

```
In [1]: #pip install --upgrade seaborn
```

```
In [2]: import warnings
warnings.filterwarnings("ignore", category=FutureWarning)
```

```
In [3]: import seaborn as sns#sns -seaborn
```

```
In [4]: sns.get_dataset_names() #inbuild dataset available
```

```
Out[4]: ['anagrams',
        'anscombe',
        'attention',
        'brain_networks',
        'car_crashes',
        'diamonds',
        'dots',
        'dowjones',
        'exercise',
        'flights',
        'fmri',
        'geyser',
        'glue',
        'healthexp',
        'iris',
        'mpg',
        'penguins',
        'planets',
        'seaice',
        'taxi',
        'tips',
        'titanic']
```

```
In [5]: tips = sns.load_dataset("tips")
tips.head() #gives 1st-5 rows
```


```
Out[5]:
```

| | 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 |

```
In [6]: titanic = sns.load_dataset("titanic")#dataset-excelsheet
titanic.head()
```

Out[6]:

| | survived | pclass | sex | age | sibsp | parch | fare | embarked | class | who | adul |
|---|----------|--------|--------|------|-------|-------|---------|----------|-------|-------|------|
| 0 | 0 | 3 | male | 22.0 | 1 | 0 | 7.2500 | S | Third | man | |
| 1 | 1 | 1 | female | 38.0 | 1 | 0 | 71.2833 | C | First | woman | |
| 2 | 1 | 3 | female | 26.0 | 0 | 0 | 7.9250 | S | Third | woman | |
| 3 | 1 | 1 | female | 35.0 | 1 | 0 | 53.1000 | S | First | woman | |
| 4 | 0 | 3 | male | 35.0 | 0 | 0 | 8.0500 | S | Third | man | |



In [7]: `sns.set_theme(style="darkgrid")`

In [8]: `tips.to_csv("tips_dataset.csv",index=False)#sns dataset will stored in my system`
`import pandas as pd`

In [9]: `import os`
`os.getcwd()`

Out[9]: 'C:\\Users\\Ramya'

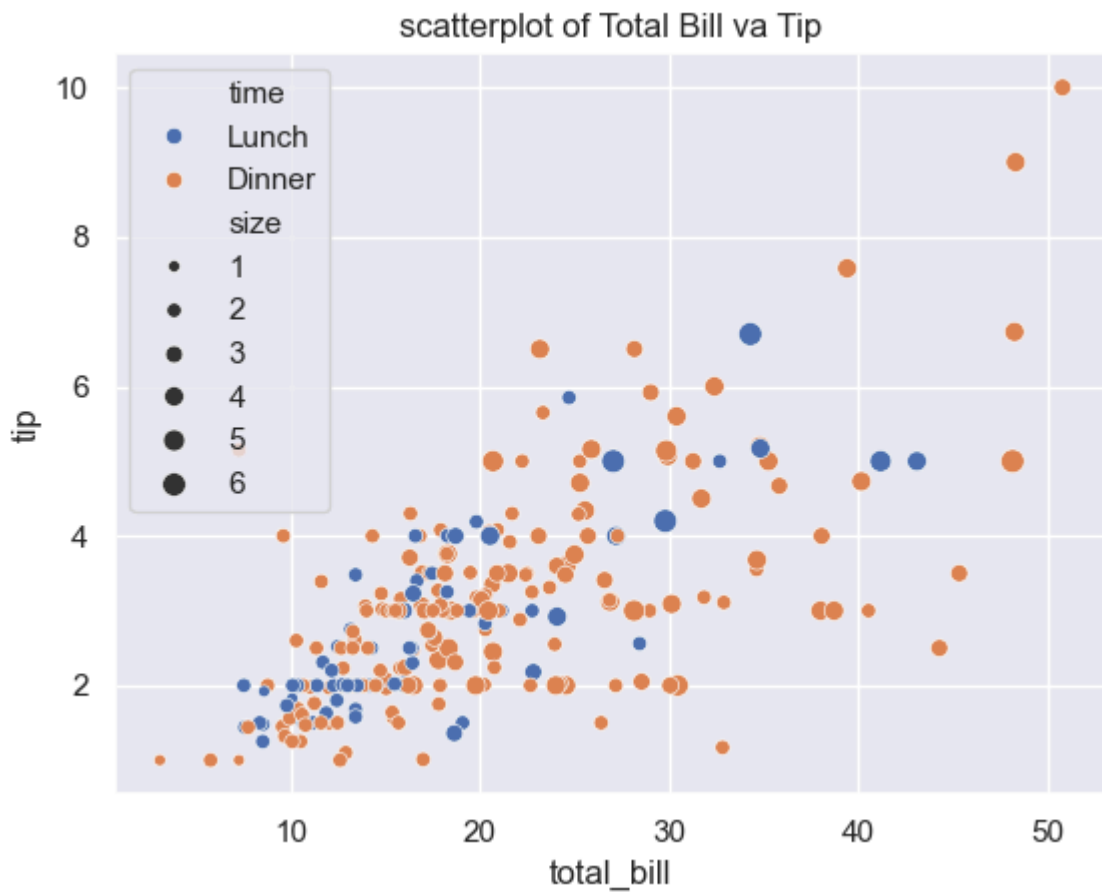
1.ScatterPlot

In [10]: `import matplotlib.pyplot as plt`

In [11]: `plt.figure(figsize=(8,6))`

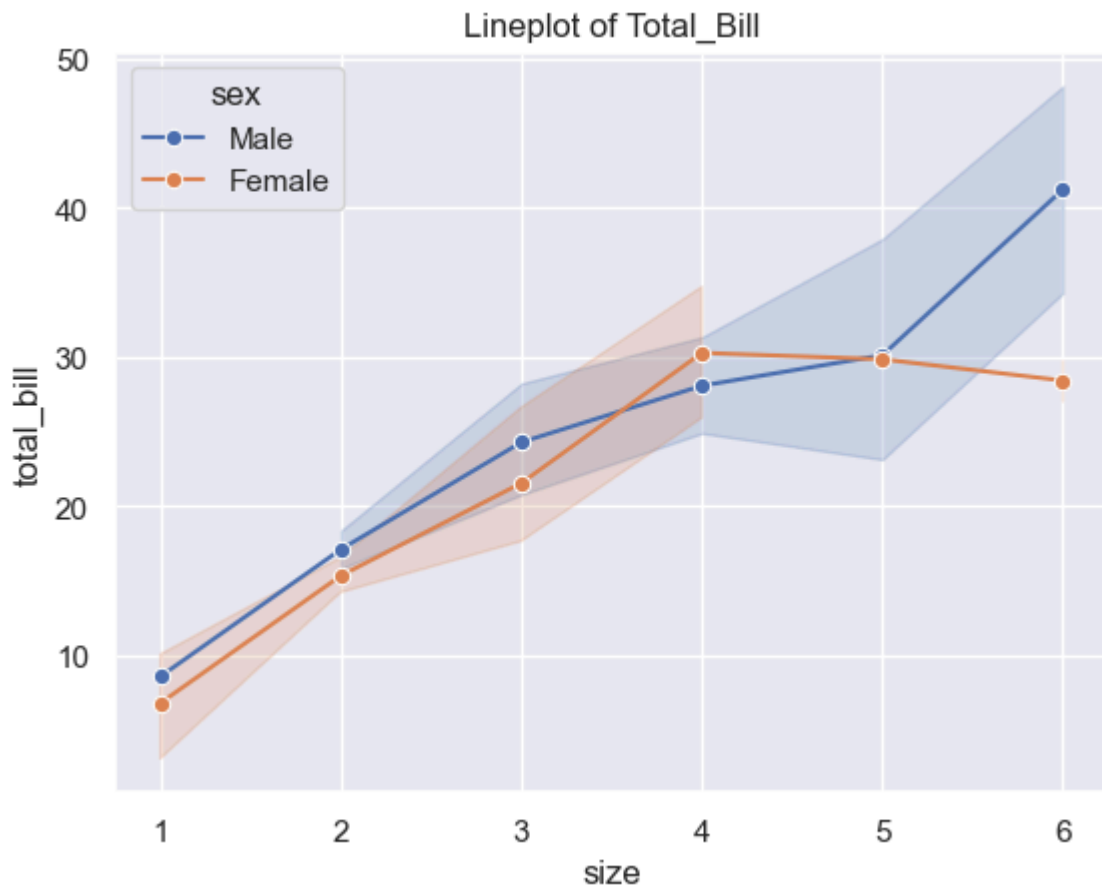
Out[11]: <Figure size 800x600 with 0 Axes>
 <Figure size 800x600 with 0 Axes>

