

## EXPERIMENT NUMBER – 02

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**Branch: CSE**  
**Semester: 5<sup>th</sup>**  
**Subject: ML Lab**

**UID: 20BCS9256**  
**Section/Group: 616 'B'**  
**Date of Performance: 24/08/2022**

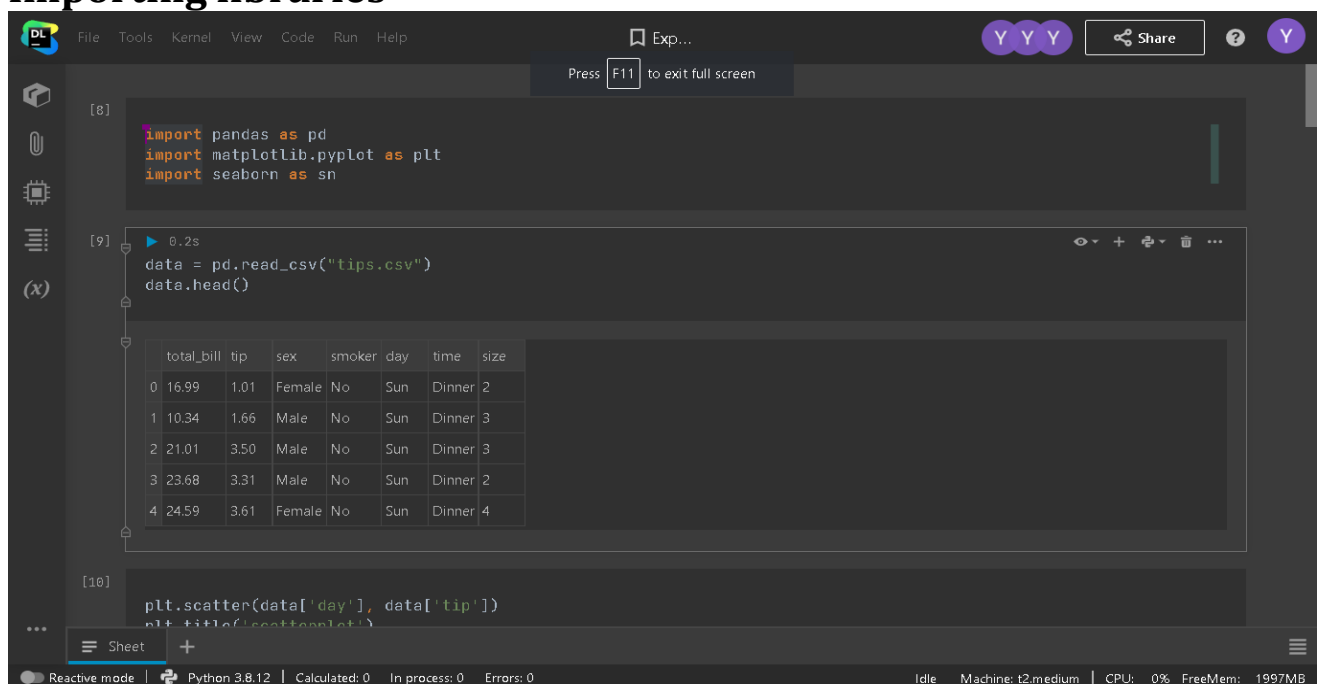
### ➤ AIM OF THE EXPERIMENT

Implement Data Visualization.

