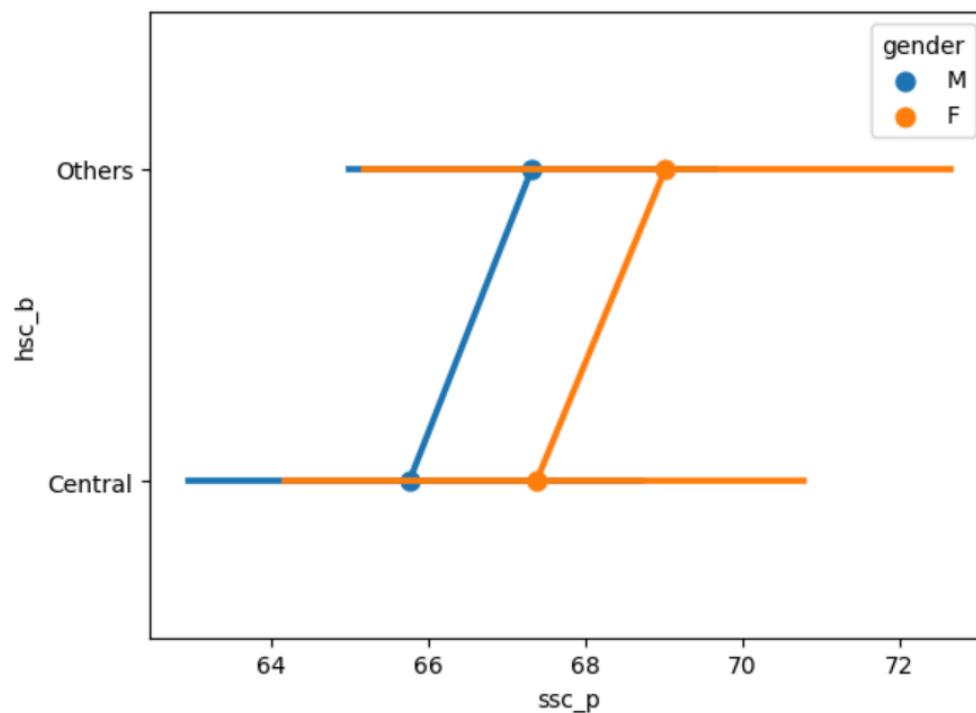
Percentile Quatrter	Males	Females
Q1	62	65
Q2	68	69
Q3	77	78
Q4	89	87

For the **Central Boards**, the minimum mark is around 42 for males and around 44 for females

Percentile Quatrter	Males	Females
Q1	61	62
Q2	65	73
Q3	72	78
Q4	87	86

When both the boards are compared , **others performed well than Central board**

## Point Plot :

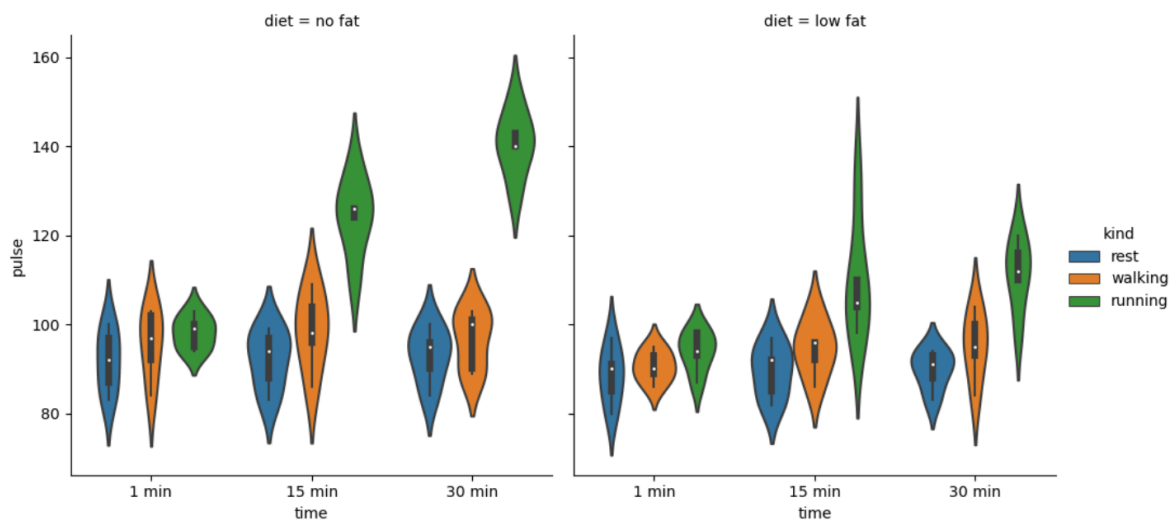


- PointPlot helps to draw point estimates and confidence intervals using scatter plots. Using the locations of the scatter plot points, a point plot represents an

estimate of the central tendency for a numerical variable and uses error bars to show the degree of uncertainty in the estimate.

- For comparisons between various levels of one or more categorical variables, point plots may be more helpful than bar plots.
- In the Above graph the ssc\_p marks of others and central board's male and female students are compared .
- From the point graph we infer the following information.
  - The average of male students in "Other" board is 67 and in "central board" it is 65
  - The average of Female students in "Other" board is 69 and in "central board" it is 67.5

## FactorPlot or CatPlot :



- In the new version of python the factorplot is replaced by CatPlot
- used to draw a different types of categorical plot

- The default plot that is shown is a point plot, but we can plot other seaborn categorical plots by using of kind parameter, like box plots, violin plots, bar plots, or strip plots.

From the Above Graph , we can infer the following information :

- Two types of graph is plotted. One is “no fat” and the other is “Low Fat”
- Both graphs have time in X-axis and Pluse in Y-Axis
- The exercise types are rest,walking and running

#### **No\_Fat Diet : Pulse rate**

<b>Minutes</b>	<b>Resting</b>	<b>Walking</b>	<b>Running</b>
<b>1</b>	Range is 75-110, peak is 82-97	Range is 75-118, peak is 90-102	Range is 90-115, peak is 95-105
<b>15</b>	Range is 75-108, peak is 80-100	Range is 75-120, peak is 86-105	Range is 105-145, peak is 120-130
<b>30</b>	Range is 76-110, peak is 95-100	Range is 80-113, peak is 85-100	Range is 120-160, peak is 140-145

### **Low \_Fat Diet : Pulse rate**

<b>Minutes</b>	<b>Resting</b>	<b>Walking</b>	<b>Running</b>
<b>1</b>	Range is 72-110, peak is 78-95	Range is 80-100, peak is 85-95	Range is 80-105, peak is 90-100
<b>15</b>	Range is 75-108, peak is 80-90	Range is 75-115, peak is 90-93	Range is 80-147, peak is 95-105
<b>30</b>	Range is 76-105, peak is 90-95	Range is 78-113, peak is 95-100	Range is 85-130, peak is 110-120

We can conclude that the Pulse rate in resting and walking for both type of diets are more or less similar.

The pulse rate is more on the upward trend for no fat diet compared to low fat diet.