```
In [122...  pip install upgrade seaborn
```

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

```
In [ ]:  import seaborn as sns
```

```
In [ ]:  sns.get_dataset_names()
```

```
In [70]:  tips = sns.load_dataset("tips")
          tips.head()
```

Out[70]:

|   | 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 [71]:  titanic = sns.load_dataset("titanic")
          titanic.head()
```

Out[71]:

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

```
In [72]:  tips
```

Out[72]:

| | 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 |
| **...** | ... | ... | ... | ... | ... | ... | ... |
| **239** | 29.03 | 5.92 | Male | No | Sat | Dinner | 3 |
| **240** | 27.18 | 2.00 | Female | Yes | Sat | Dinner | 2 |
| **241** | 22.67 | 2.00 | Male | Yes | Sat | Dinner | 2 |
| **242** | 17.82 | 1.75 | Male | No | Sat | Dinner | 2 |
| **243** | 18.78 | 3.00 | Female | No | Thur | Dinner | 2 |

244 rows × 7 columns

In [73]:
```python
sns.set_theme(style="darkgrid")
```

In [74]:
```python
tips.to_csv("tips_dataset.csv",index=False)
import pandas as pd
```

In [75]:
```python
import os
os.getcwd()
```
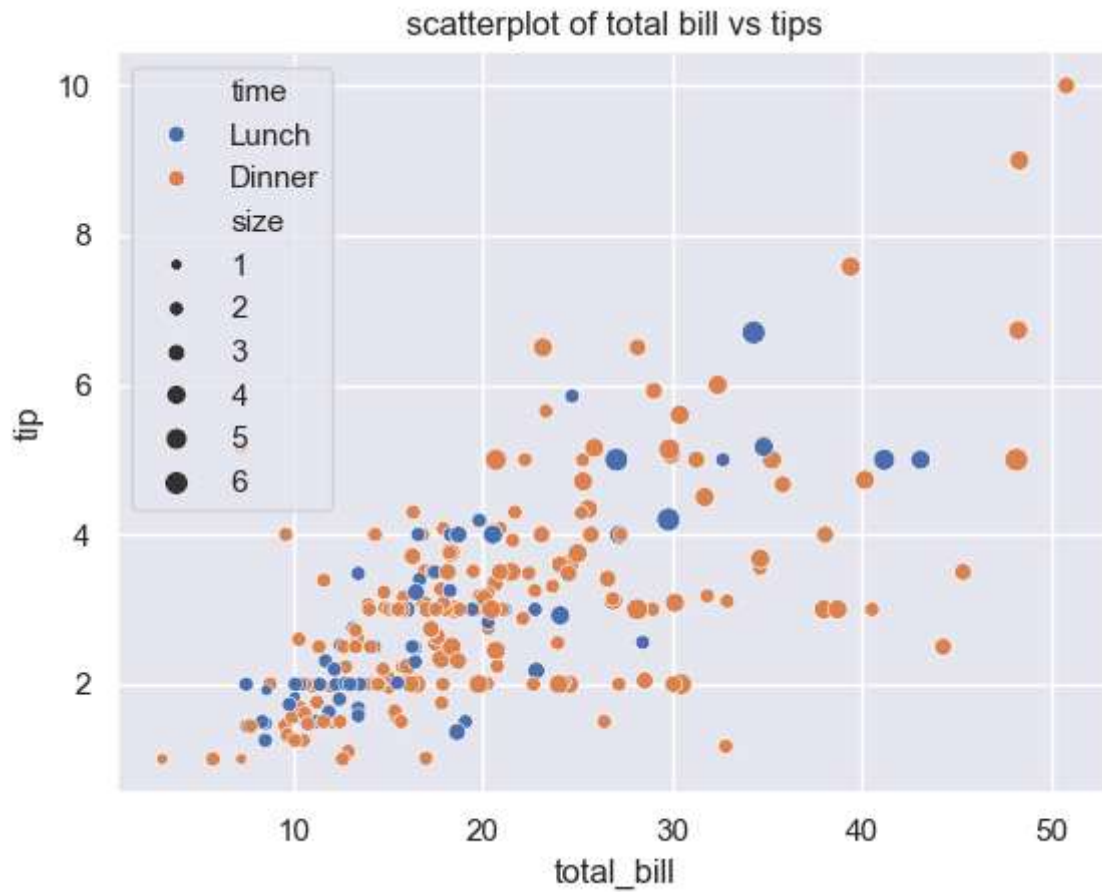
Out[75]: 'C:\\Users\\sande'

In [76]:
```python
import matplotlib.pyplot as plt
```

In [77]:
```python
plt.figure(figsize=(8,6))
```

Out[77]: <Figure size 800x600 with 0 Axes>

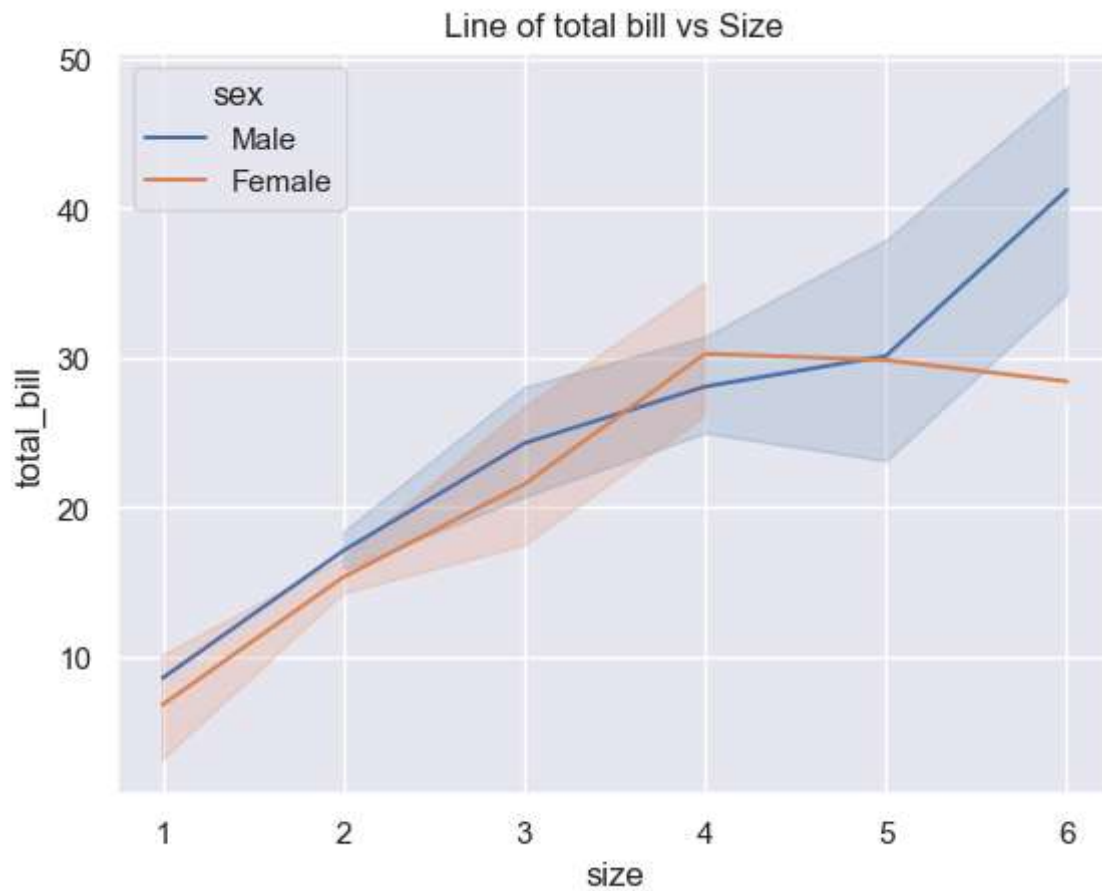<Figure size 800x600 with 0 Axes>

# 1.Scatter Plot

In [78]:
```python
sns.scatterplot(data=tips,x="total_bill", y="tip",hue="time", size="size",palette="
plt.title("scatterplot of total bill vs tips")
plt.show()
```

scatterplot of total bill vs tips

# 2.Line Plot