### ➤ APPARATUS

- Jupyter Notebook/Google Collab
- Python
- Pandas Library
- Seaborn Library
- Standard Dataset

## 1. Importing libraries



```
[8]
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns

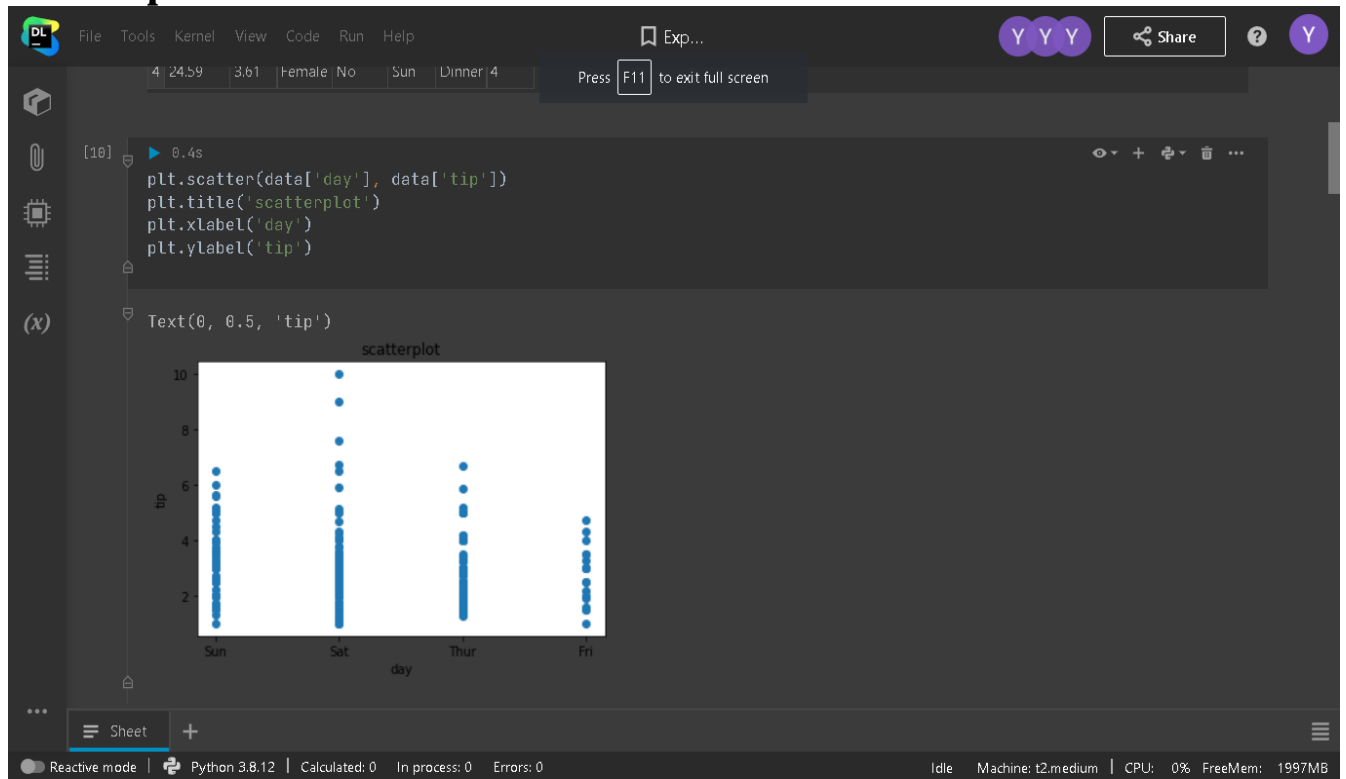
[9]
data = pd.read_csv("tips.csv")
data.head()
```

