

# VIOLINPLOT

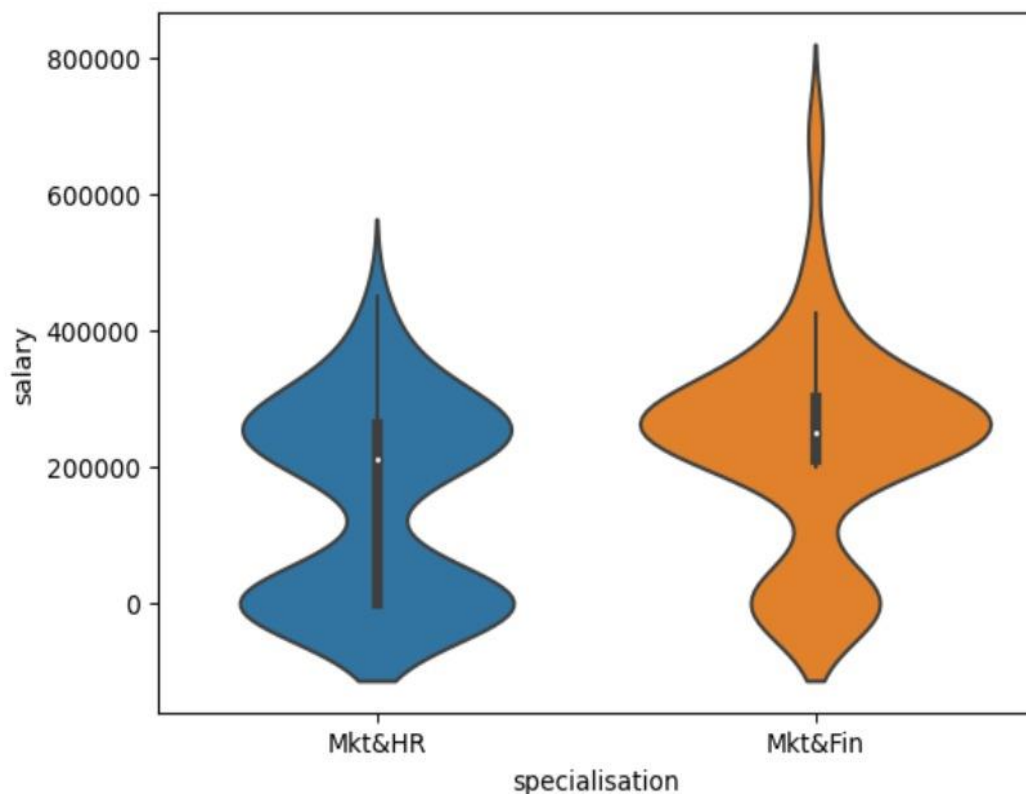
## VIOLINPLOT:

\* A violin plot is a type of data visualization that combines aspects of a box plot with a kernel density plot.

\* Violin plots are exploratory data analysis, providing a comprehensive view of the data and comparisons between different groups or categories. particularly useful when dealing with both numerical and categorical data.

Some examples in our dataset:

```
: import seaborn as sns
import matplotlib.pyplot as plt
sns.violinplot(x="specialisation", y="salary", data=dataset)
plt.show()
```

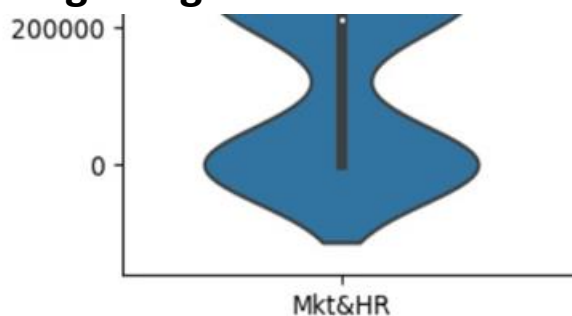


## VIOLINPLOT

Here, I am comparing data on "specialization" and "salary", including both categorical and numerical datasets. This analysis aims to determine which specialization is associated with the minimum and maximum salary values. Let's decode it.