In [12]: `sns.scatterplot(data=tips,x="total_bill",y="tip",hue="time",size="size",palette=`
`plt.title("scatterplot of Total Bill va Tip")`
`plt.show()`

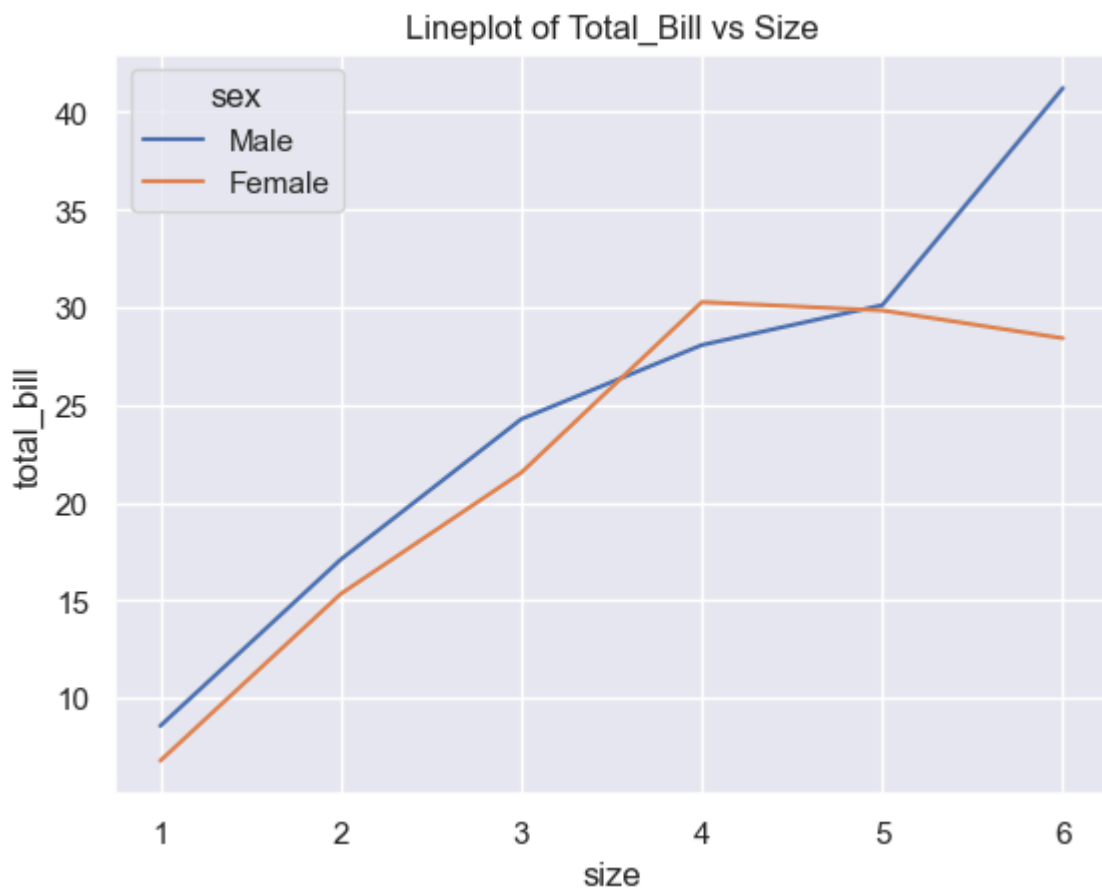


2.LinePlot

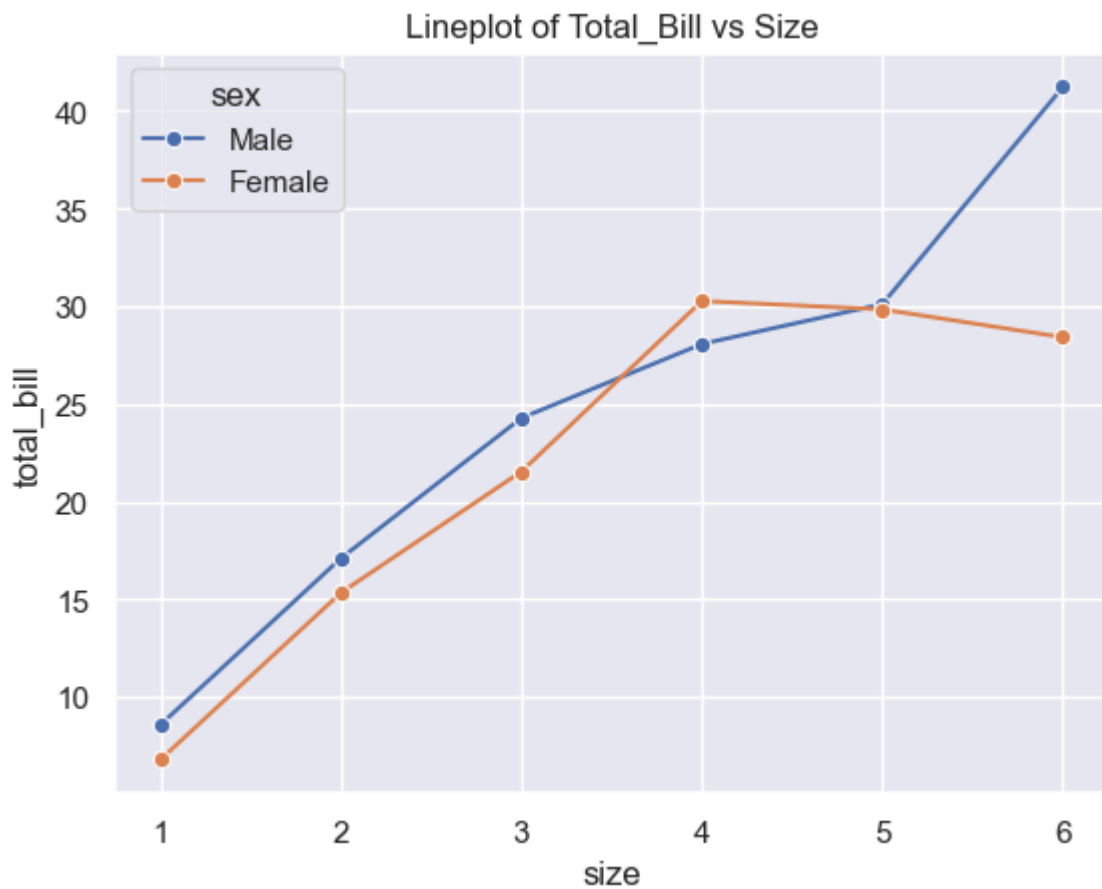
```
In [13]: sns. lineplot(data=tips,x='size',y='total_bill',hue='sex',marker='o')  
plt.title("Lineplot of Total_Bill")  
plt.show()
```



```
In [14]: sns.lineplot(data=tips,x='size',y='total_bill',hue='sex',ci=None)
plt.title("Lineplot of Total_Bill vs Size")
plt.show()
```