```
In [79]: sns.lineplot(data=tips, x="size",y="total_bill",hue="sex",markers="o")
         plt.title("Line of total bill vs Size")
         plt.show()
```
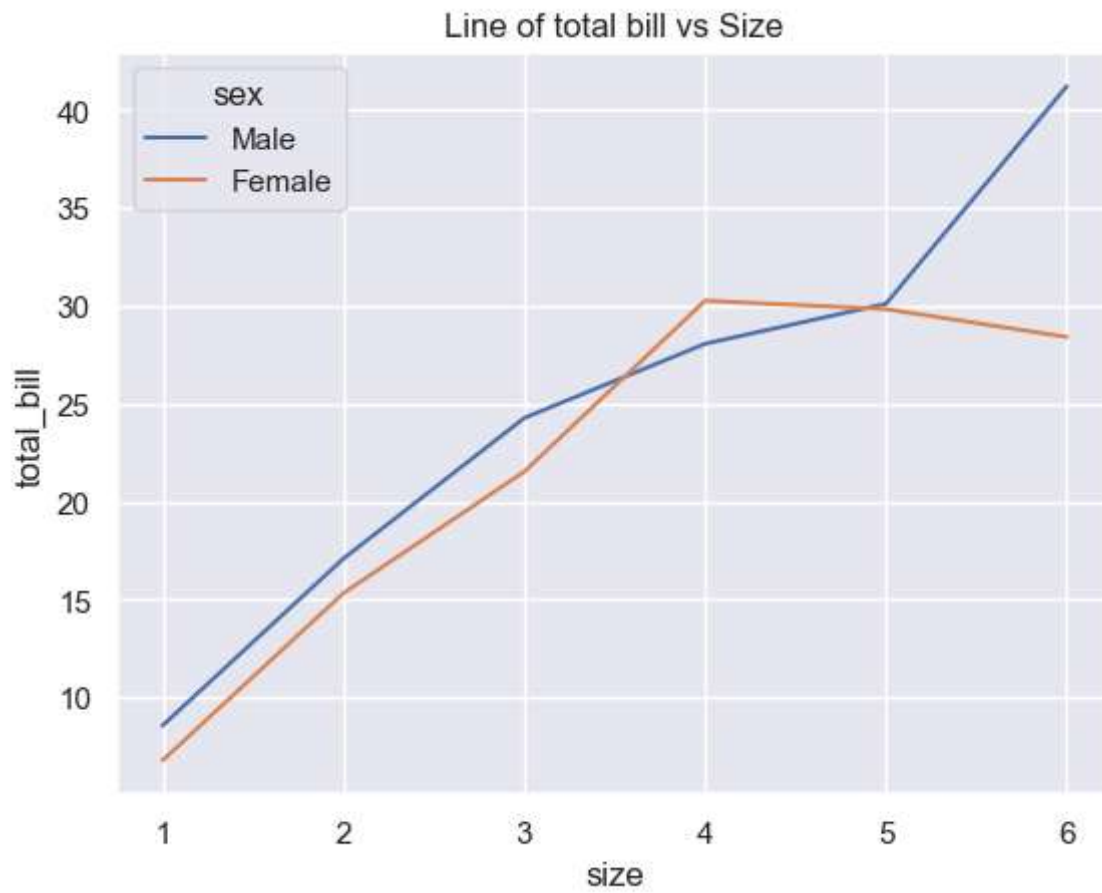
## Line of total bill vs Size



```
In [80]: sns.lineplot(data=tips, x='size',y='total_bill',hue='sex', ci=None,markers='o')
         plt.title("Line of total bill vs Size")
         plt.show()
```

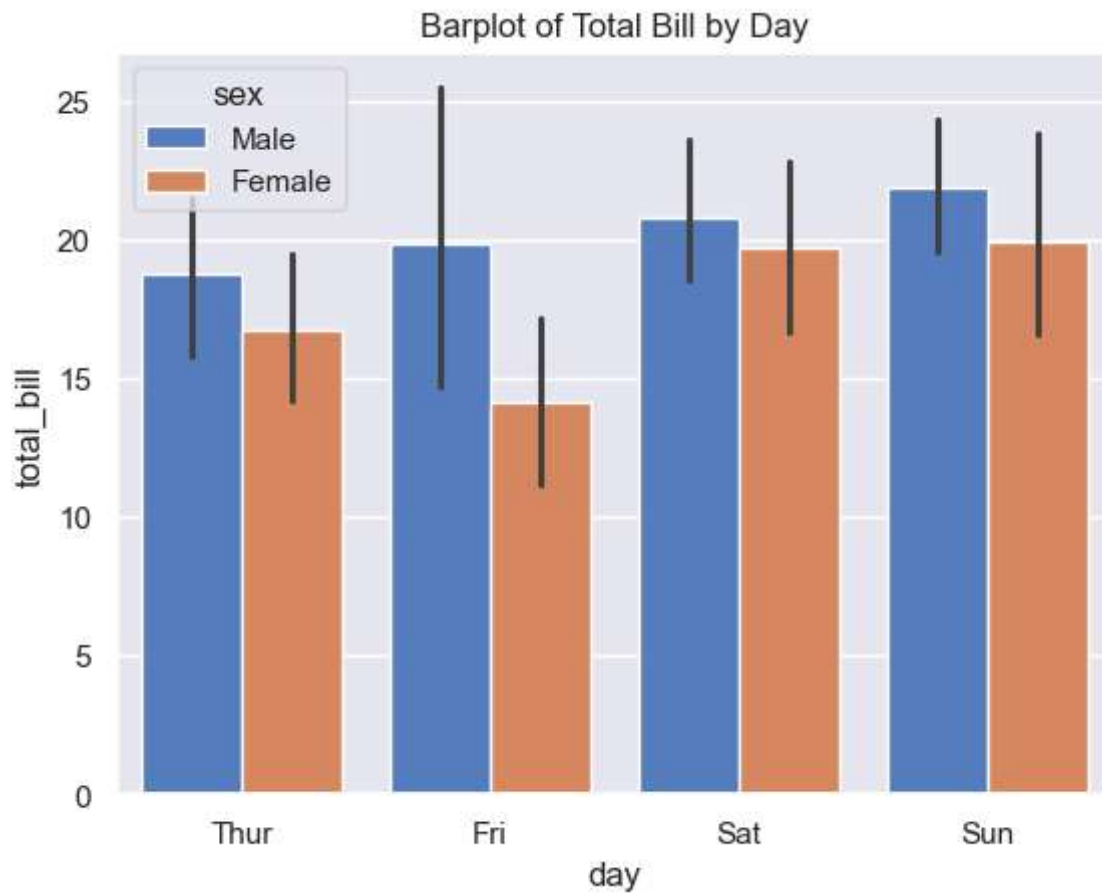C:\Users\sande\AppData\Local\Temp\ipykernel_4176\1375309315.py:1: FutureWarning:

The `ci` parameter is deprecated. Use `errorbar=None` for the same effect.

  sns.lineplot(data=tips, x='size',y='total_bill',hue='sex', ci=None,markers='o')

## Line of total bill vs Size



# 3.Bar Plot

