



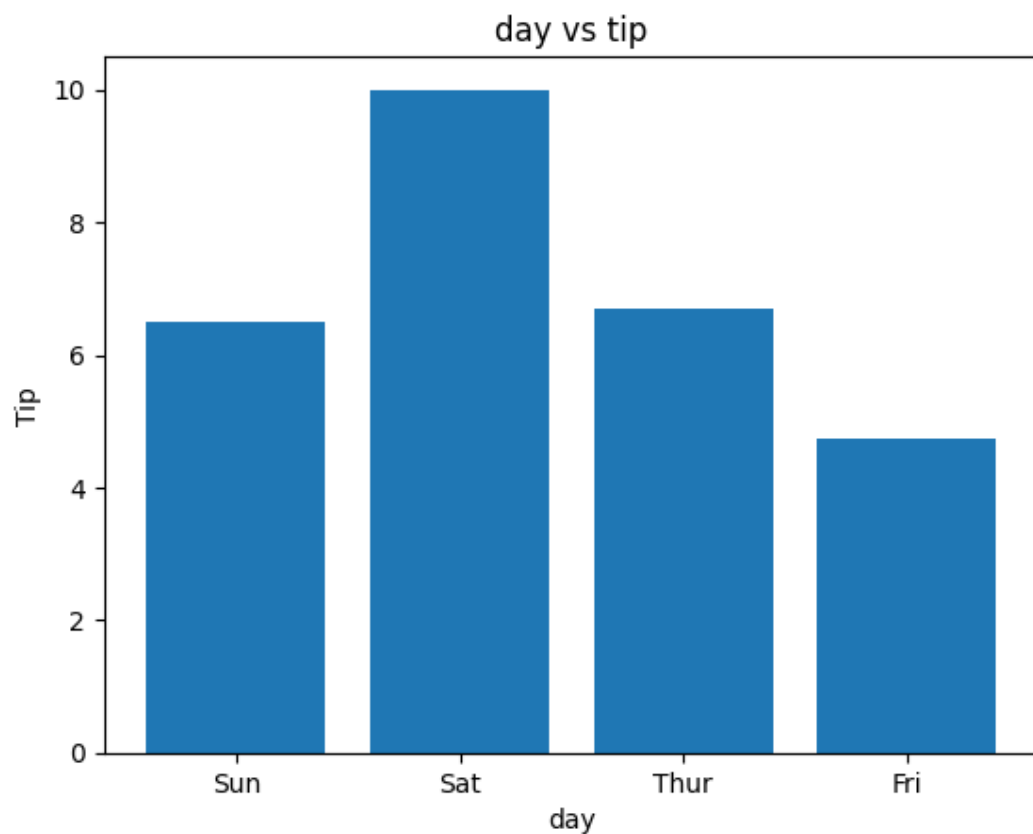
▼ Tips dataset plots EXP_6

```
# @title Tips dataset plots EXP_6
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