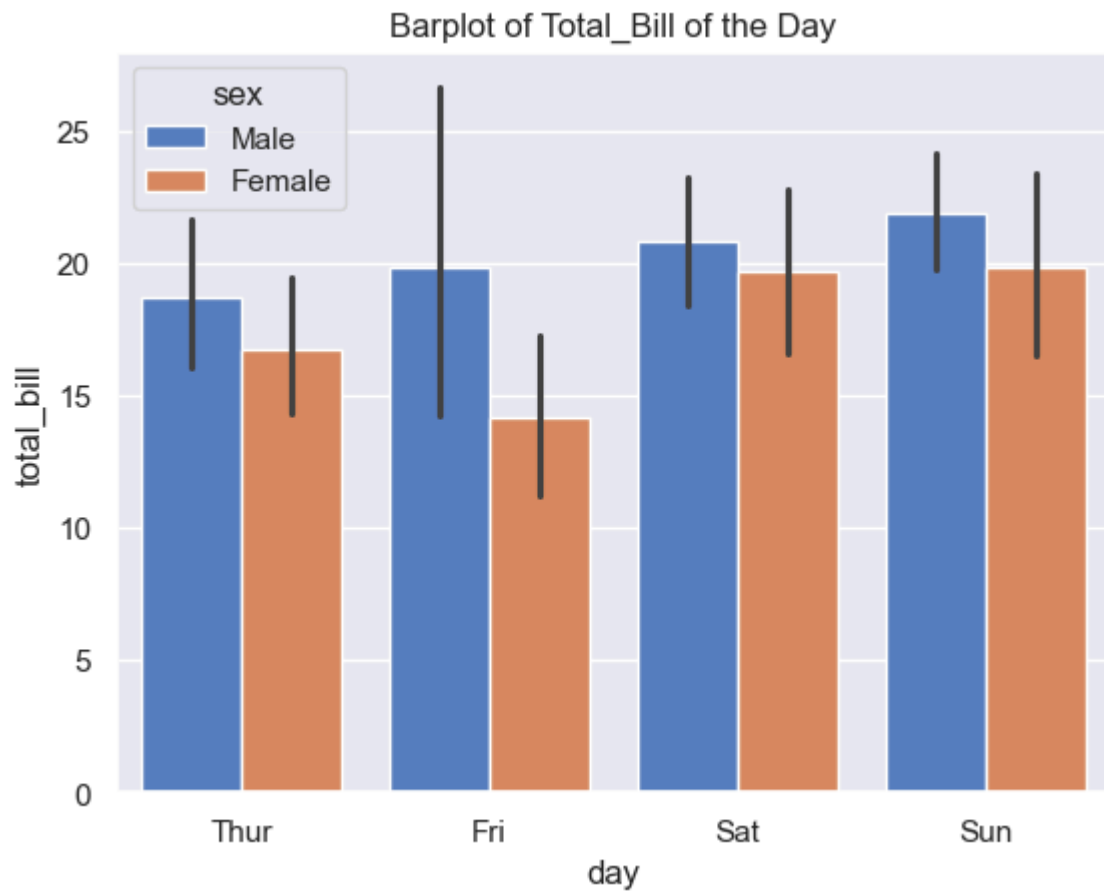


```
In [15]: sns.lineplot(data=tips,x='size',y='total_bill',hue='sex',ci=None,marker='o')
plt.title("Lineplot of Total_Bill vs Size")
plt.show()
```



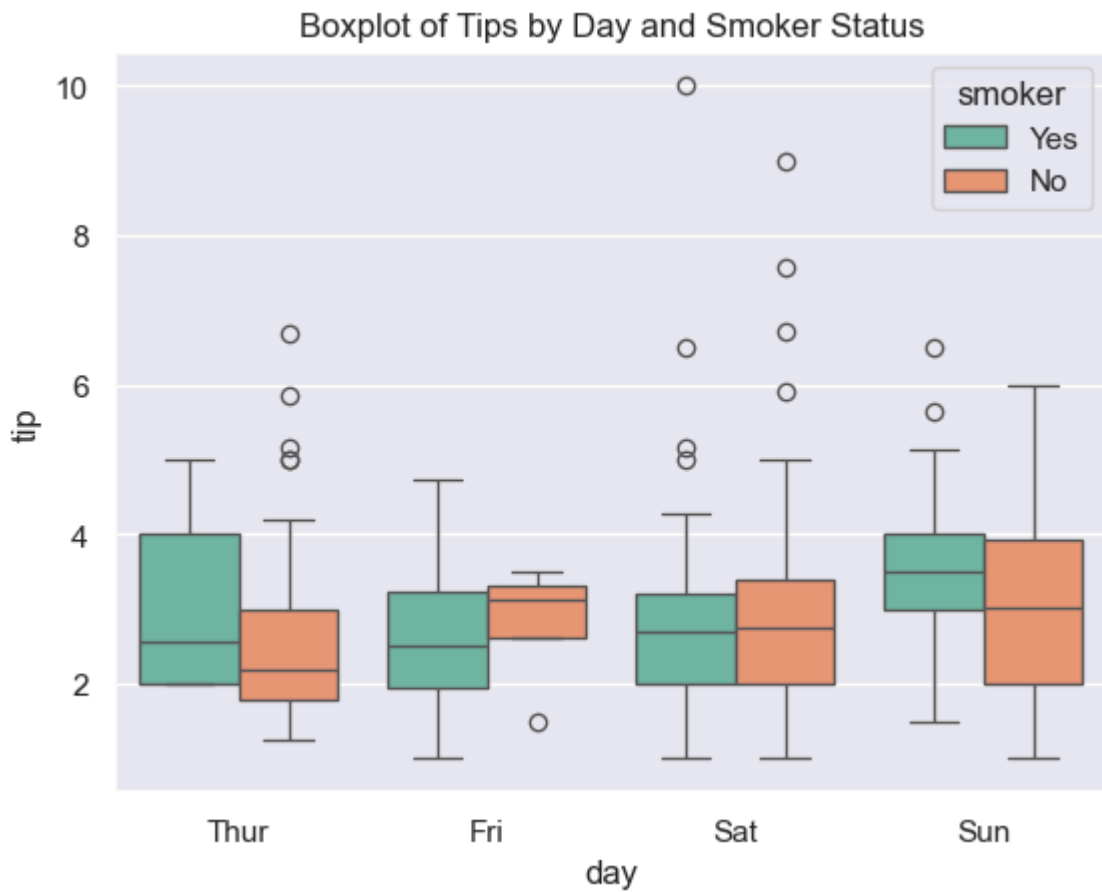
3.Bar Plot

```
In [16]: sns.barplot(data=tips,x='day',y='total_bill',hue='sex',palette='muted')#hue rep
plt.title("Barplot of Total_Bill of the Day")
plt.show()
```