	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4

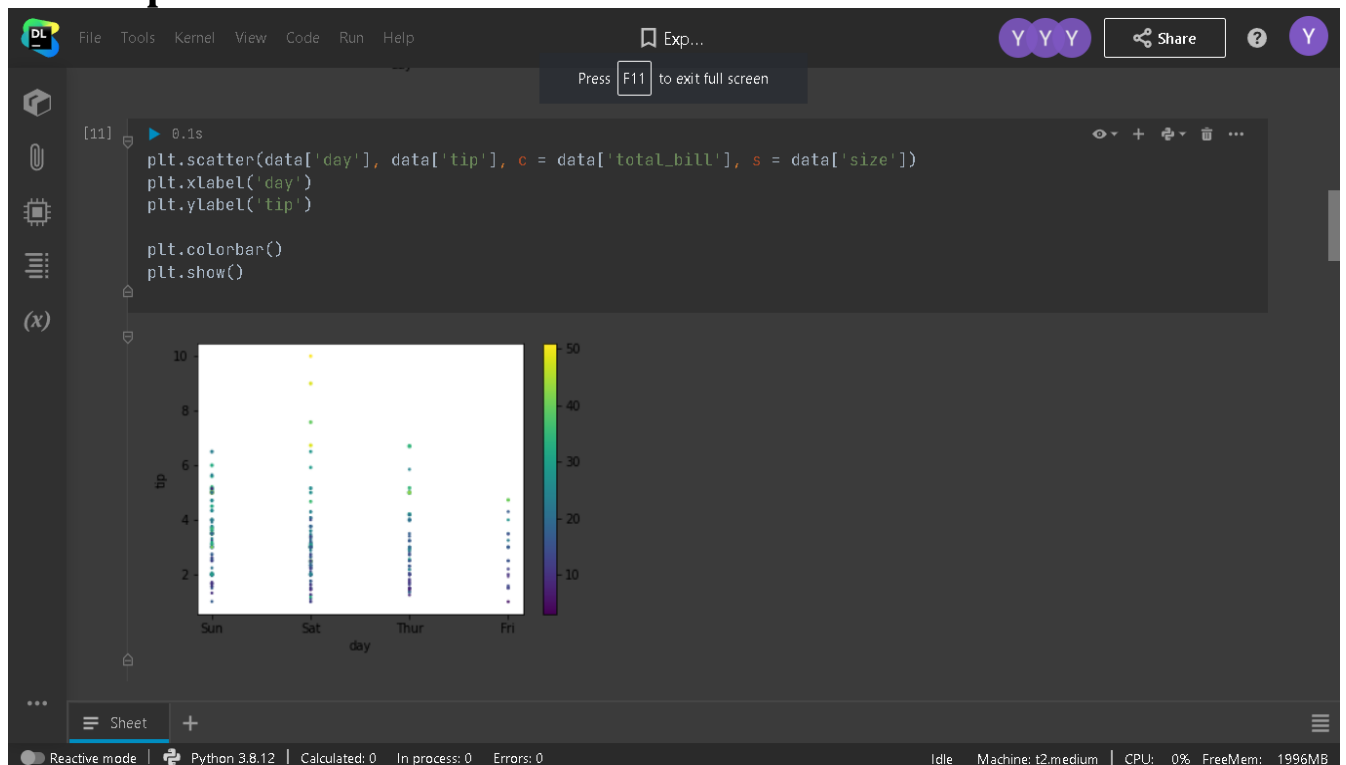
```
[10]
plt.scatter(data['day'], data['tip'])
plt.title('Scatterplot')
```

Reactive mode | Python 3.8.12 | Calculated: 0 | In process: 0 | Errors: 0 | Idle | Machine: t2.medium | CPU: 0% | FreeMem: 1997MB

