Machine Learning Lab

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Exercise 1 BoxPlot (Measure of Dispersion of data)

Tips dataset downloaded from **Github**

Dataset url : https://gist.github.com/ryanorsinger/0c702f67dfe59346cd4677cd24f7aec7

Collab url : https://colab.research.google.com/drive/1UP02FLbTROsYtO1pND5F-ziDUO0z3lff?usp=sharing

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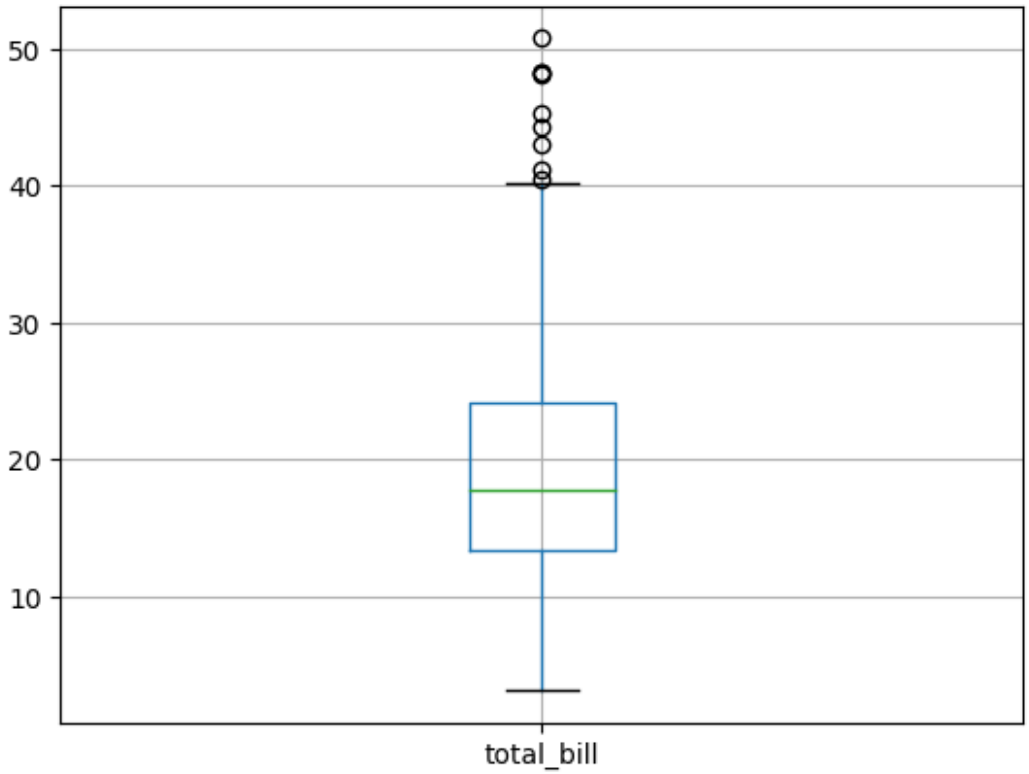
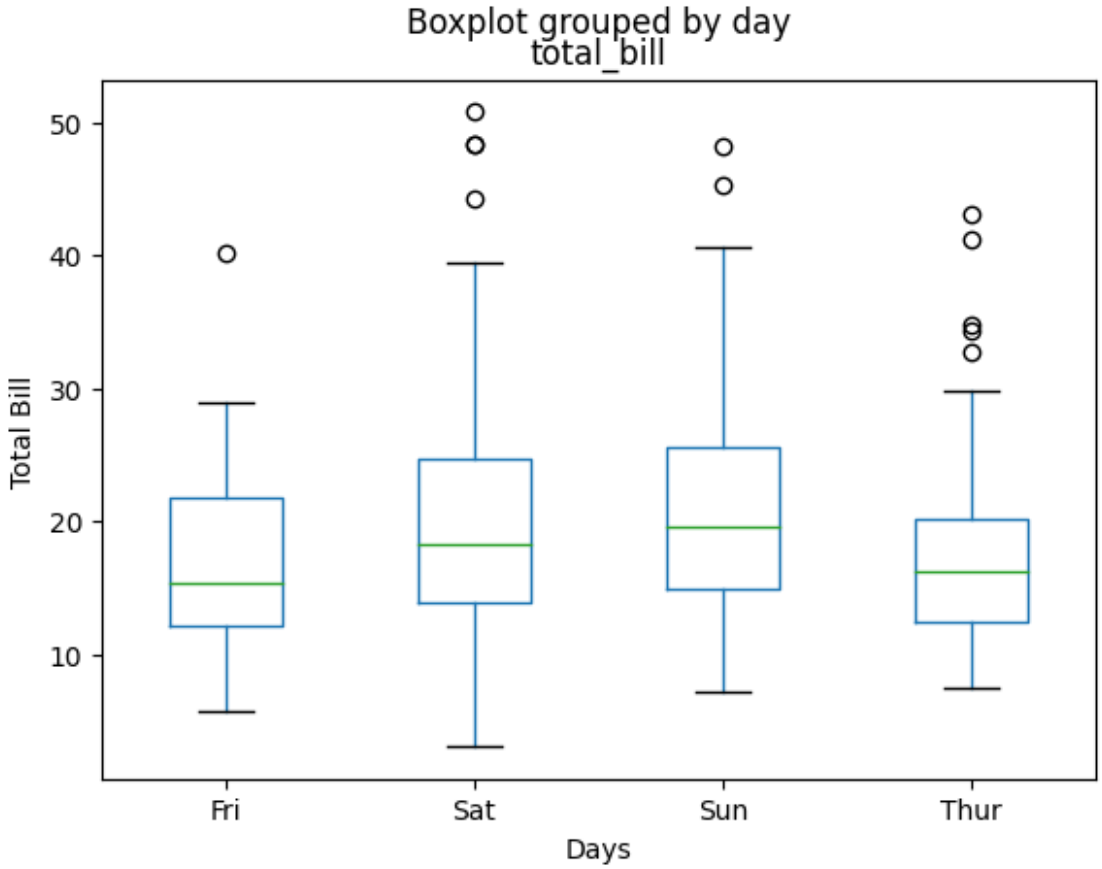
Creating a box plot of the tip variable on the y axis and the day variable on the x axisreating a boxplot of the total bill column in the tips.csv dataset.