```
In [81]: sns.barplot(data=tips, x="day",y="total_bill",hue="sex",palette="muted")
         plt.title("Barplot of Total Bill by Day")
         plt.show()
```
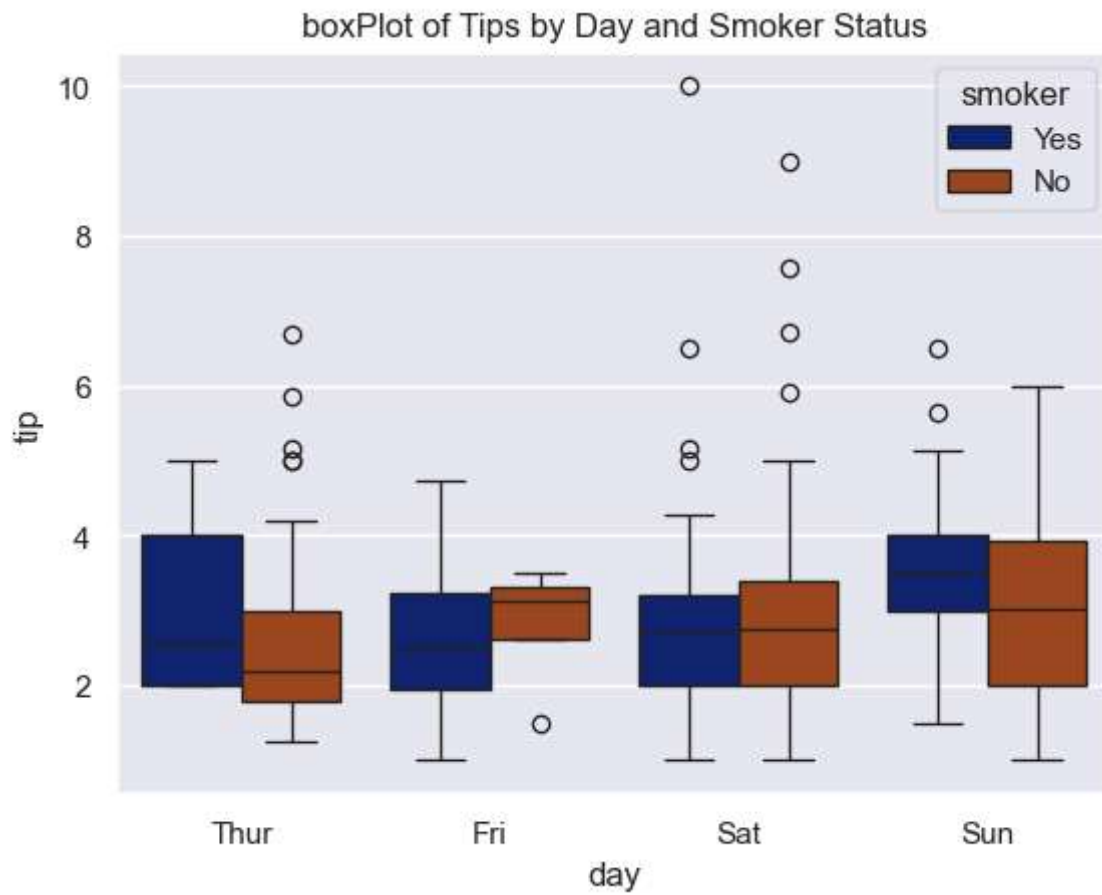
Barplot of Total Bill by Day

In [82]: `tips.columns`

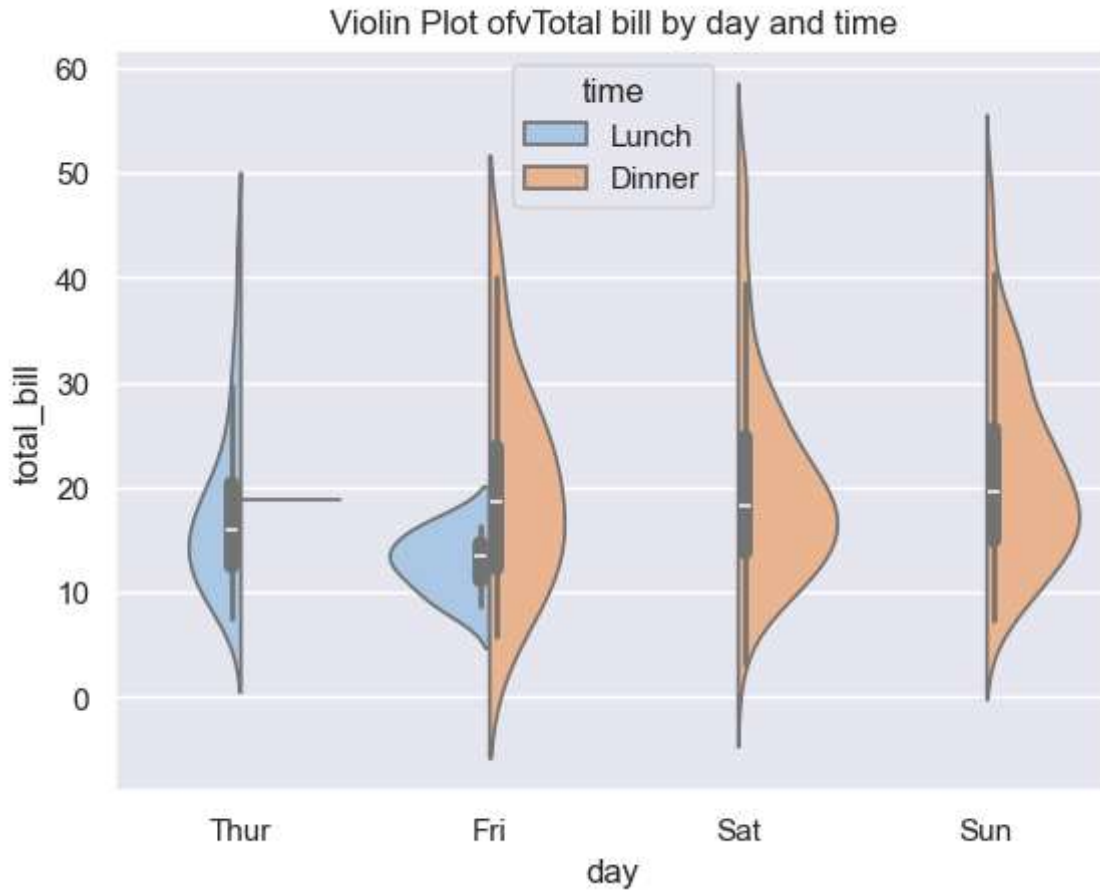Out[82]: `Index(['total_bill', 'tip', 'sex', 'smoker', 'day', 'time', 'size'], dtype='object')`

# 4.Boxplot

In [83]:
```python
sns.boxplot(data=tips,x="day",y="tip", hue="smoker",palette="dark")
plt.title("boxPlot of Tips by Day and Smoker Status")
plt.show()
```

## boxPlot of Tips by Day and Smoker Status



# 5. Violin Plot