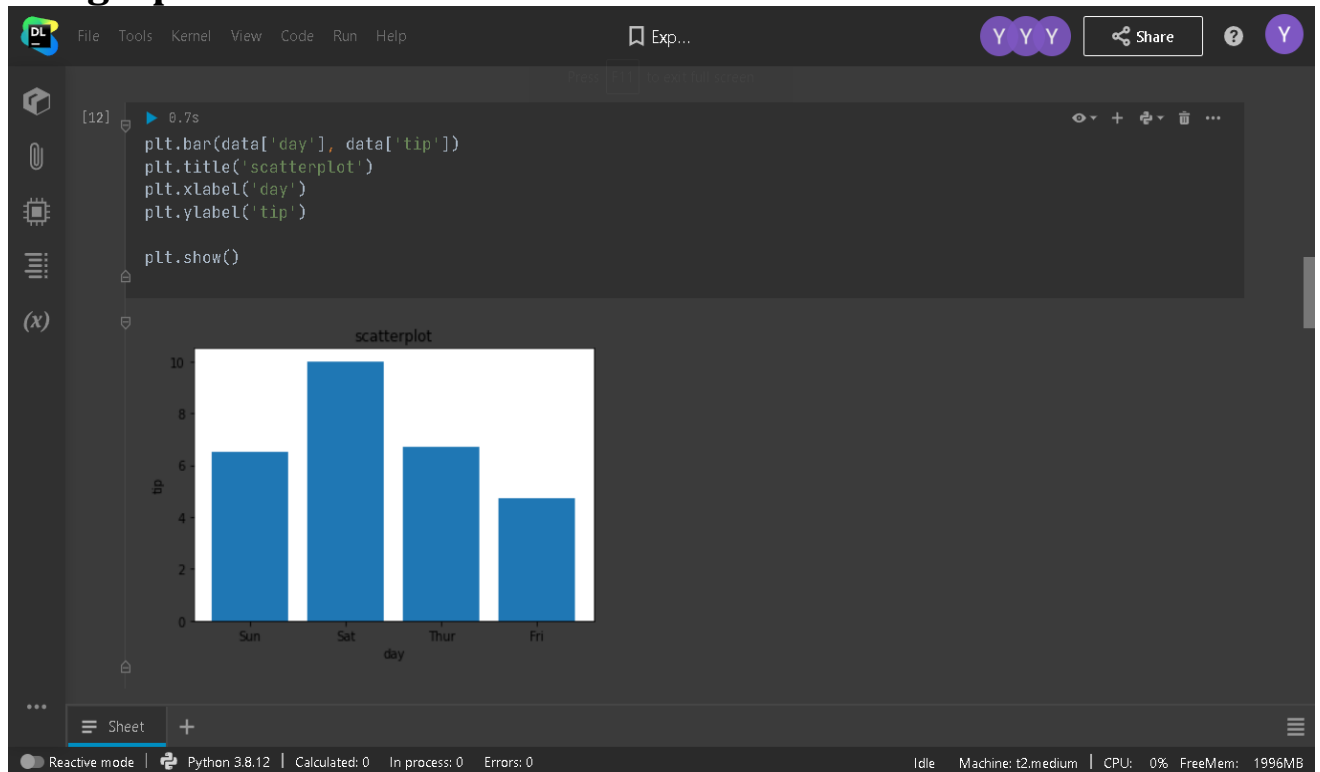
## 2. Scatterplot



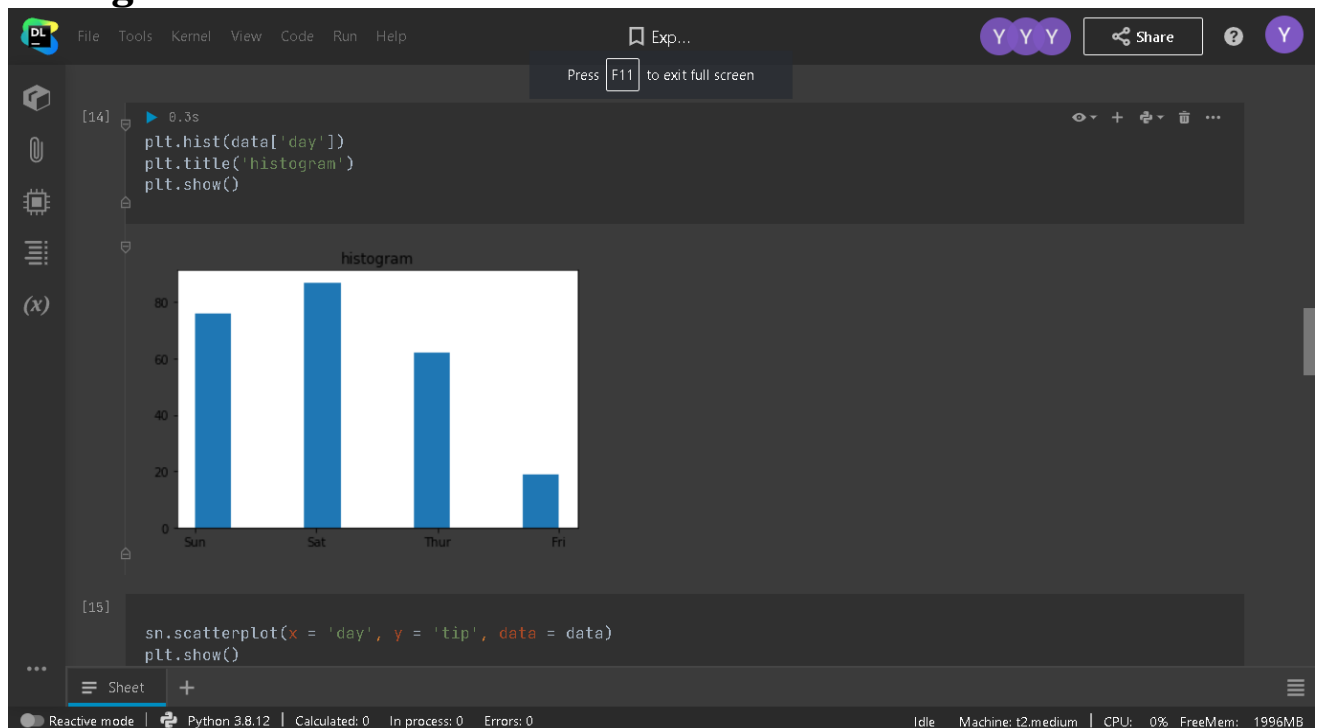