```
df=pd.read_csv("/content/drive/MyDrive/DV lab/tips.csv")
df.head()
```

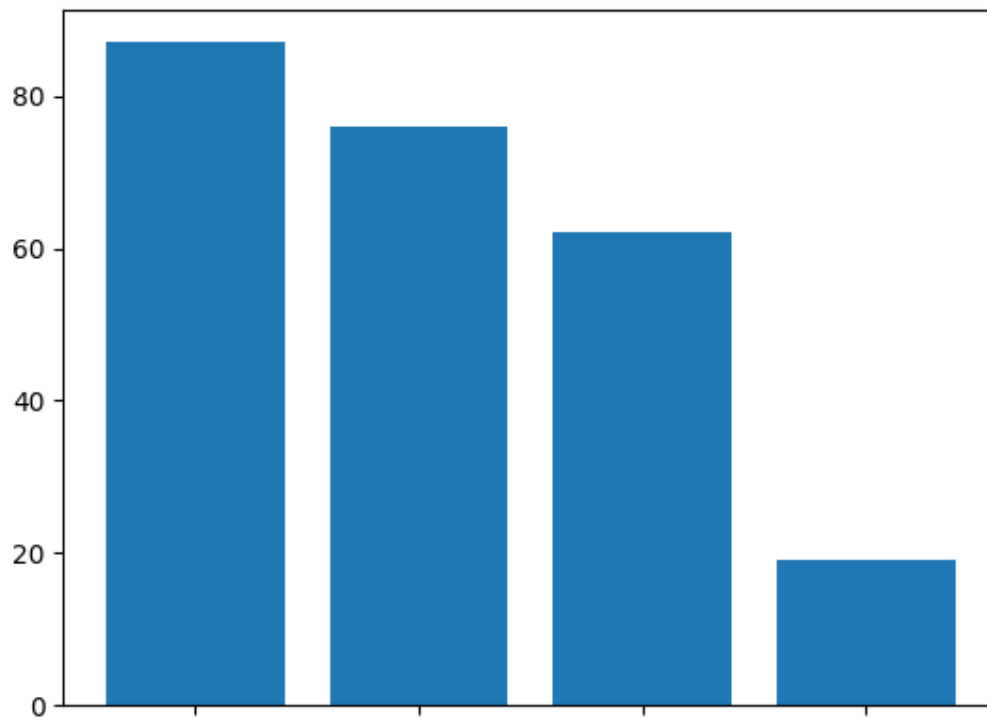
	total_bill	tip	sex	smoker	day	time	size	
0	16.99	1.01	Female	No	Sun	Dinner	2	
1	10.34	1.66	Male	No	Sun	Dinner	3	
2	21.01	3.50	Male	No	Sun	Dinner	3	
3	23.68	3.31	Male	No	Sun	Dinner	2	
4	24.59	3.61	Female	No	Sun	Dinner	4	

```
#bar chart
plt.bar(df['day'],df['tip'])
plt.title("day vs tip")
plt.xlabel("day")
plt.ylabel("Tip")
plt.show()
sns.barplot(x='day',y='tip',data=df)
plt.legend()
plt.show()
```

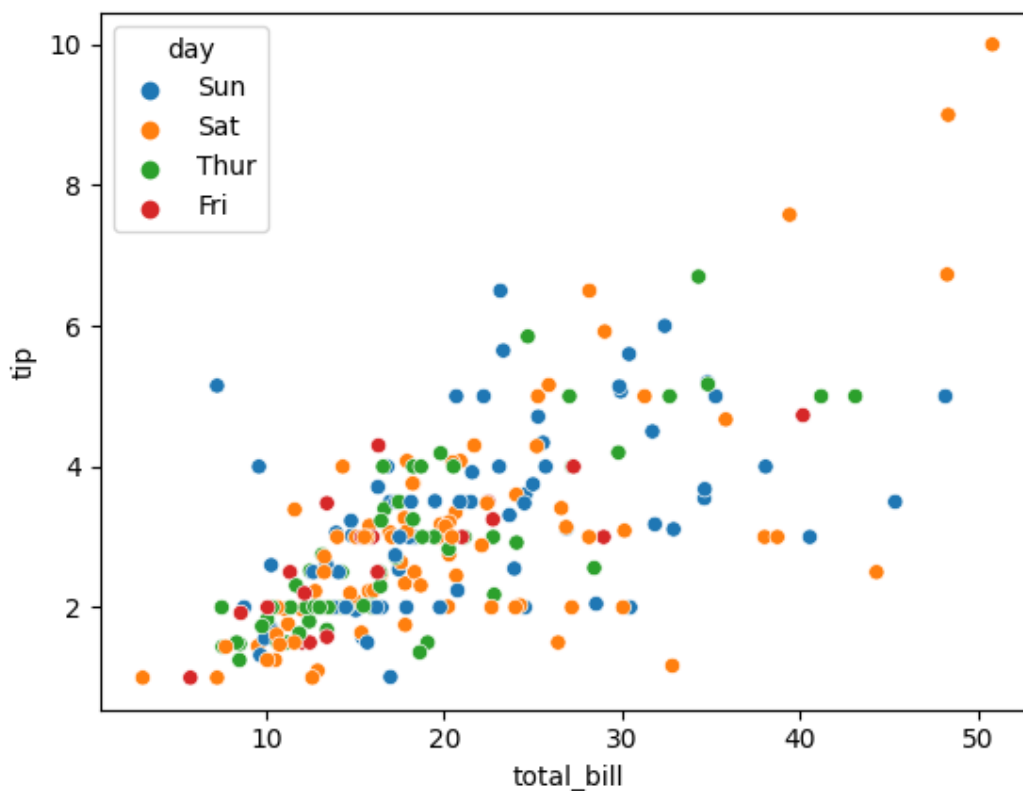


WARNING:matplotlib.legend:No artists with labels found to put in legend. Note that :