```
In [84]: sns.violinplot(data= tips, x="day", y="total_bill", hue="time", split=True, palette
         plt.title("Violin Plot ofvTotal bill by day and time")
         plt.show()
```
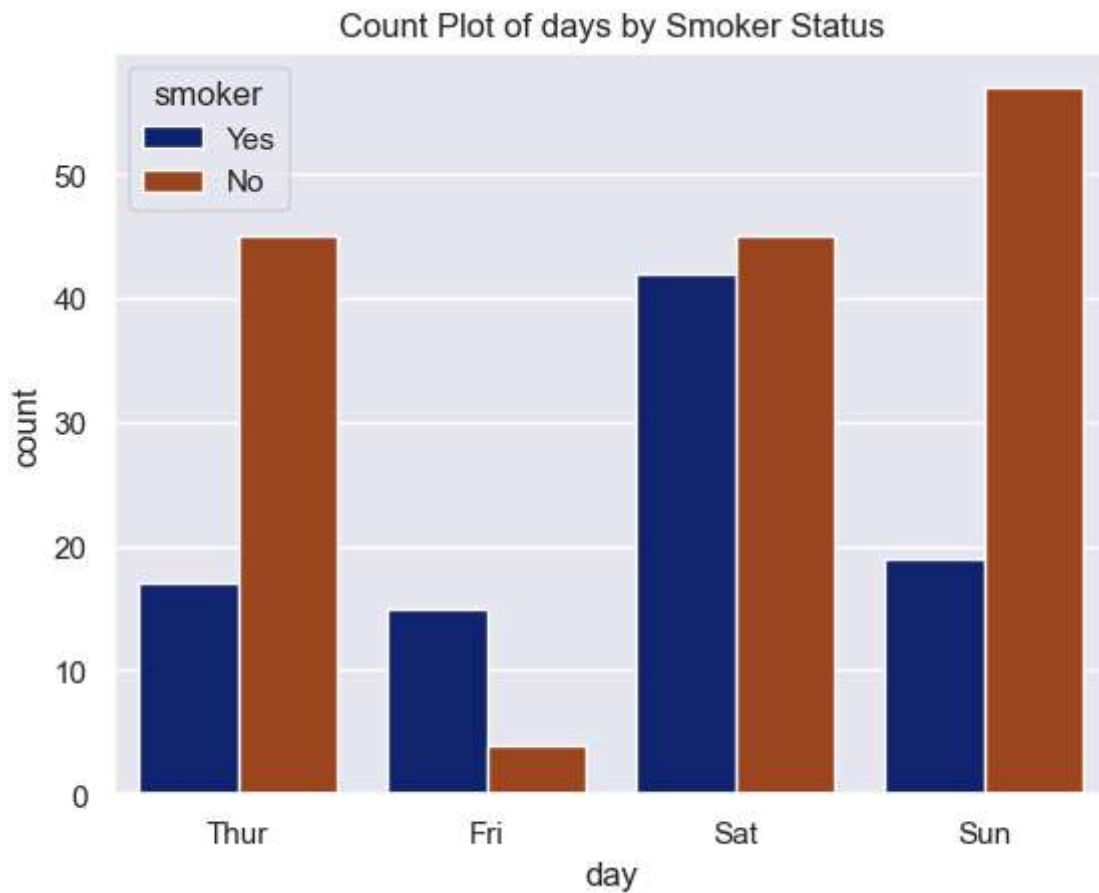
## Violin Plot ofvTotal bill by day and time



`tips.columns`

`Index(['total_bill', 'tip', 'sex', 'smoker', 'day', 'time', 'size'], dtype='objec`
`t')`

# 6.Count Plot