## 3. Scatterplot With Color Bar



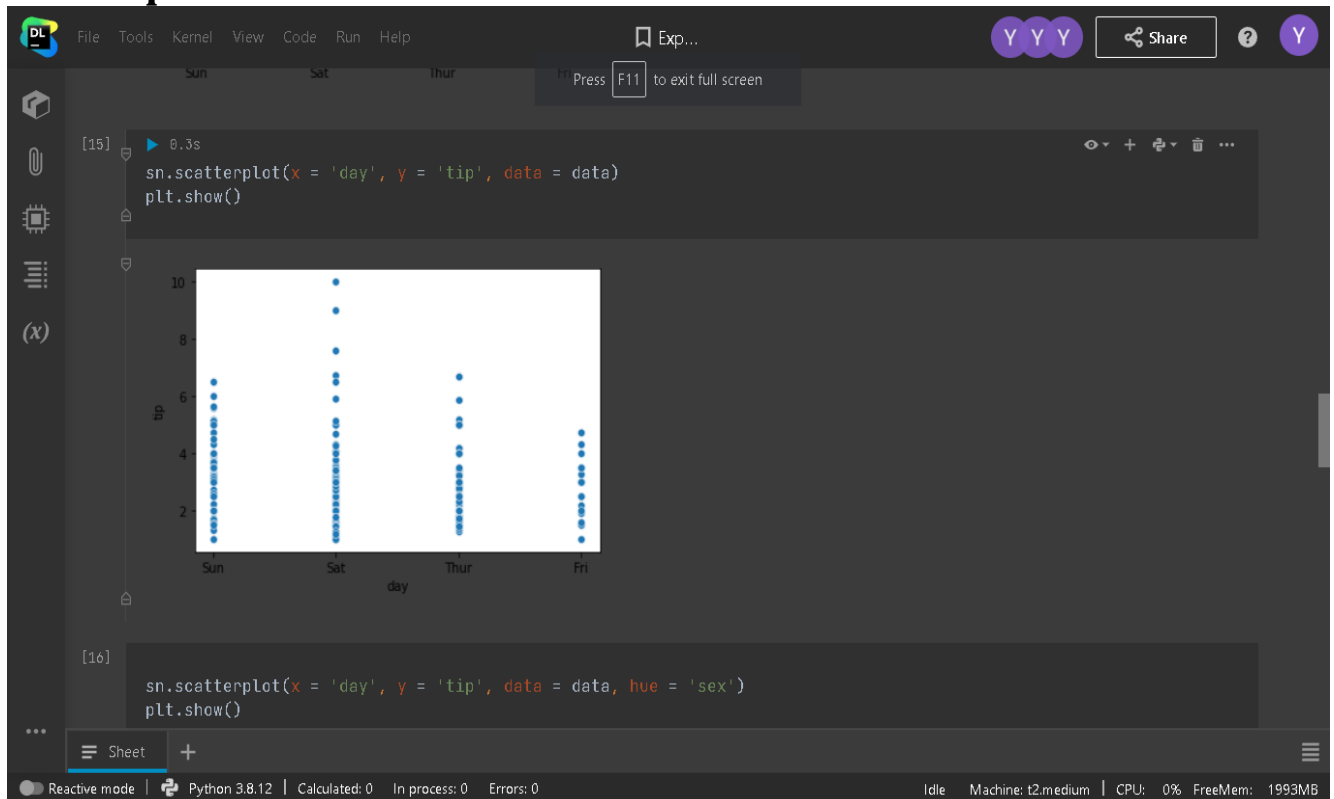