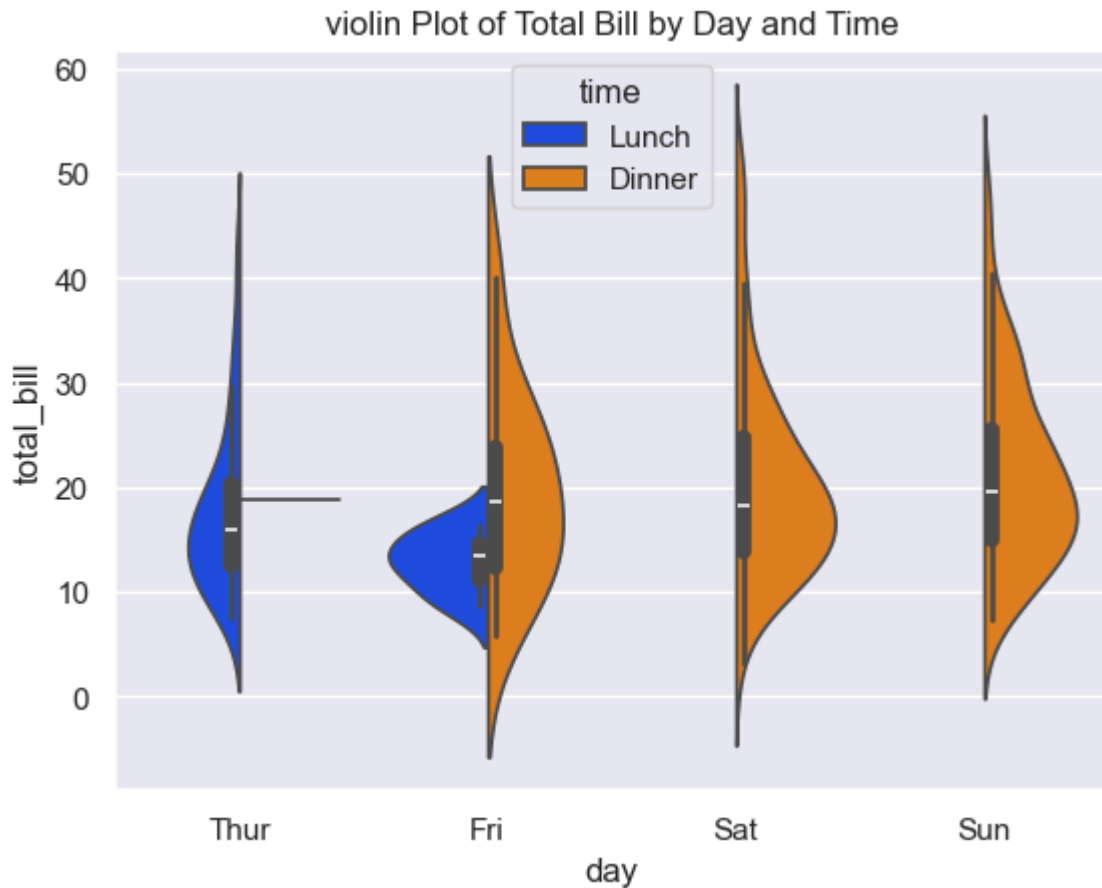
4.Box Plot

```
In [17]: sns.boxplot(data=tips,x='day',y='tip',hue='smoker',palette='Set2')
plt.title("Boxplot of Tips by Day and Smoker Status")
plt.show()
```



5.VIOLIN PLOT

```
In [18]: sns.violinplot(data=tips,x='day',y='total_bill',hue='time',split=True,palette='b
plt.title("violin Plot of Total Bill by Day and Time")
plt.show()
```

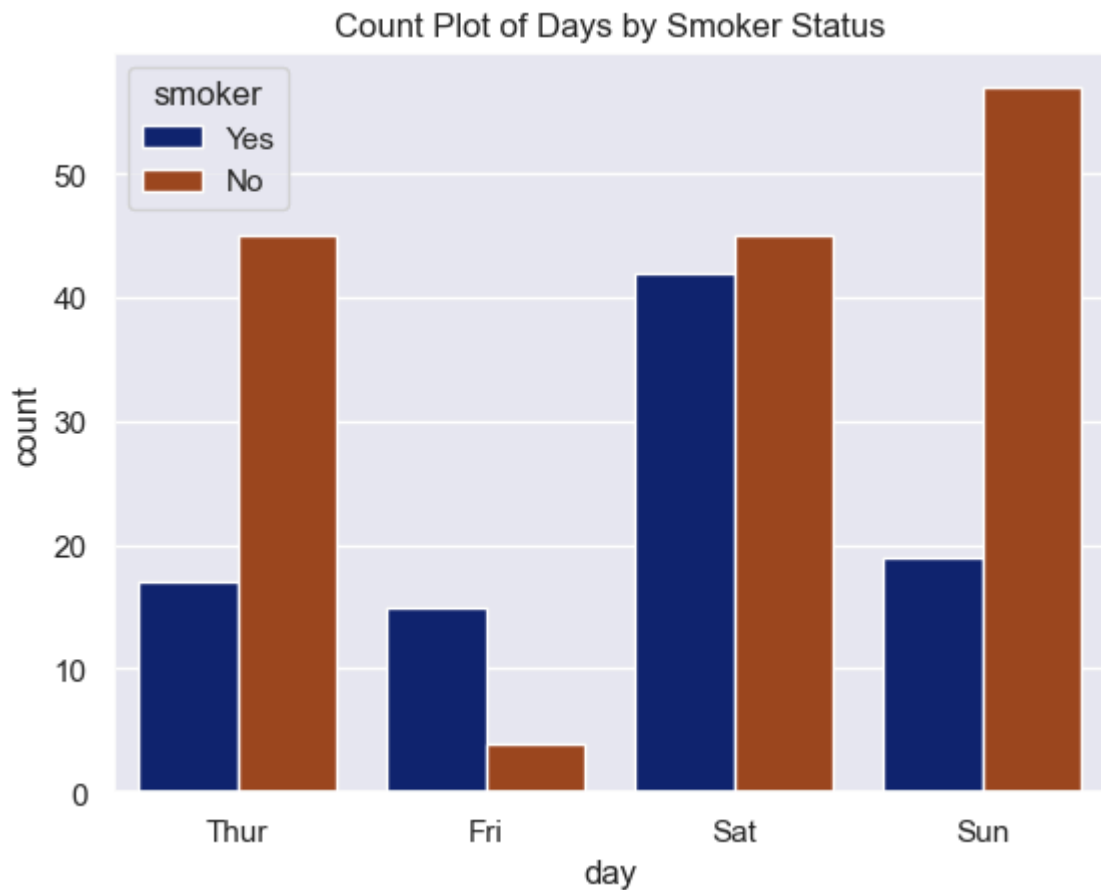


```
In [19]: tips.columns
```

```
Out[19]: Index(['total_bill', 'tip', 'sex', 'smoker', 'day', 'time', 'size'], dtype='object')
```

6.COUNT PLOT

```
In [20]: sns.countplot(data=tips,x='day',hue='smoker',palette='dark')  
plt.title("Count Plot of Days by Smoker Status")  
plt.show()
```