### Market&HR:

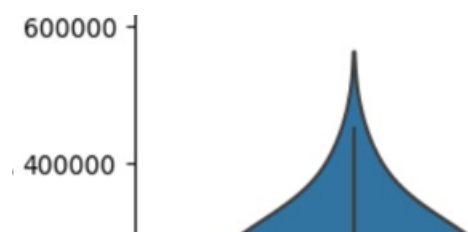
**"Minimum number of people in the market & HR team are getting salaries below range 2 lakh."**



**"But some set of people in the market&HR team are getting salaries ranging from 2 lakh to 4 lakh."**

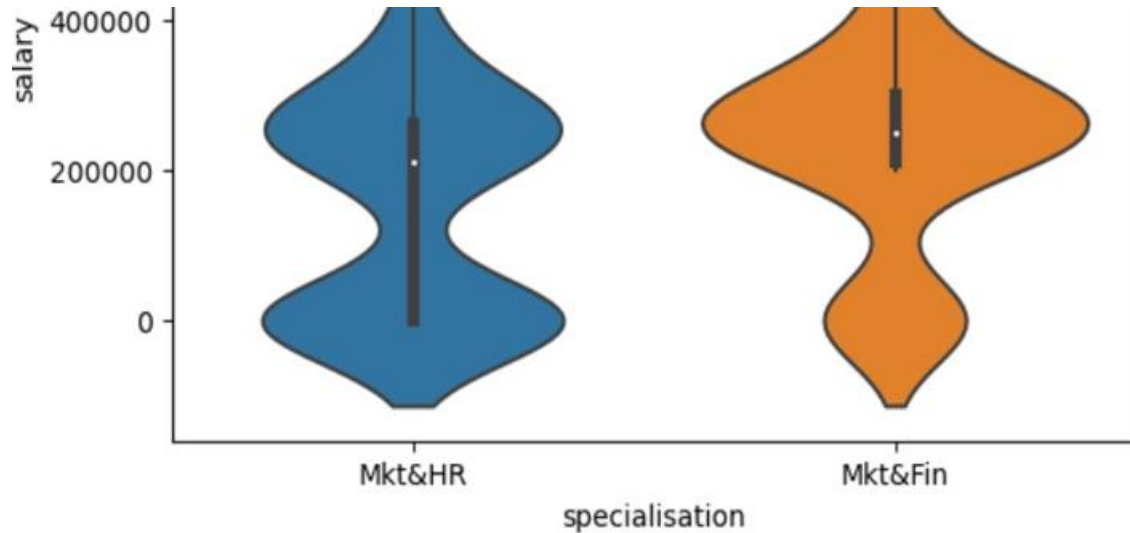


**"And finally, some members of the market &HR team are receiving salaries ranging from 4 lakh to 6 lakh and a half."**

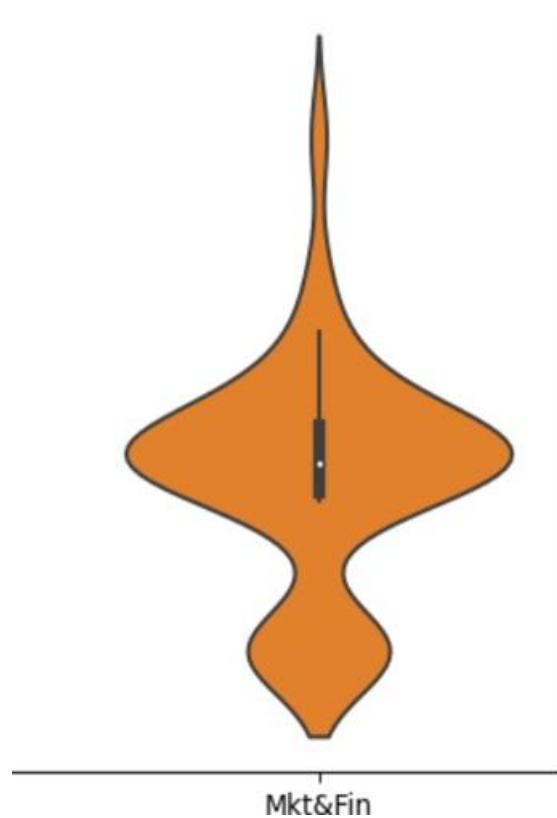


