In [3]:
```
import warnings
warnings.filterwarnings('ignore')
```

In [4]:
```
import seaborn as sns
```

In [5]:
```
sns.get_dataset_names()
```

Out[5]:
```
['anagrams',
 'anscombe',
 'attention',
 'brain_networks',
 'car_crashes',
 'diamonds',
 'dots',
 'dowjones',
 'exercise',
 'flights',
 'fmri',
 'geyser',
 'glue',
 'healthexp',
 'iris',
 'mpg',
 'penguins',
 'planets',
 'seaice',
 'taxis',
 'tips',
 'titanic']
```

In [6]:
```
tips=sns.load_dataset("tips")
tips.head()
```

Out[6]:

	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 [7]:
```
titanic=sns.load_dataset("titanic")
titanic.head()
```

Out[7]:

	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 [8]:
```
tips
```

Out[8]:

	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 [9]:
```
sns.set_theme(style="darkgrid")
```

In [10]:
```
tips.to_csv("tips_dataset.csv",index=False)
import pandas as pd
```

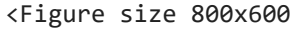
In [11]:
```
import os
os.getcwd()
```

Out[11]:
```
'C:\\Users\\DELL\\FSDS'
```

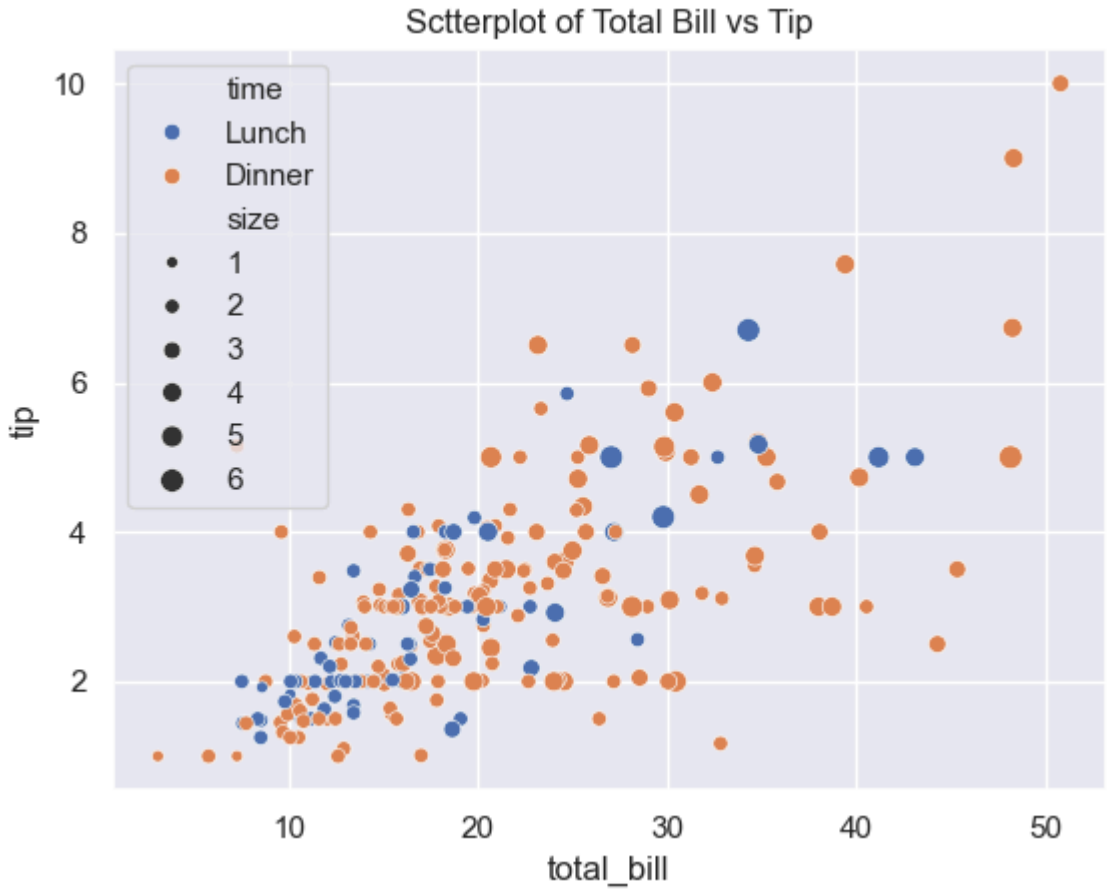
In [13]:
```
import matplotlib.pyplot as plt
```

In [14]:
```
plt.figure(figsize=(8,6))
```

Out[14]:
```
<Figure size 800x600 with 0 Axes>
```



In [20]:
```
sns.scatterplot(data=tips,x="total_bill",y="tip",hue="time",size="size",palette=
plt.title("Sctterplot of Total Bill vs Tip")
plt.show()
```