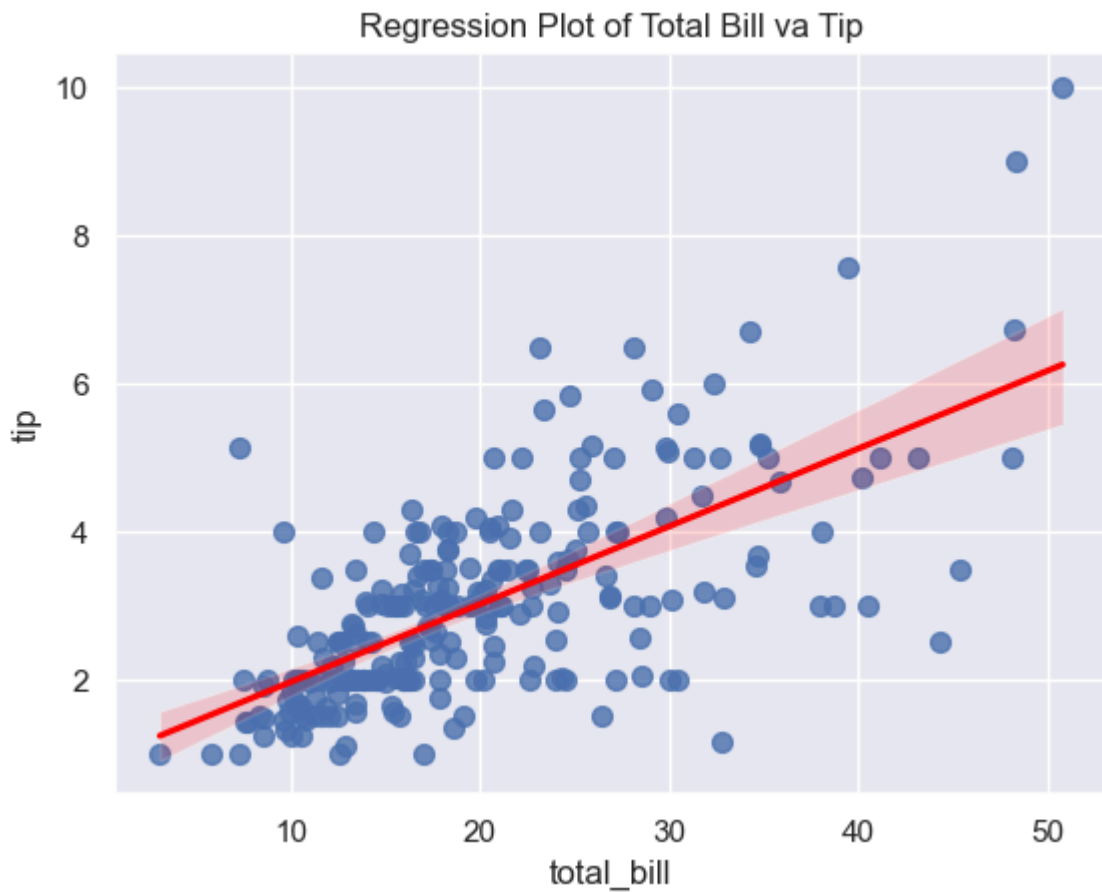



```
In [21]: tips.columns
```

```
Out[21]: Index(['total_bill', 'tip', 'sex', 'smoker', 'day', 'time', 'size'], dtype='object')
```

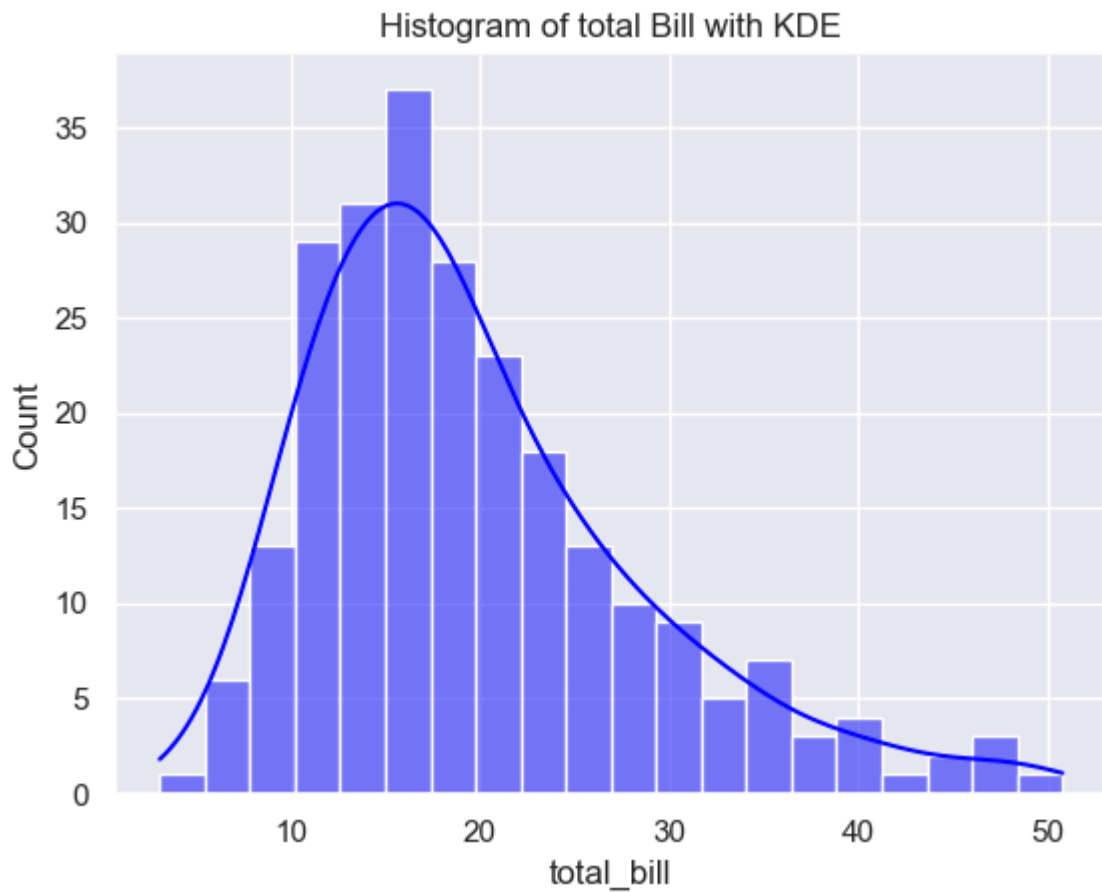
7. Regression Plot

```
In [22]: sns.regplot(data=tips, x="total_bill", y="tip", scatter_kws={'s': 50}, line_kws={'color': 'red'})  
plt.title("Regression Plot of Total Bill va Tip")  
plt.show()
```