```python
sns.countplot(data=tips, x="day", hue="smoker",palette="dark")
plt.title("Count Plot of days by Smoker Status")
plt.show()
```
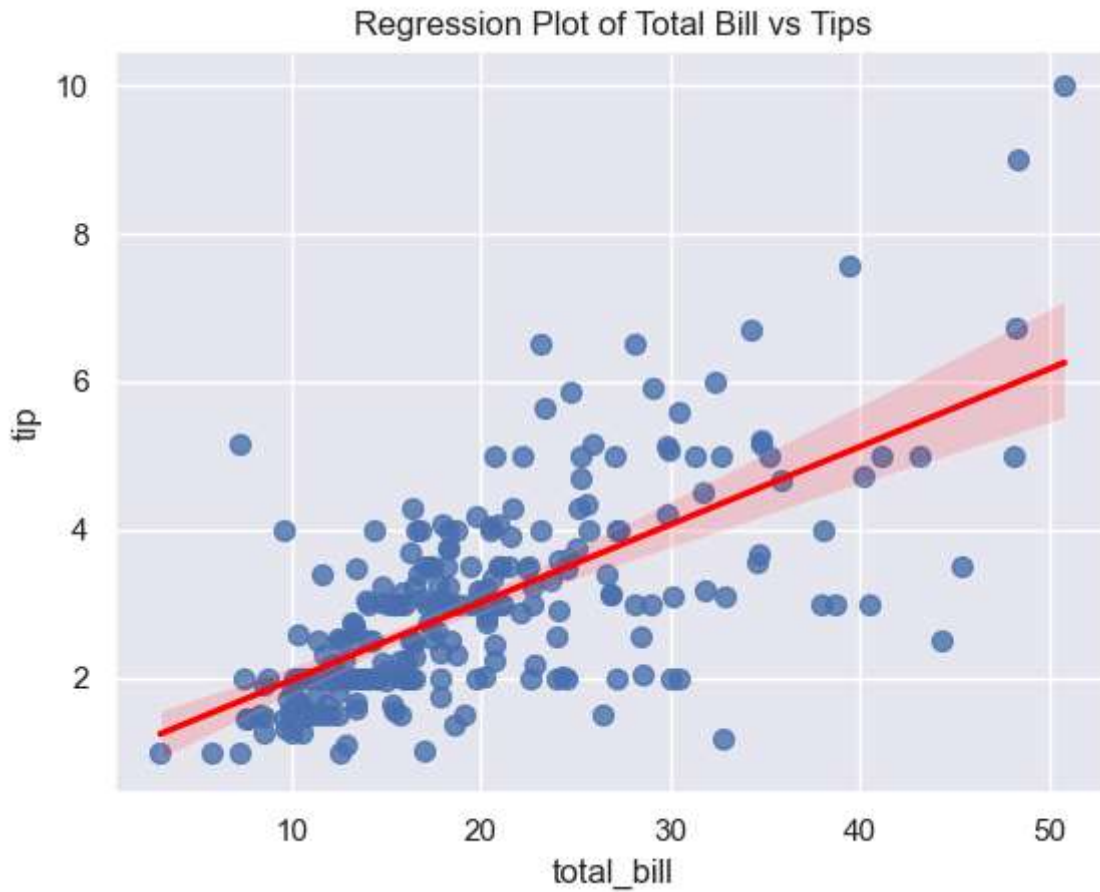
Count Plot of days by Smoker Status

In [87]: `tips.columns`

Out[87]: `Index(['total_bill', 'tip', 'sex', 'smoker', 'day', 'time', 'size'], dtype='object')`

# 7.Regression Plot

In [88]:
```python
sns.regplot(data=tips, x="total_bill", y="tip", scatter_kws={"s":50}, line_kws={"co
plt.title("Regression Plot of Total Bill vs Tips")
plt.show()
```
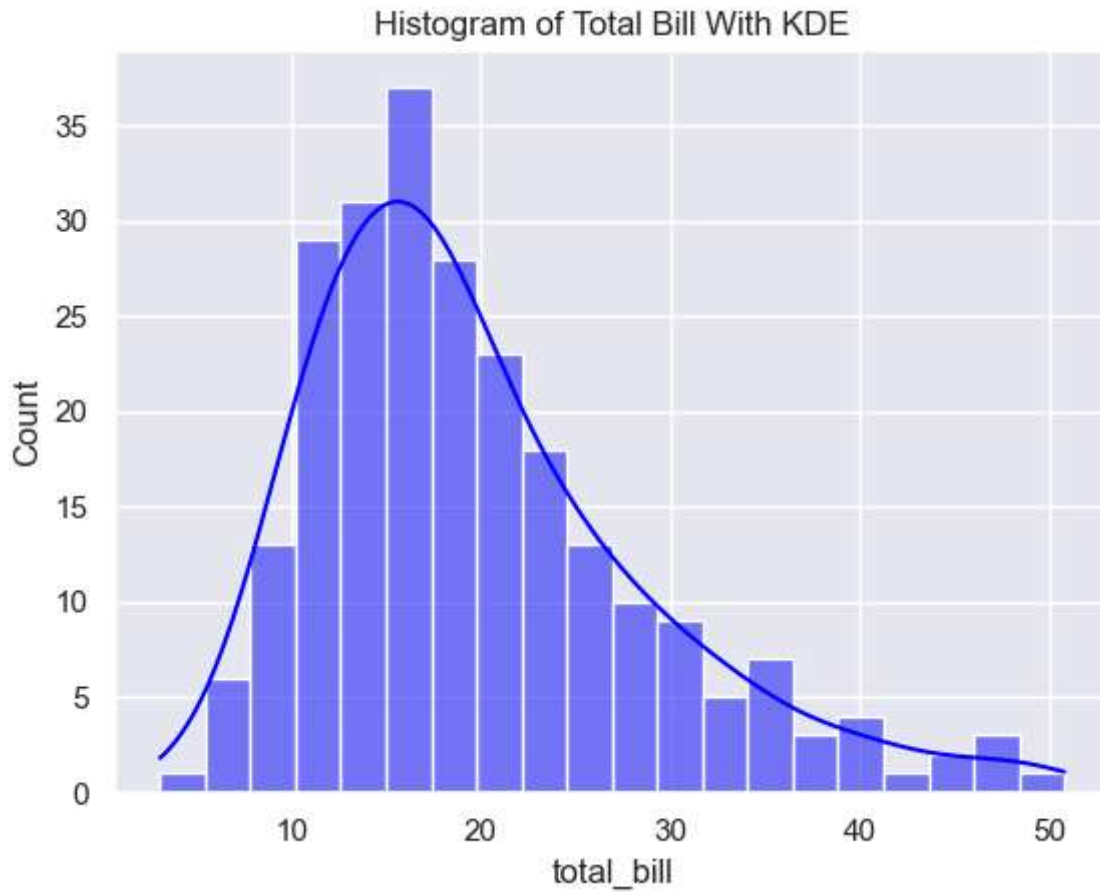
## Regression Plot of Total Bill vs Tips



In [52]: `tips.columns`

Out[52]: `Index(['total_bill', 'tip', 'sex', 'smoker', 'day', 'time', 'size'], dtype='object')`

# 8.Histogram

In [89]:
```python
sns.histplot(data=tips, x="total_bill", bins=20, kde=True, color="blue")
plt.title("Histogram of Total Bill With KDE")
plt.show()
```

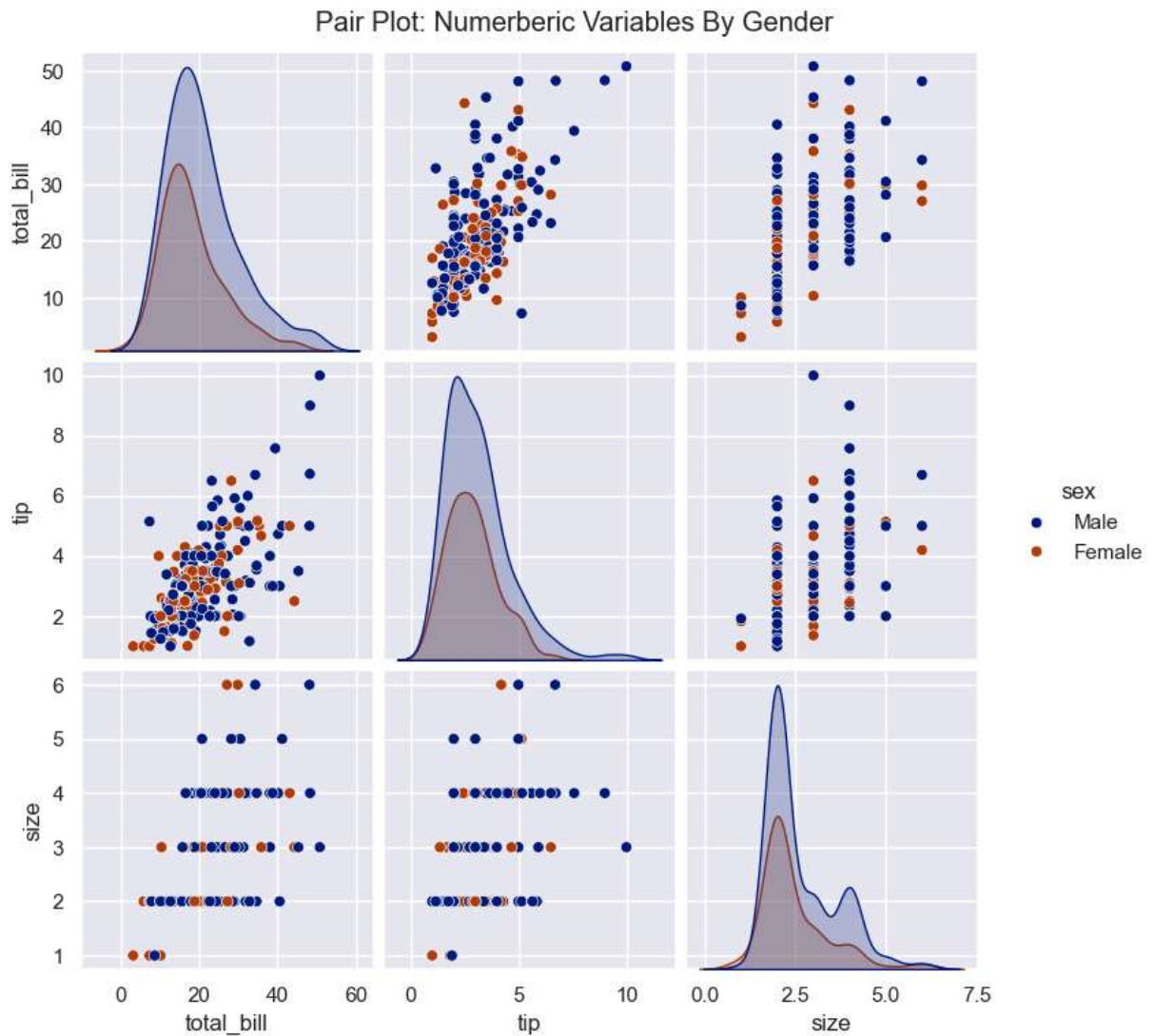Histogram of Total Bill With KDE

# 9.Pairplot
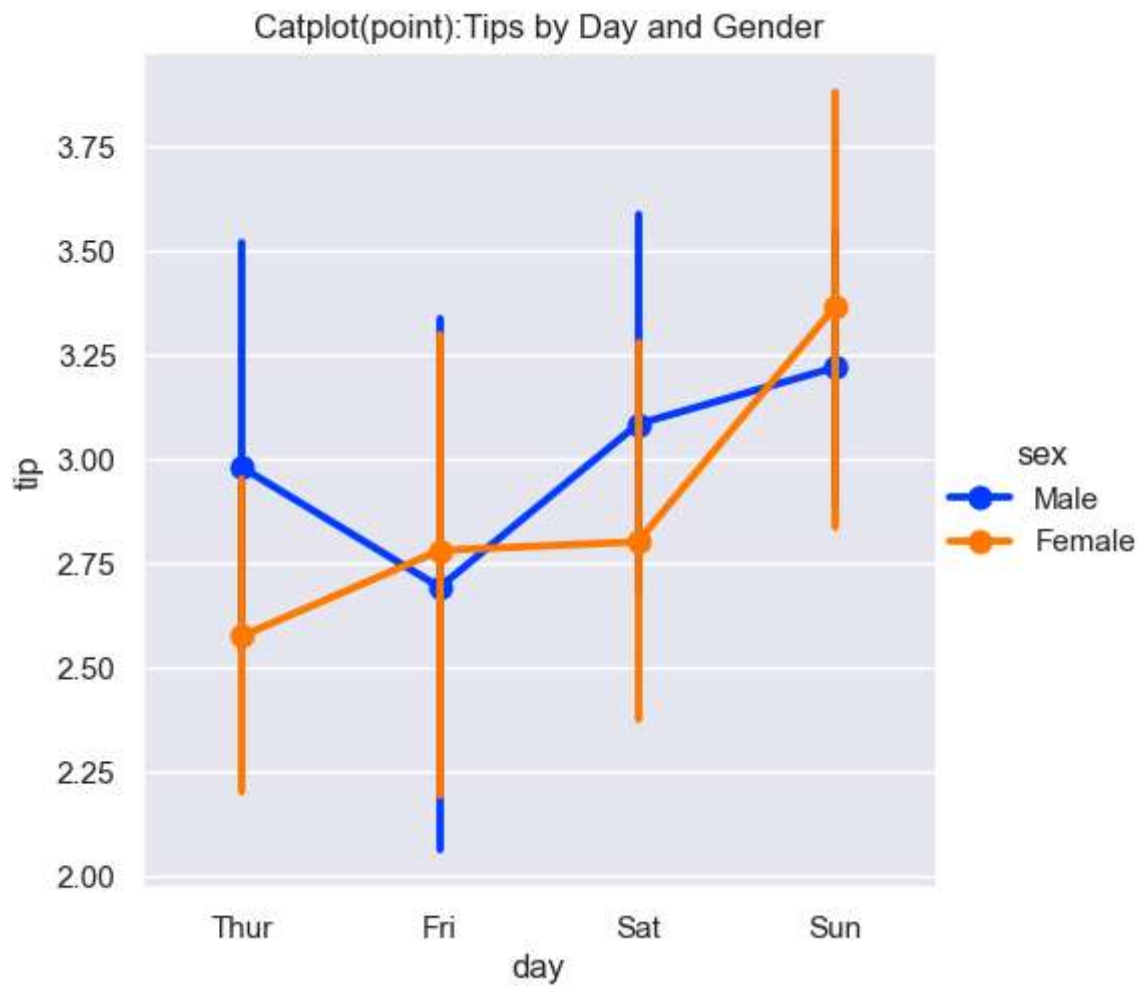
```
In [90]:  plt
```