## VIOLINPLOT

**"Maximum number of people in the market & Fin team are getting salaries 2 lakhs to 4 lack."**

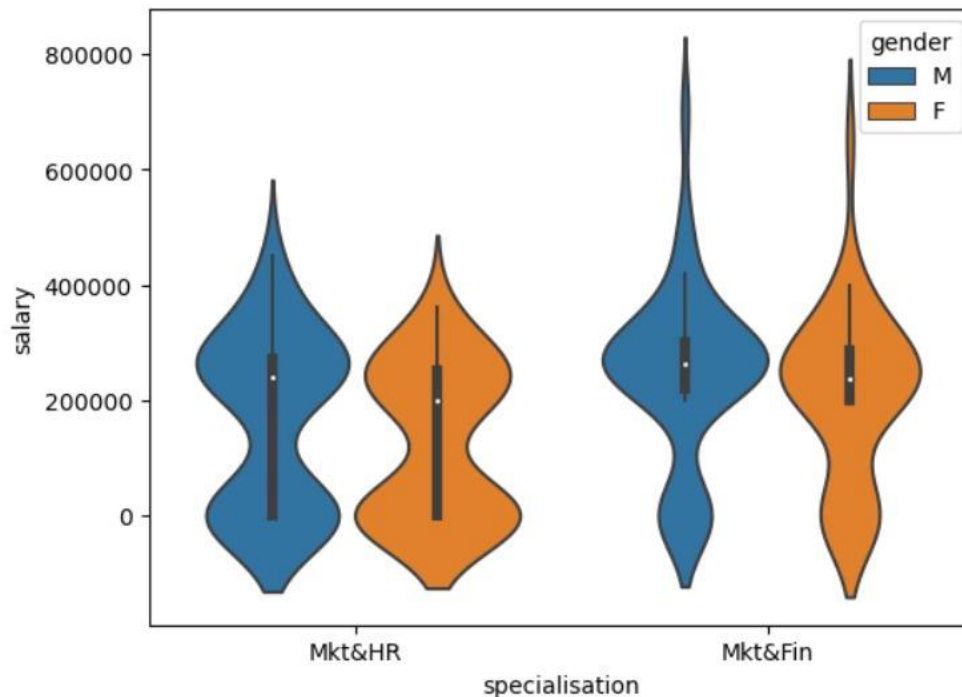


**"And finally, some members of the market &Fin team are receiving salaries ranging from 8 Lack".**



# VIOLINPLOT

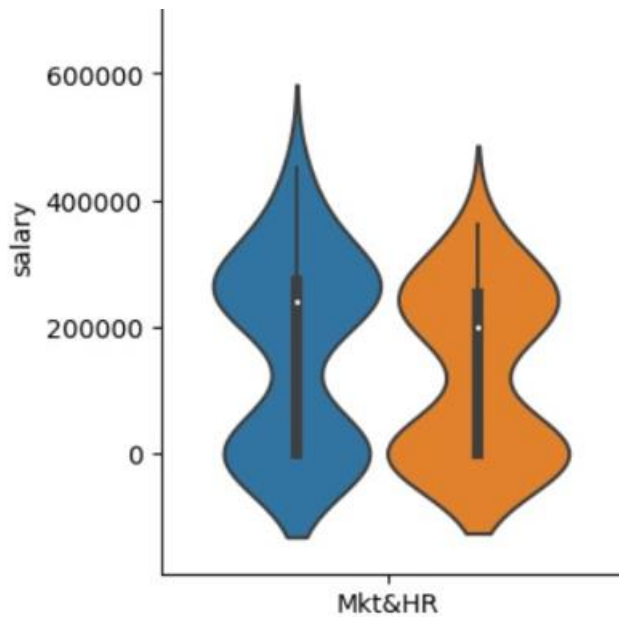
```
] import seaborn as sns
import matplotlib.pyplot as plt
sns.violinplot(x="specialisation", y="salary", data=dataset, hue="gender")
plt.show()
```