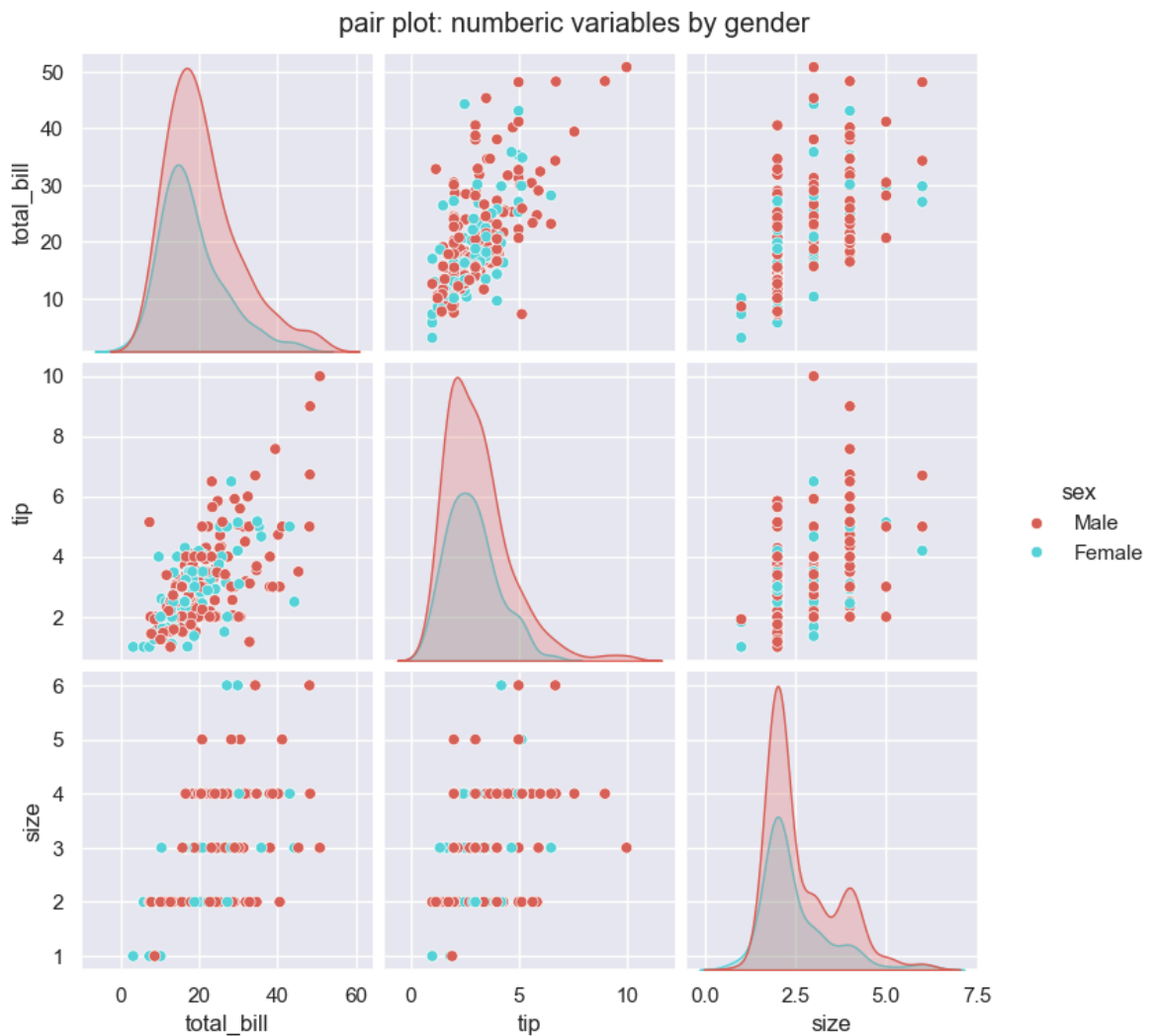
8.Histogram of Total Bill with KDE

```
In [23]: sns.histplot(data=tips,x='total_bill', bins=20,kde=True,color='blue')
plt.title("Histogram of total Bill with KDE")
plt.show()
```



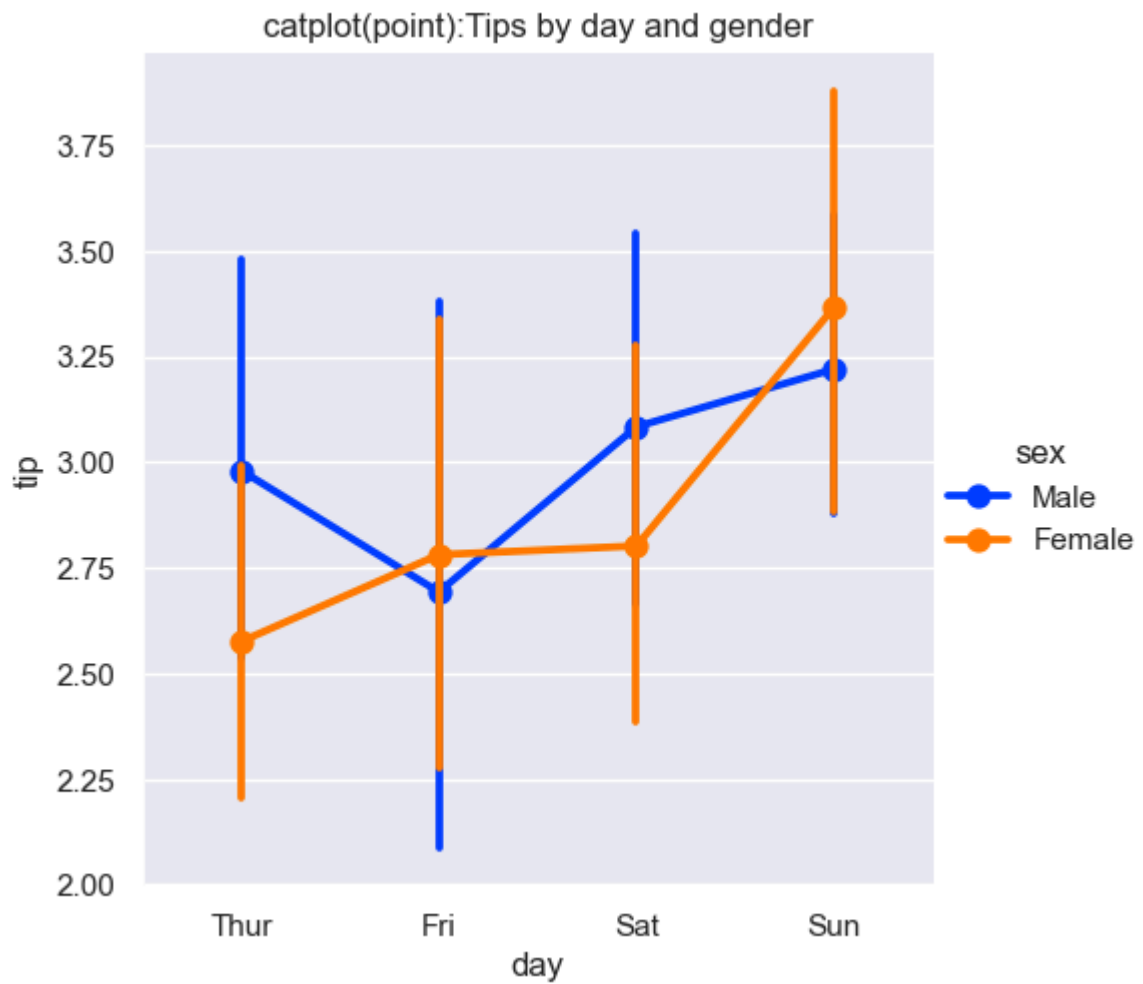
9. Pair Plot

```
In [24]: sns.pairplot(tips, hue='sex', vars=["total_bill", "tip", "size"], palette="hls")  
plt.suptitle("pair plot: numeric variables by gender", y=1.02)  
plt.show()
```