```
Out[90]:  <module 'matplotlib.pyplot' from 'C:\\Users\\sande\\anaconda3\\Lib\\site-packages
          \\matplotlib\\pyplot.py'>
```

```
In [116…  sns.pairplot(tips, hue='sex', vars=["total_bill", "tip", "size"], palette='dark')
          plt.suptitle("Pair Plot: Numerberic Variables By Gender", y=1.02)
          plt.show()
```
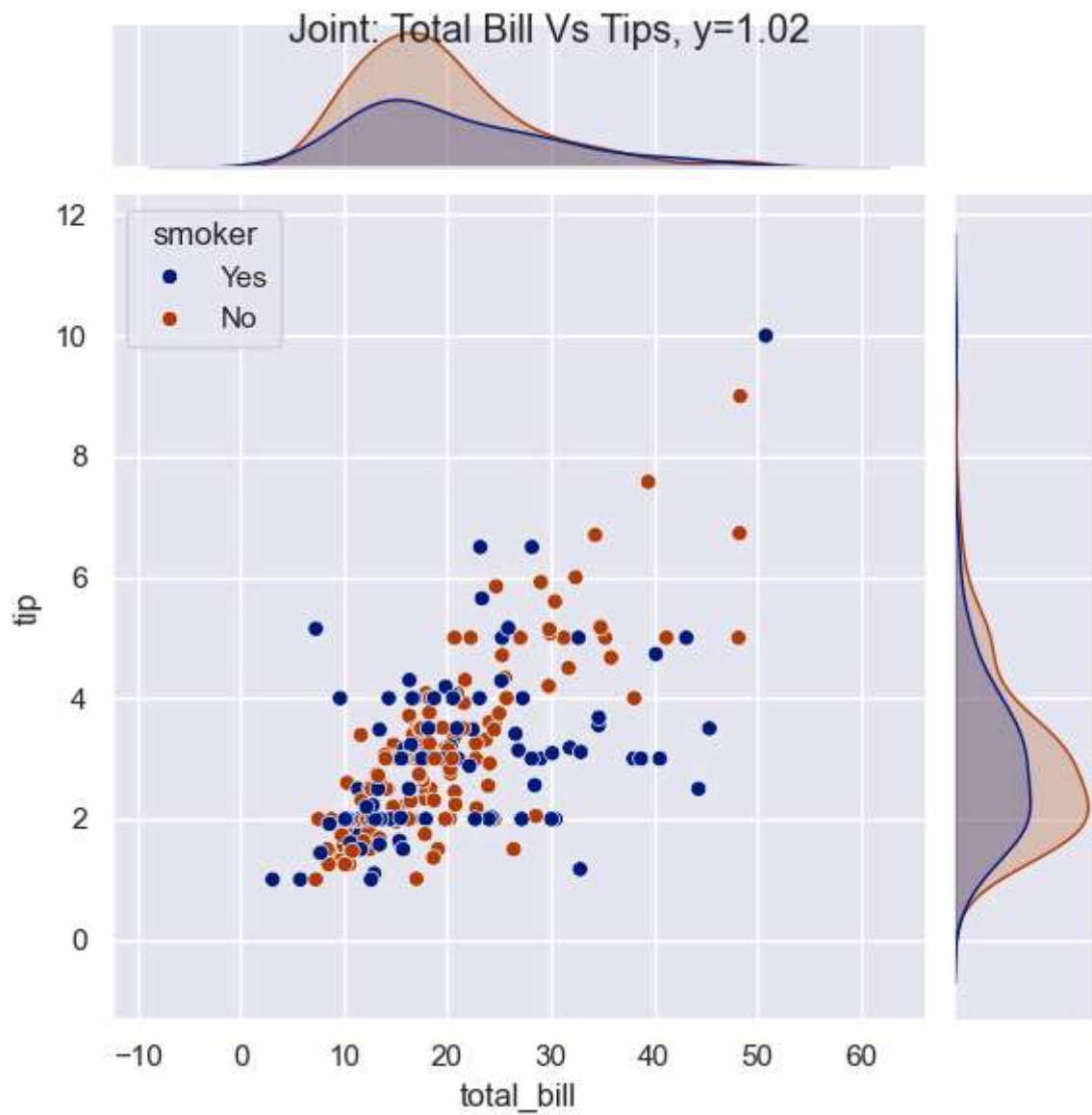
Pair Plot: Numerberic Variables By Gender

# 10.Catplot