```
a=pd.DataFrame(df['day'].value_counts())
a.reset_index(inplace=True)
plt.bar(a['index'],a['day'])
plt.show()
sns.barplot(x='index',y='day',data=a)
plt.show()
```



```
plt.scatter(df['total_bill'],df['tip'])  
plt.show()  
sns.scatterplot(x='total_bill',y='tip',data=df,hue='day')  
plt.show()
```



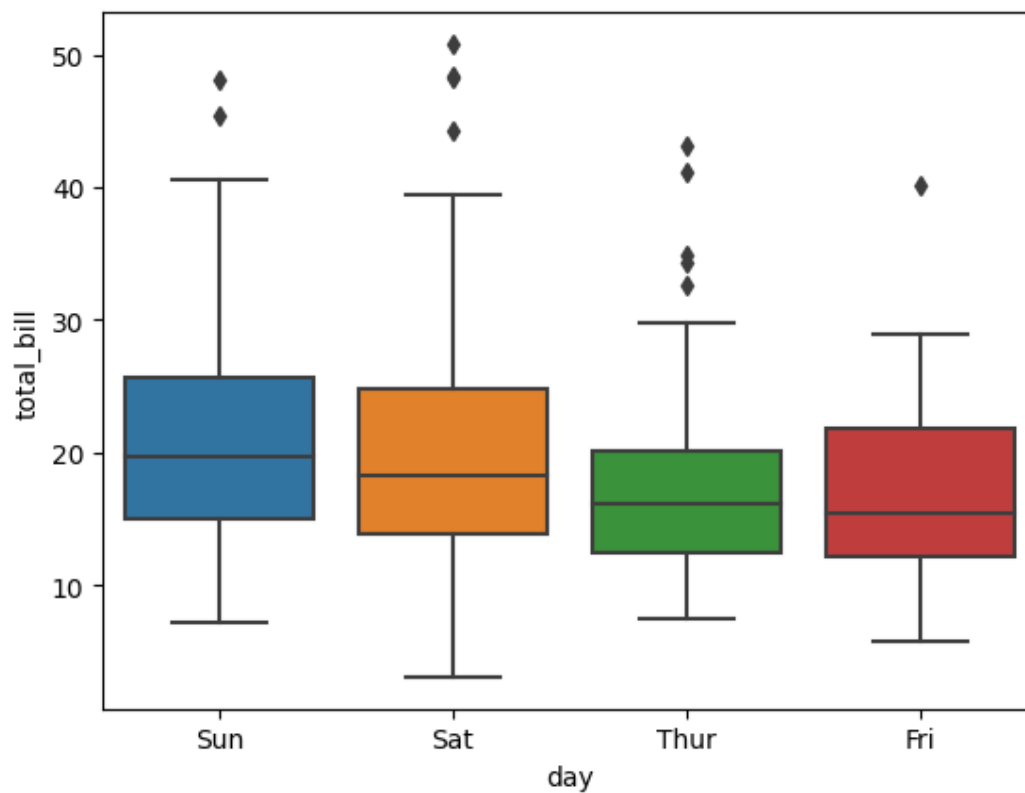
```
sns.heatmap(df.corr(),annot=True)  
plt.show()
```