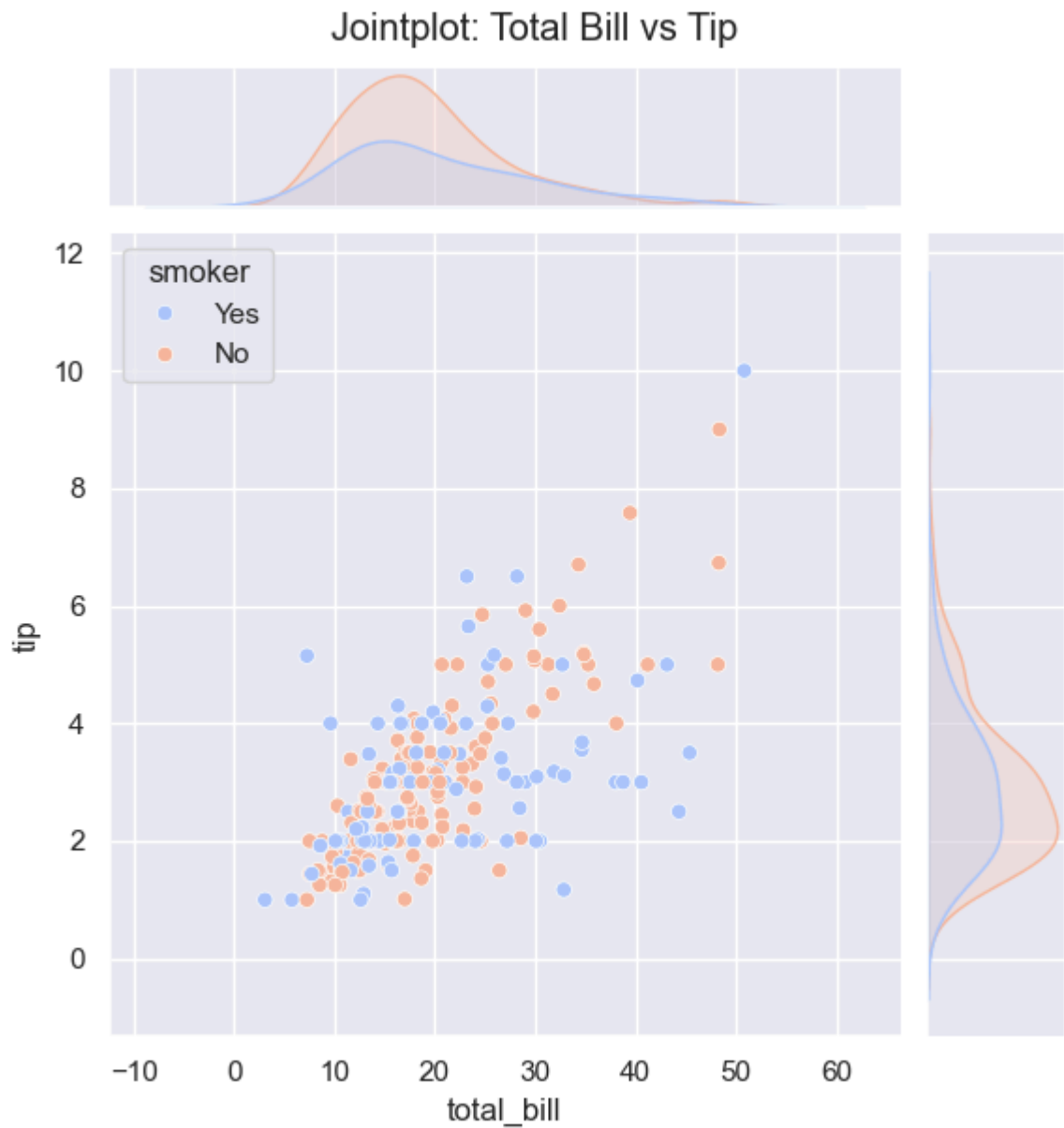
10.CATEROCIAL PLOT/Cat plot

```
In [25]: sns.catplot(data=tips, x='day', y='tip', hue='sex', kind='point', palette='brigh
plt.title("catplot(point):Tips by day and gender")
plt.show()
```



11.Joint Plot

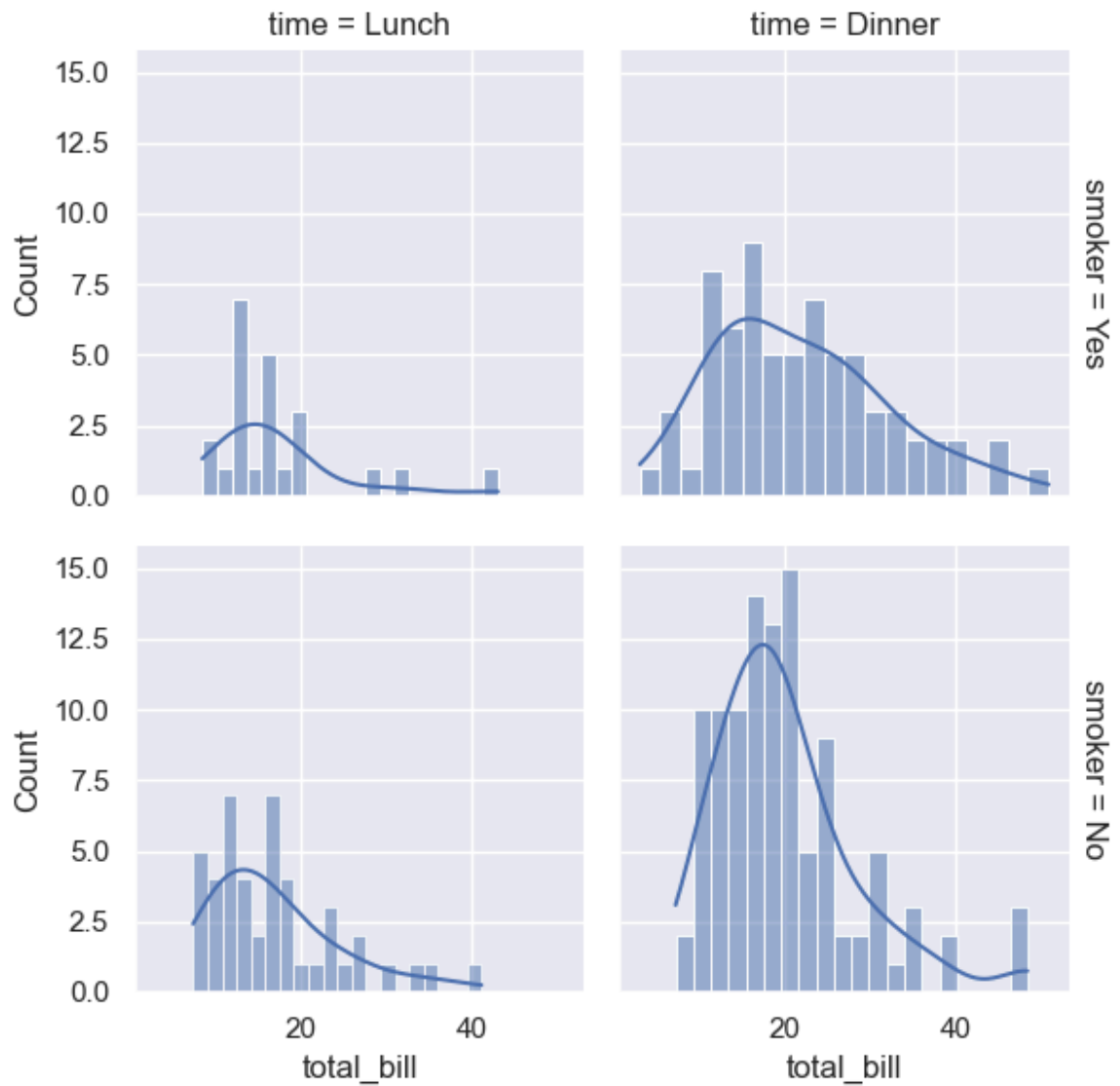
```
In [26]: sns.jointplot(data=tips, x='total_bill', y='tip', kind='scatter', hue='smoker',  
plt.suptitle("Jointplot: Total Bill vs Tip", y=1.02)  
plt.show()
```