```
In [95]:  sns.catplot(data=tips, x="day", y="tip", hue="sex", kind="point", palette="bright")
          plt.title("Catplot(point):Tips by Day and Gender")
          plt.show()
```
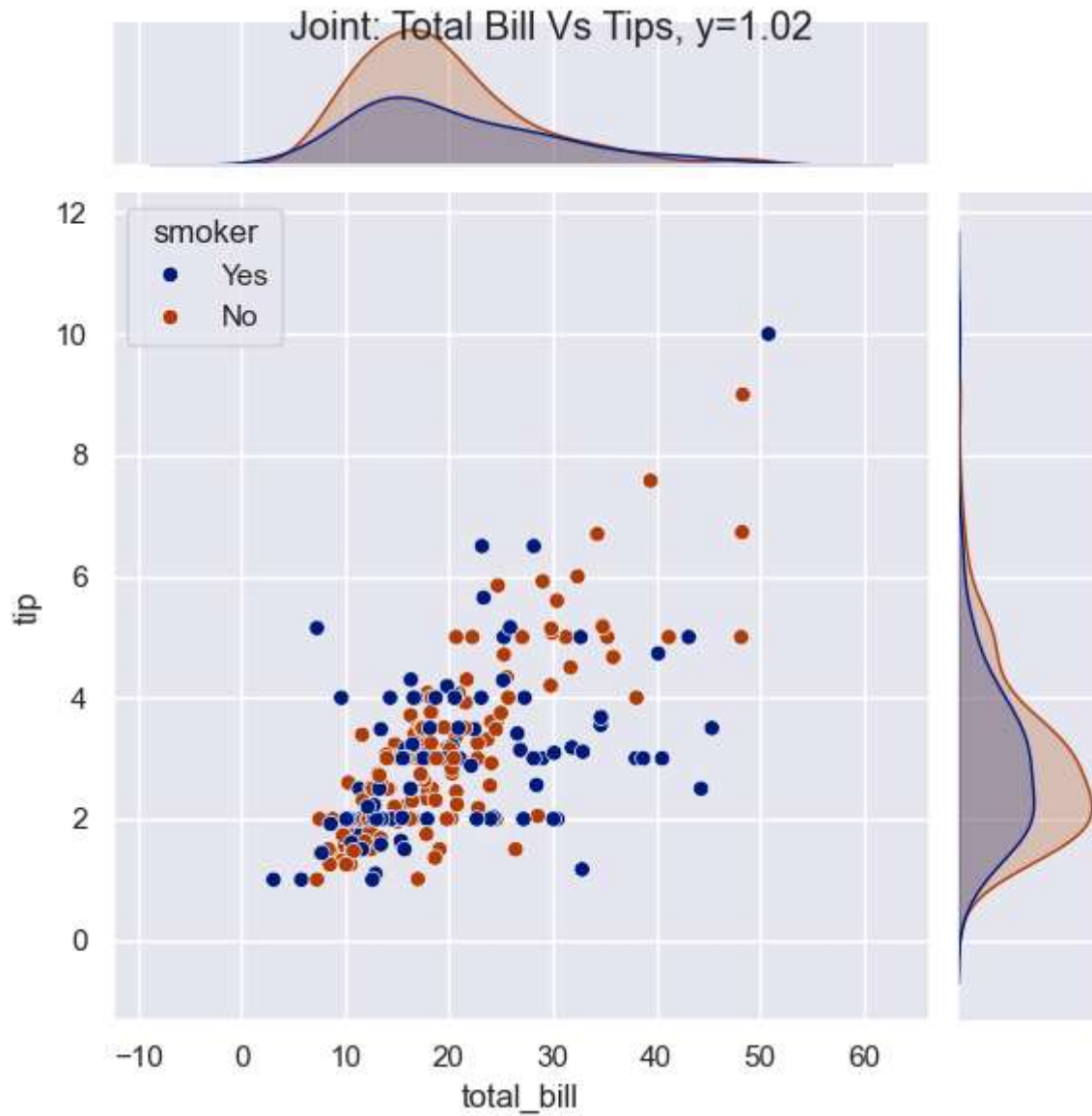
Catplot(point):Tips by Day and Gender

# 11.Jointplot