```
<ipython-input-7-f6412ee67fb3>:1: FutureWarning: The default value of numeric_only in  
sns.heatmap(df.corr(),annot=True)
```



```
sns.pairplot(data=df,hue='sex')  
plt.show()
```

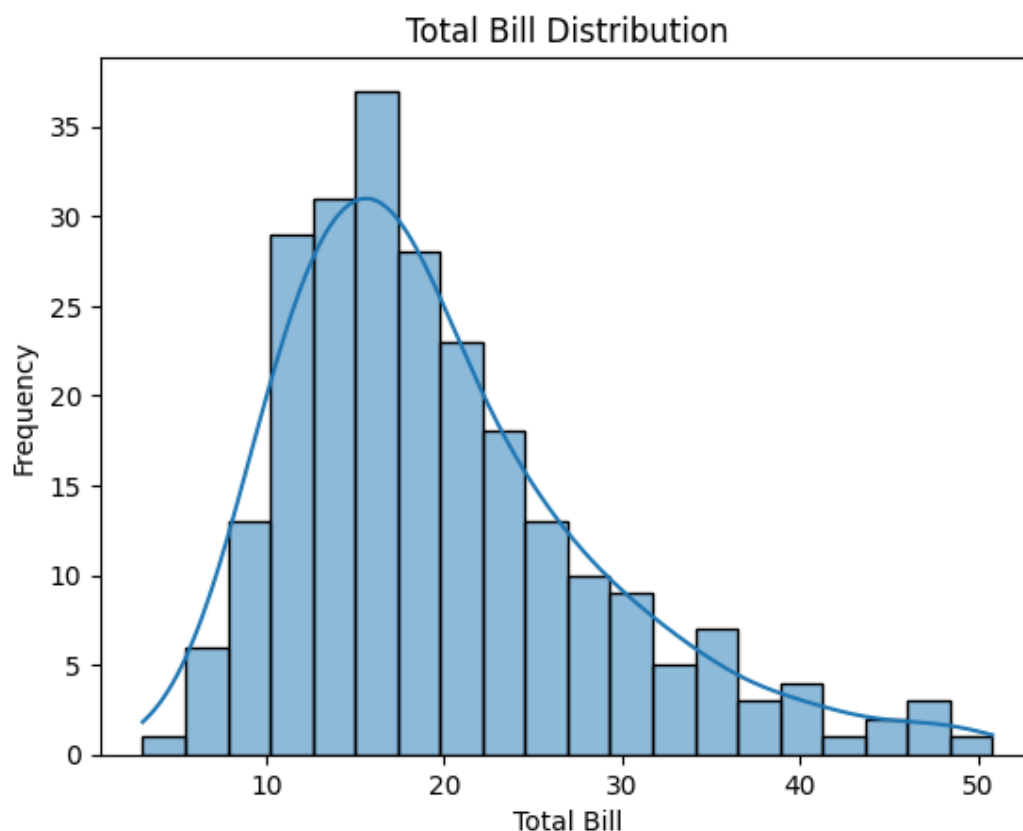
```
sns.boxplot(x='day',y='total_bill',data=df)  
plt.show()
```



```
df.groupby('day').mean()['total_bill'].plot(kind='line')  
plt.show()
```

<ipython-input-10-0b580bfc64bb>:1: FutureWarning: The default value of numeric_only :

```
sns.histplot(df['total_bill'],bins=20,kde=True)
plt.title("Total Bill Distribution")
plt.xlabel("Total Bill")
plt.ylabel("Frequency")
plt.show()
```



```
data={
    'total_bill':[16.99,10.34,21.01,23.68,24.59],
    'tip':[1.01,1.66,3.5,3.31,3.61]
}
df=pd.DataFrame(data)
plt.errorbar(range(len(df)),df['total_bill'],yerr=df['tip'],fmt='o',color='green',label='Total t
plt.xticks(range(len(df)),range(1,len(df)+1))
plt.xlabel('Data point Index')
plt.ylabel('Total Bill')
plt.title("Error chart for Total BIl1")
plt.grid()
plt.legend()
plt.show()
```