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
Data = pd.read_csv('/content/tips.csv')
Data.boxplot(column==['total_bill'])
plt.show()
```



Performing a boxplot of the total bill by day.

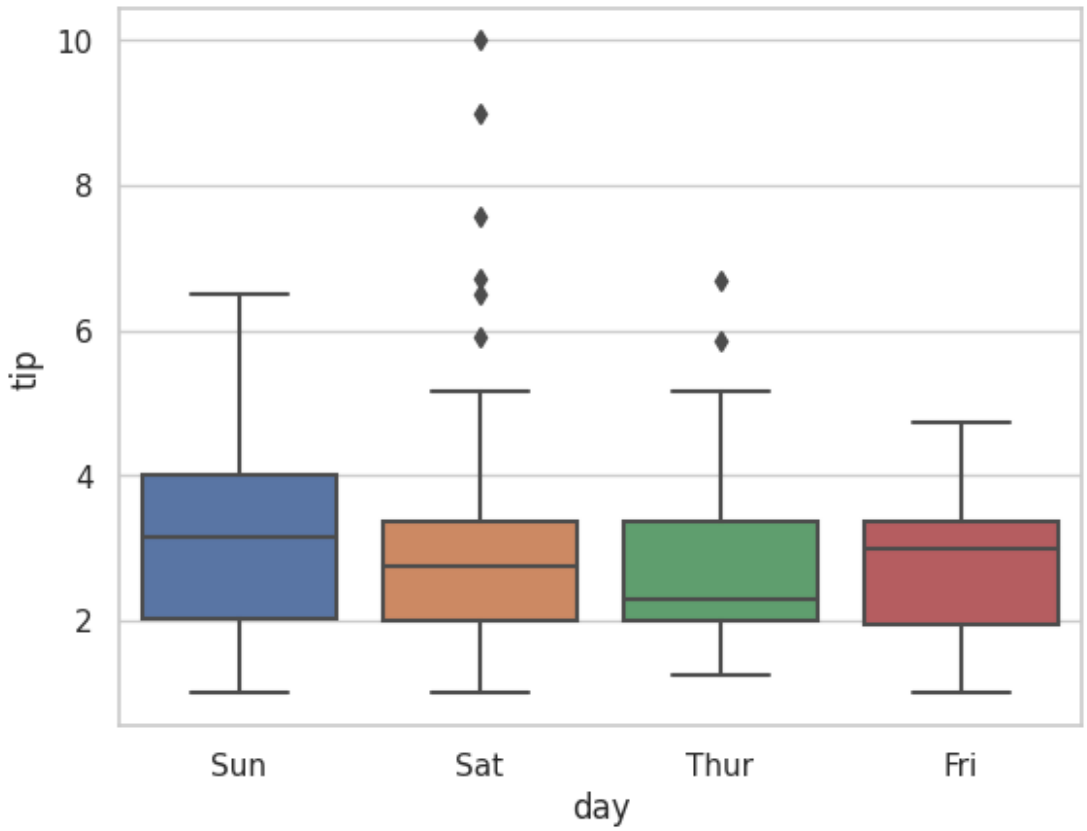
```
import pandas as pd
import matplotlib.pyplot as plt
Data =pd.read_csv('/content/tips.csv')
Data.boxplot(by ='day', column =['total_bill'], grid=False)
plt.ylabel('Total Bill')
plt.xlabel('Days')
plt.show()
```



Creating a boxplot using Seaborn.