3.FacetGrid

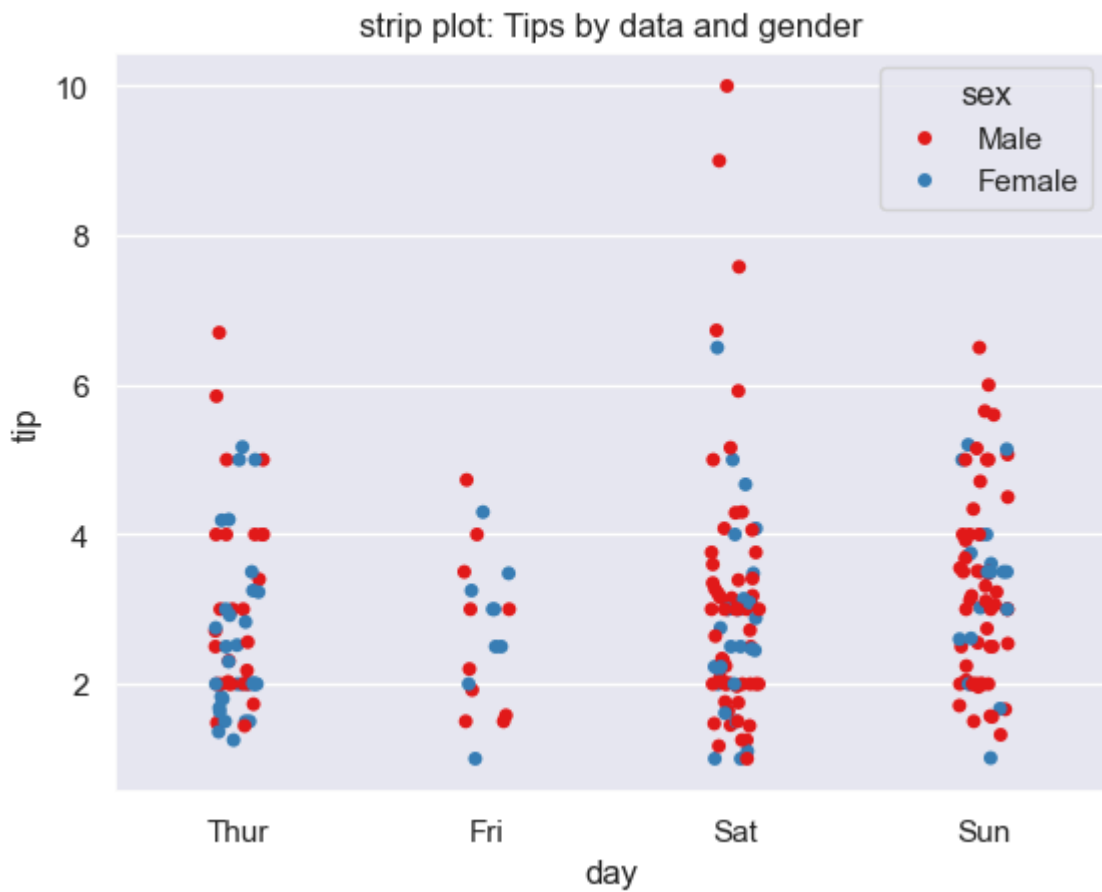
```
In [27]: g = sns.FacetGrid(tips, col='time', row='smoker', margin_titles=True).map(sns.hist)
```

```
Out[27]: <seaborn.axisgrid.FacetGrid at 0x1a7c45bfb60>
```



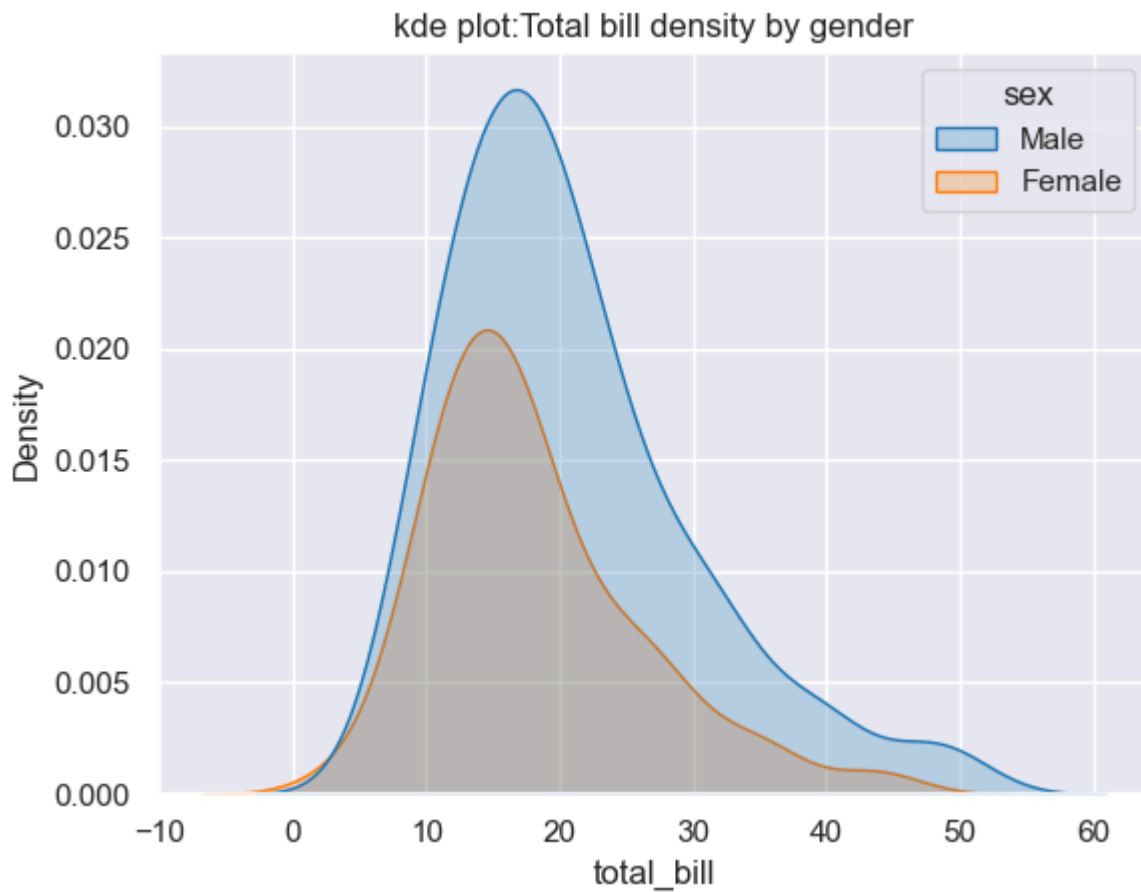
13.Strip Plot

```
In [28]: sns.stripplot(data=tips, x='day', y='tip', hue='sex', jitter=True, palette='Set1')
plt.title("strip plot: Tips by data and gender")
plt.show()
```



14.KDE Plot

```
In [29]: sns.kdeplot(data=tips, x='total_bill', hue='sex', fill=True, palette='tab10')
plt.title("kde plot:Total bill density by gender")
plt.show()
```

SEABORN CODE DEVELOPEMENT HAS DONE

In []: