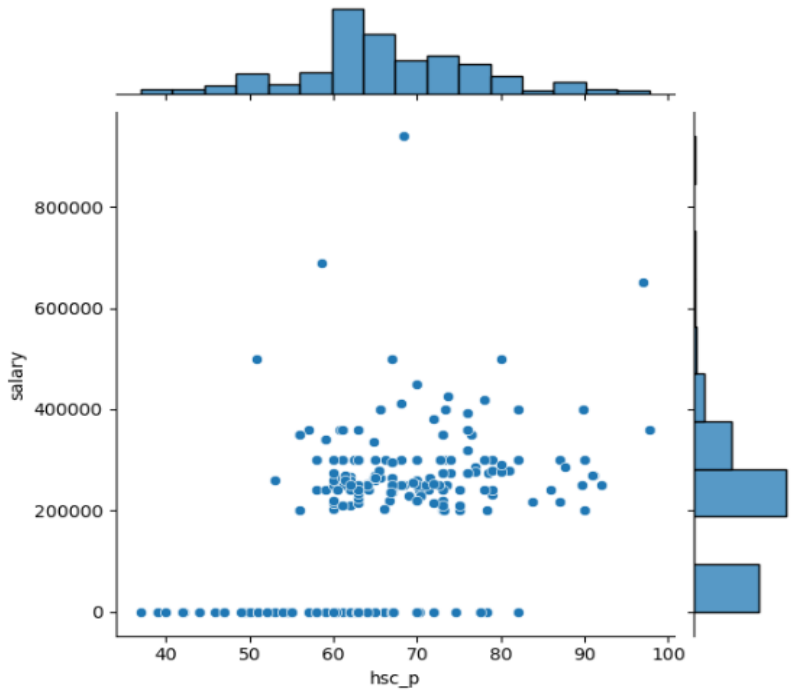
Joint Plot

Bivariate Analysis – between Numerical columns

```
sb.jointplot(x='hsc_p',y='salary',data = df)
plt.show()
```



Joint Plot

- This function used to visualize the relationship between two variables along with their individual distributions.
- It creates a scatter plot (or other plot types like hex, reg, or kde) to show the relationship, while also displaying marginal histograms or density plots along the x and y axes to represent the distributions of each variable.
- This provides a comprehensive view of both correlation and distribution in one visual.

Relationship

- Comparision between 12th Percentage & salary

Scatter plot

- Students who have scored between 60% – 80% salary ranges from 200k – 350k
- Students scored between 85% – 90% also getting the salary ranges from 200k – 350k
- Few students who scored between 65% – 82% salary ranges between 400k – 500k
- A student who scored 52% below average is getting the salary for about 500k
- Same salary range 500k was given for the student who scored 68% & 82%

- Surprisingly a student who scored an average 68% is getting the salary nearly 1000k
- On the other side, vice versa, a student who scored 98% is getting the salary less than 400k

Histogram

- Tells about the frequency of salary & 12^{th} percentages through which we can identify the density of the data.
- In $12^{th\ exam}$ maximum score obtained by the student ranges between 60 & 70
- Maximum salary ranges between 180k – 240k