## 4. Bar graph



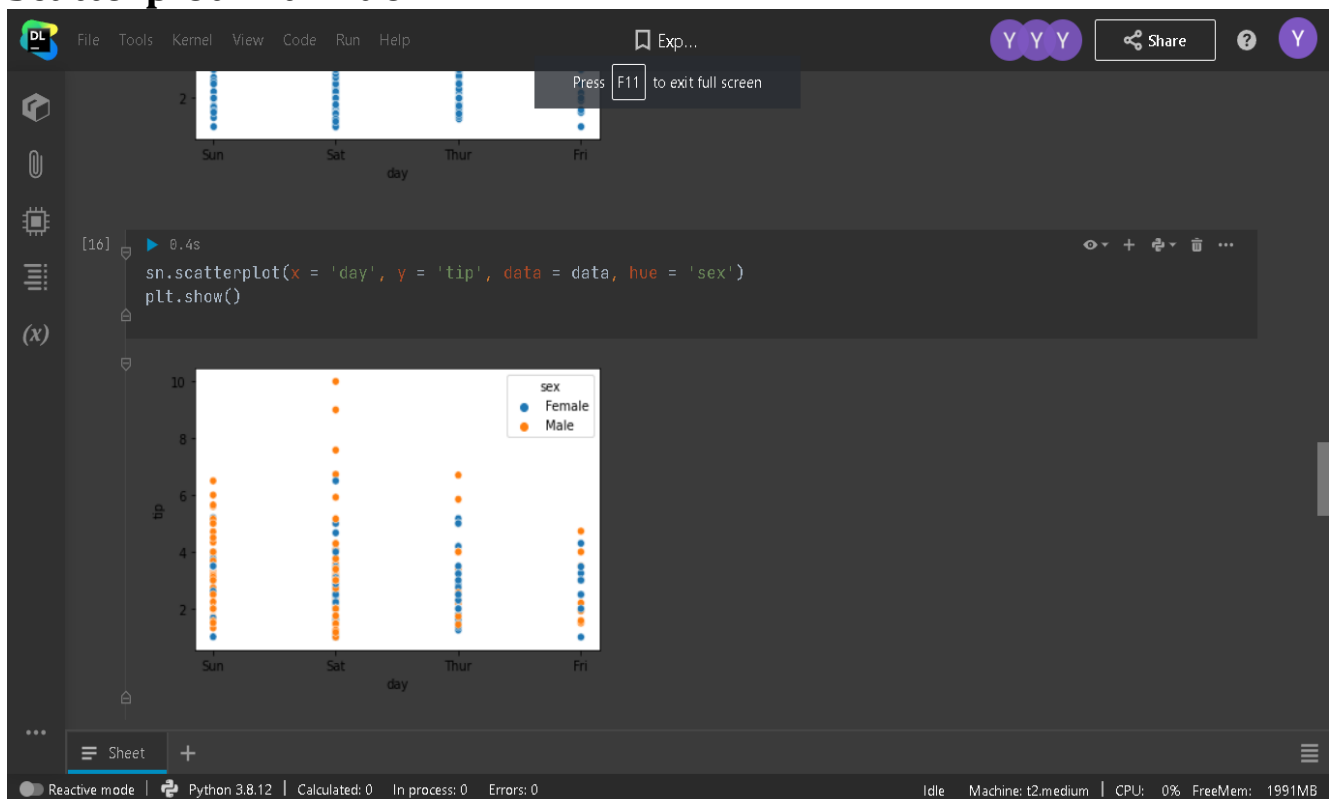
## 5. Histogram