```
import seaborn
seaborn.set(style='whitegrid')
tip = pandas.read_csv('/content/tips.csv')
seaborn.boxplot(x='day', y='tip', data=tip)
```

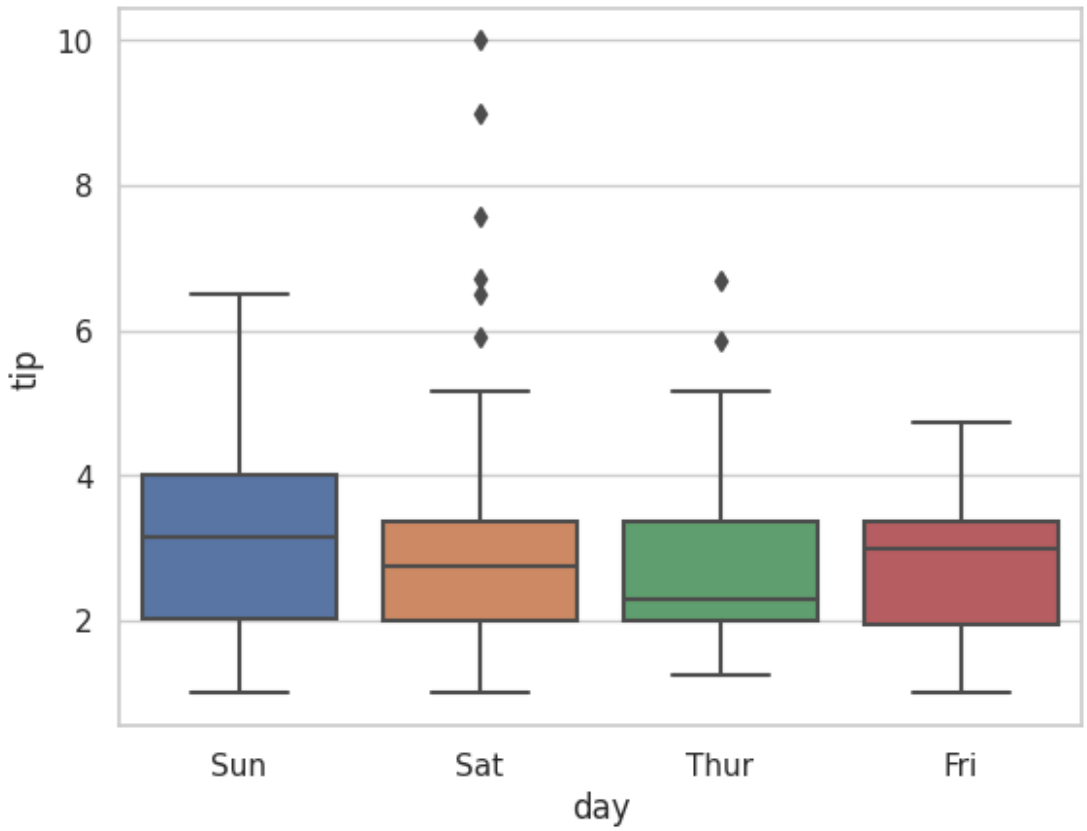
```
<Axes: xlabel='day', ylabel='tip'>
```



Creating a boxplot of the tip variable on the y axis and the day variable on the x axis

```
import seaborn
seaborn.set(style='whitegrid')
seaborn.boxplot(x='day', y='tip', data=Data)
```

```
<Axes: xlabel='day', ylabel='tip'>
```


10
8
6
4
2
tip
Sun
Sat
Thur
Fri
day