```python
sns.jointplot(data=tips, x="total_bill", y="tip", kind="scatter", hue="smoker",colo
plt.suptitle("Joint: Total Bill Vs Tips, y=1.02")
plt.show()
```

# Joint: Total Bill Vs Tips, y=1.02



In [99]:
```python
sns.jointplot(data=tips, x="total_bill", y="tip", kind="scatter", hue="smoker",pale
plt.suptitle("Joint: Total Bill Vs Tips, y=1.02")
plt.show()
```
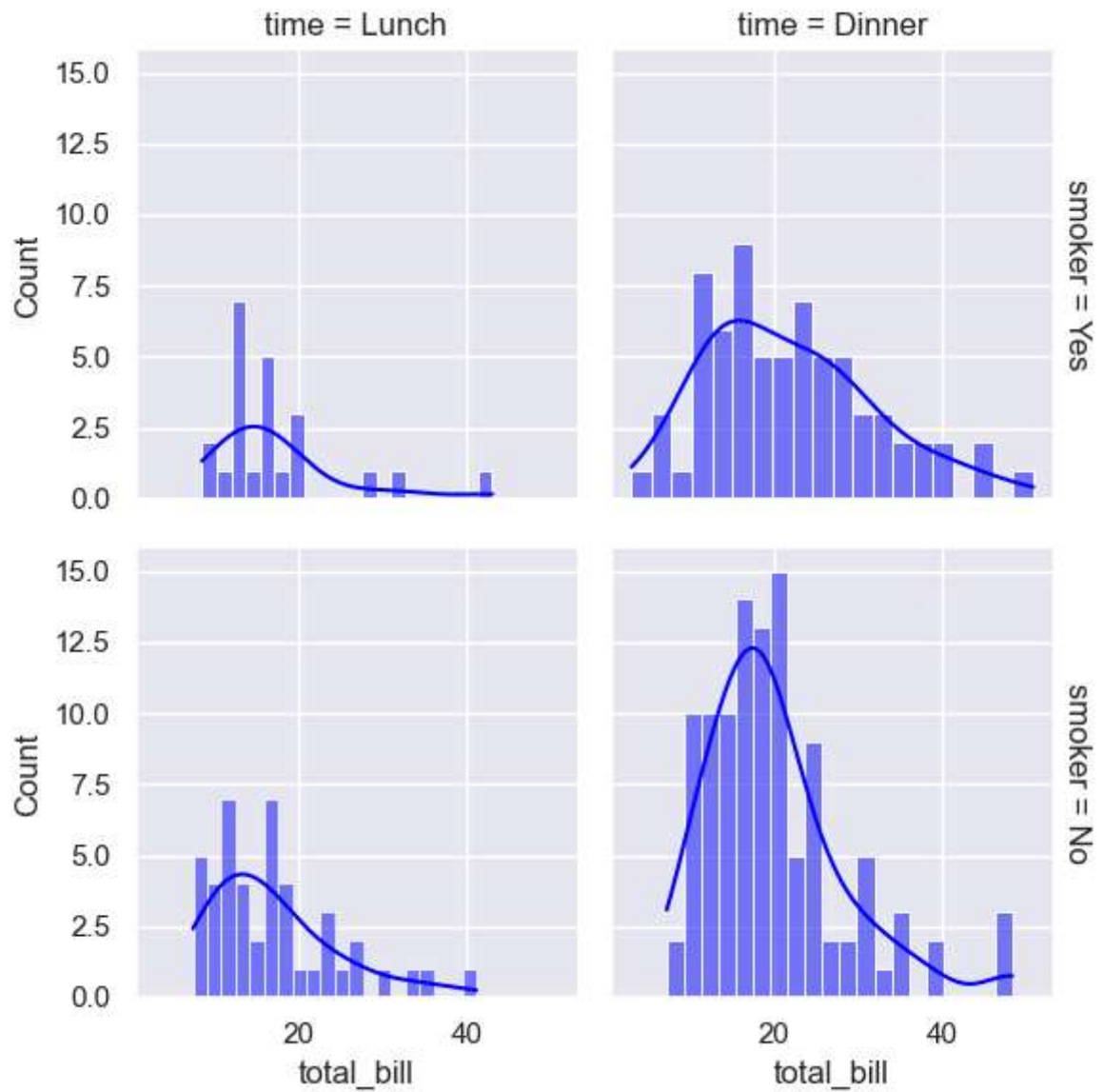
Joint: Total Bill Vs Tips, y=1.02

# 12.Facetgrid

```
In [105…   g=sns.FacetGrid(tips, col='time', row='smoker', margin_titles=True).map(sns.histplo
           g
```

```
Out[105…   <seaborn.axisgrid.FacetGrid at 0x1dee0131bb0>
```
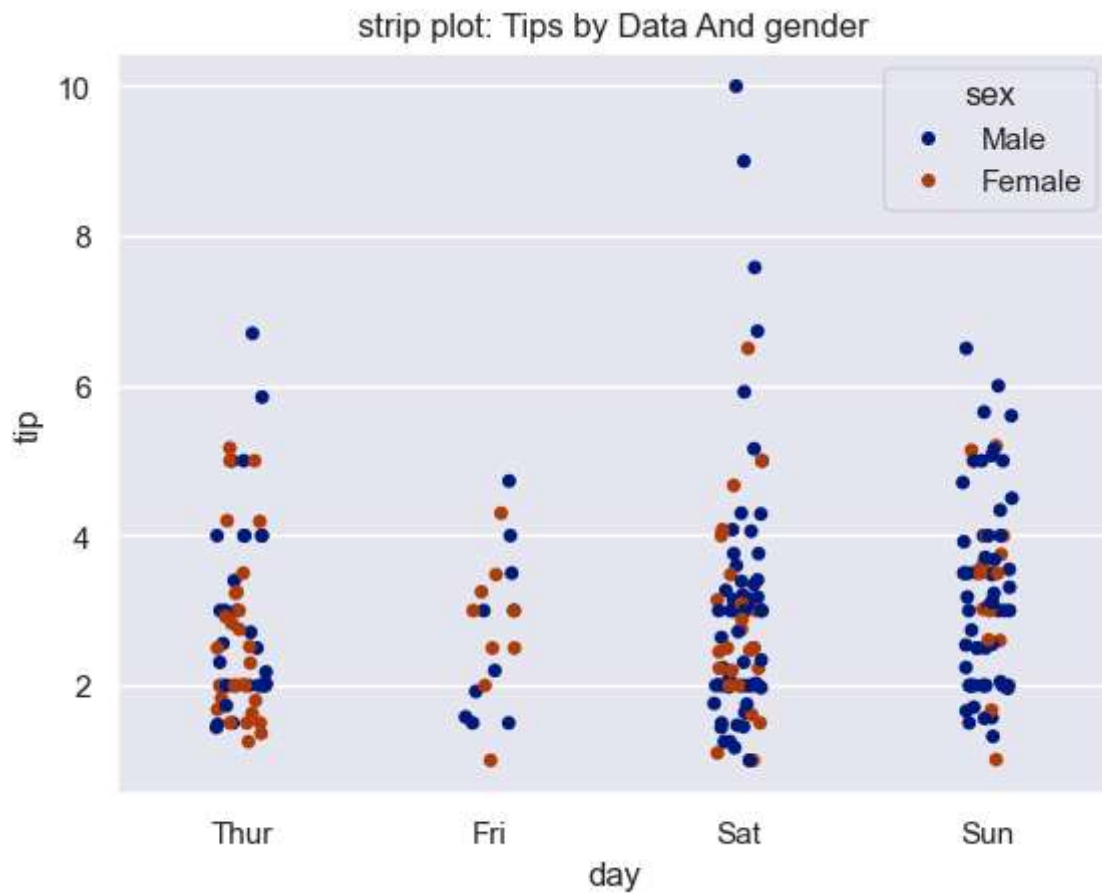
# 13.Strip Plot

```
In [109…   sns.stripplot(data=tips, x='day', y='tip', hue='sex', jitter=True, palette='dark')
           plt.title("strip plot: Tips by Data And gender")
           plt.show()
```

strip plot: Tips by Data And gender

# 14.KDE PLOT

```
In [121…   sns.kdeplot(data=tips, x='total_bill',hue='sex', fill=True, palette='dark')
           plt.title("kde Plot:Total Bill Density By Gender")
           plt.show()
```

kde Plot:Total Bill Density By Gender