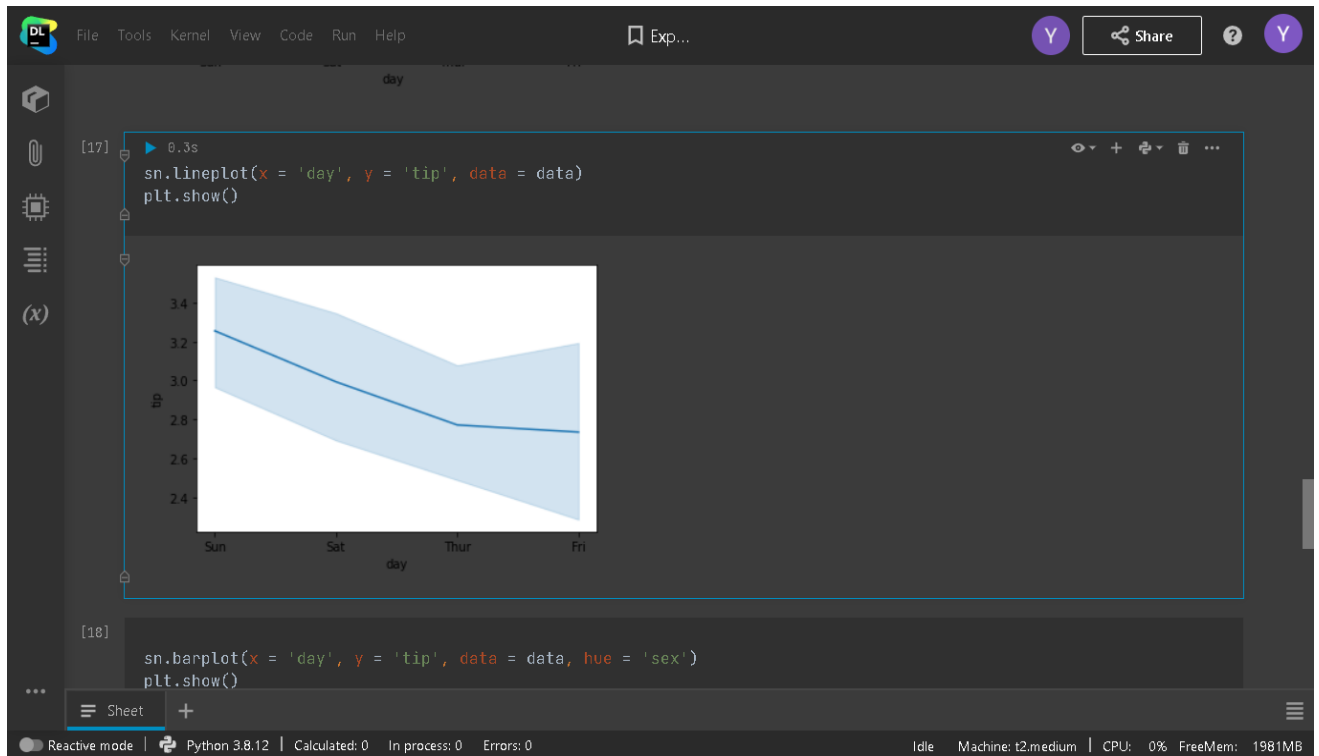
## 6. Scatterplot



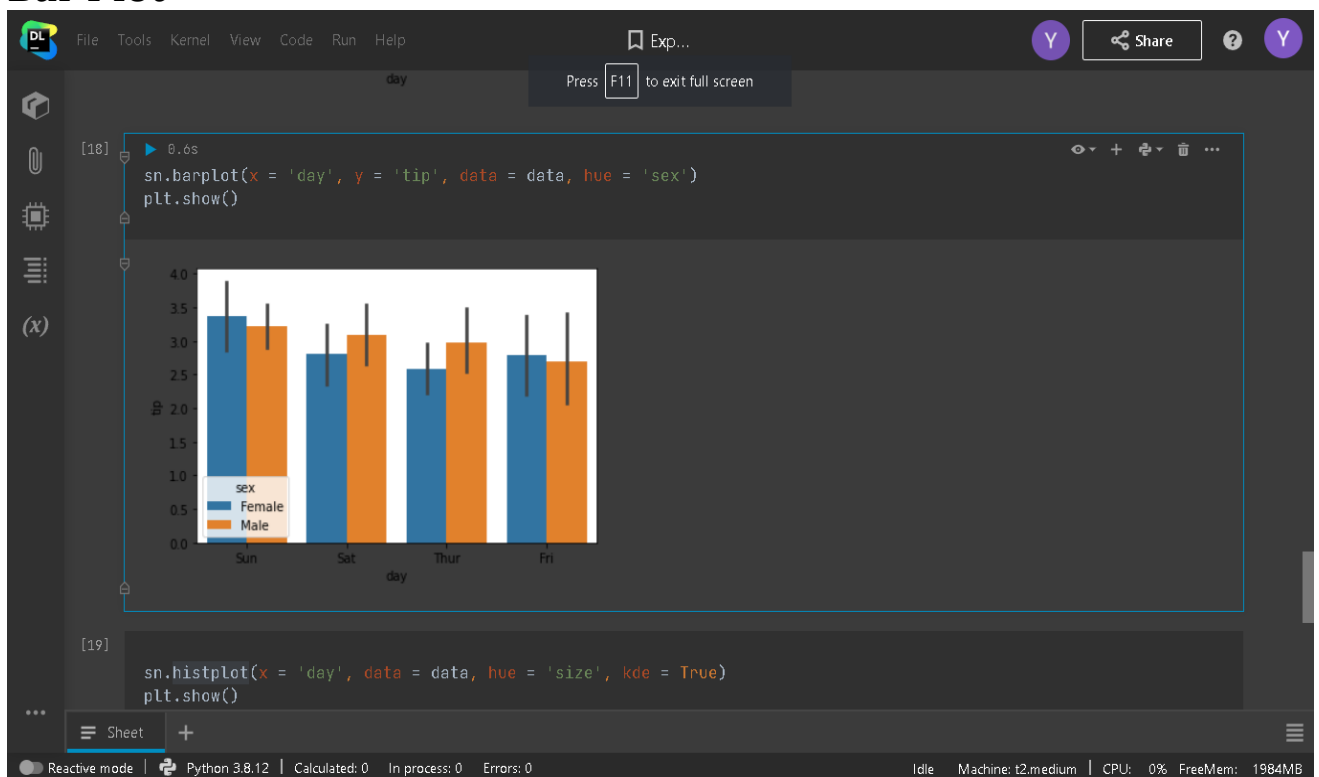
## 7. Scatterplot with hue



## 8. Line Plot



## 9. Bar Plot



## 10. HistPlot