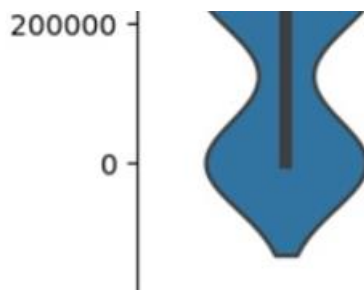
Here, I am analysing data on "specialization", "salary", and "gender", which includes both categorical and numerical datasets. This analysis aims to identify which specialization and gender combination is associated with the lowest and highest salaries, as well as the minimum and maximum salary values.

In this diagram, explain how "specialization" in Market & HR and Market & Fin relates to gender (male and female) in the salary's, comparing who receives the minimum and maximum salary.

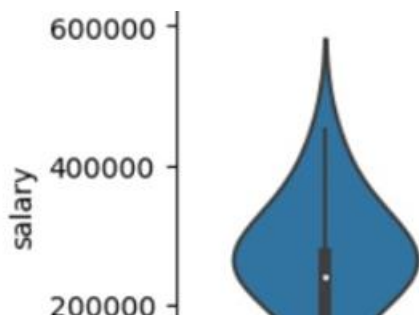
## VIOLINPLOT



In this picture, blue represents males, and orange represents females. In Market & HR, males are separated into two different salary groups, and similarly, females also differ in two salary groups.



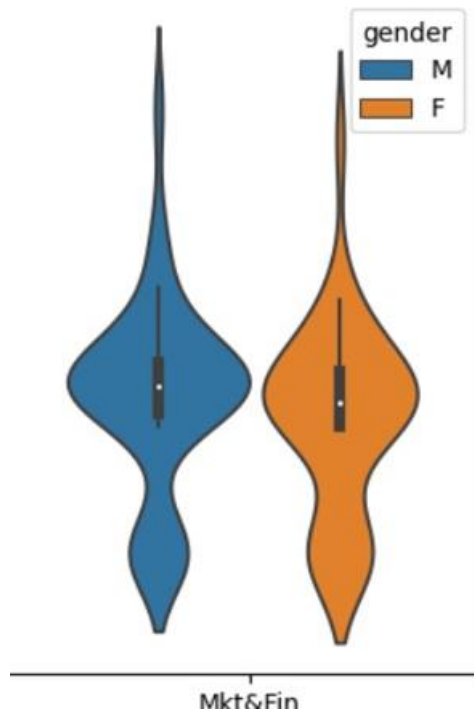
"Minimum number of people in the market & HR team are getting salaries below range 2 lakh."



## VIOLINPLOT

"But max set of people in the market&HR team are getting salaries ranging from 2 lakh to 4 lakh.

"And finally, some members set of the market &HR team are receiving salaries ranging from 4 lakh to 6 lakh".



"Minimum number of people in the market & HR team are getting salaries below range 2 lakh."

"But max set of people in the market&Fin team are getting salaries ranging from 2 lakh to 4 lakh.

"And finally, some members set of the market &Fin team are receiving salaries ranging from 8 lakh".

### CONCLUSION:

Comparison, both male and female employees in the Market & HR and Market & Fin teams receive higher salaries, but comparatively, both male and female employees in the

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Market & HR team receive lower salaries than those in the Market & Fin team.