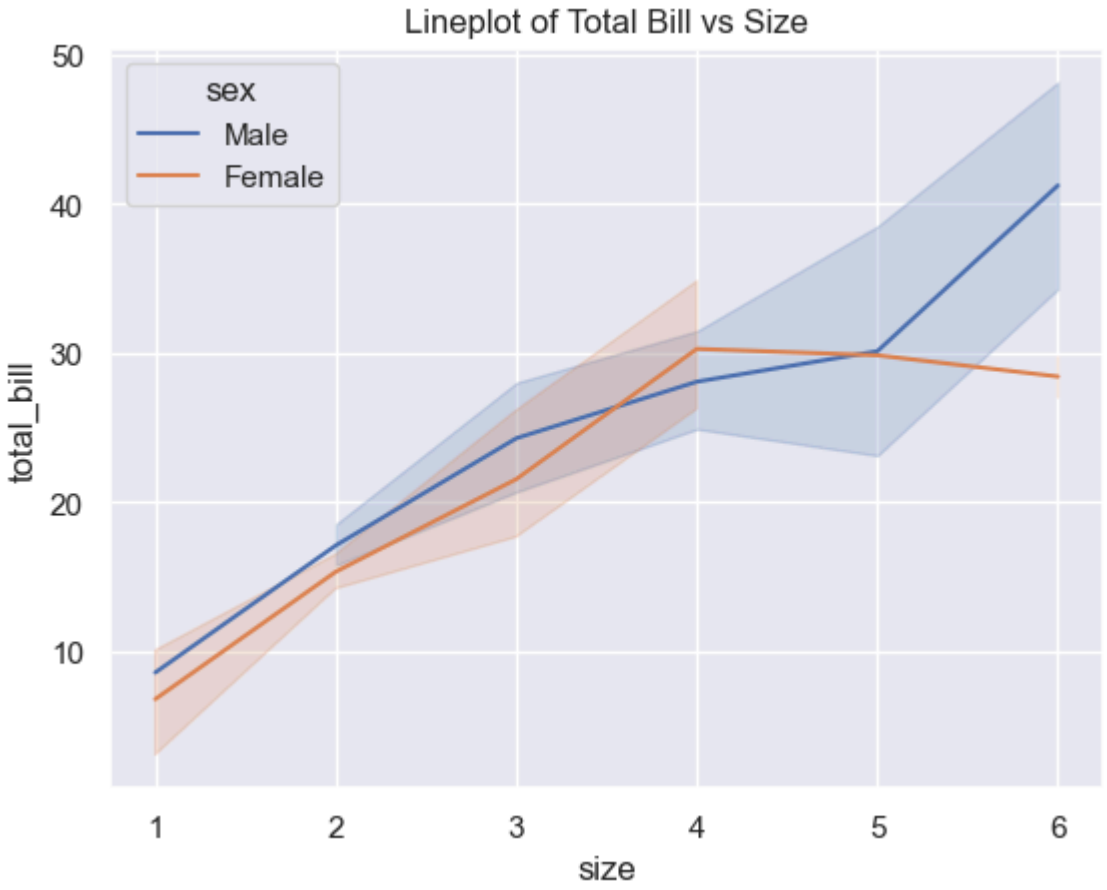
In [18]:
```
tips
```

Out[18]:

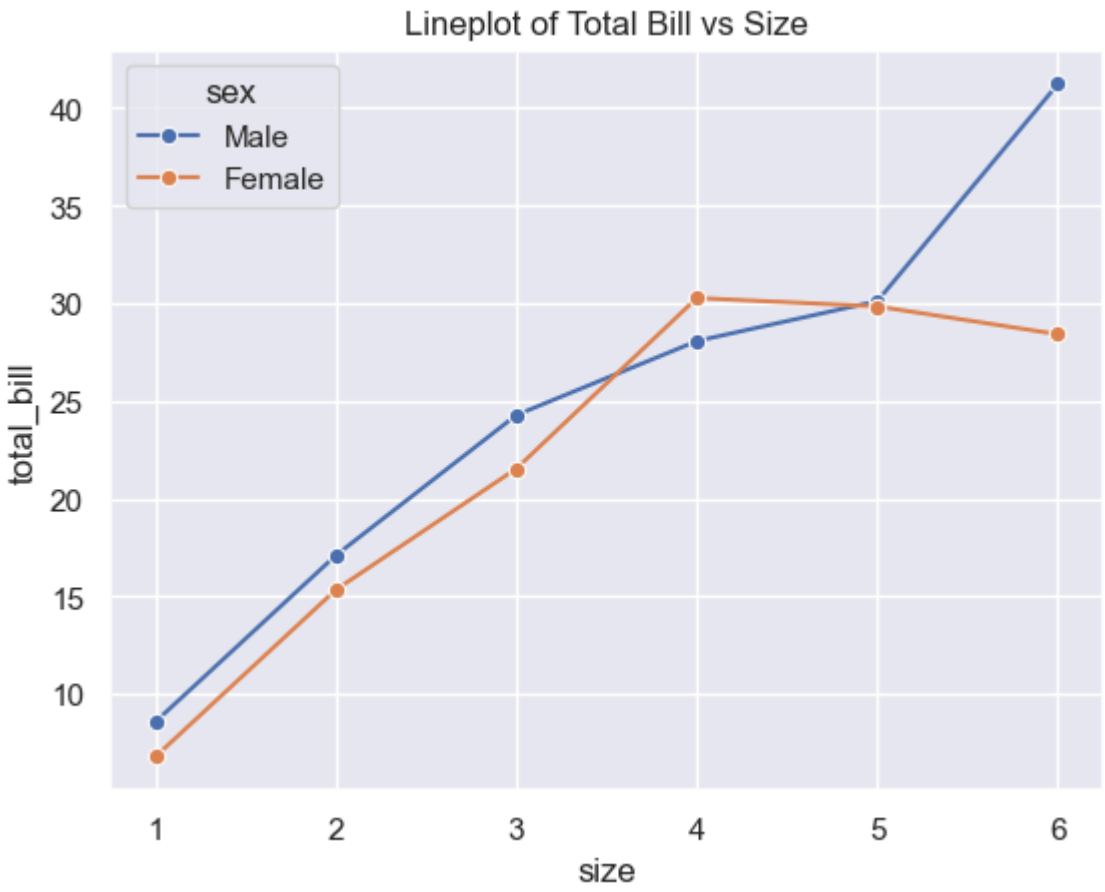
	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4
...	...	...	...	...	...	...	...
239	29.03	5.92	Male	No	Sat	Dinner	3
240	27.18	2.00	Female	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

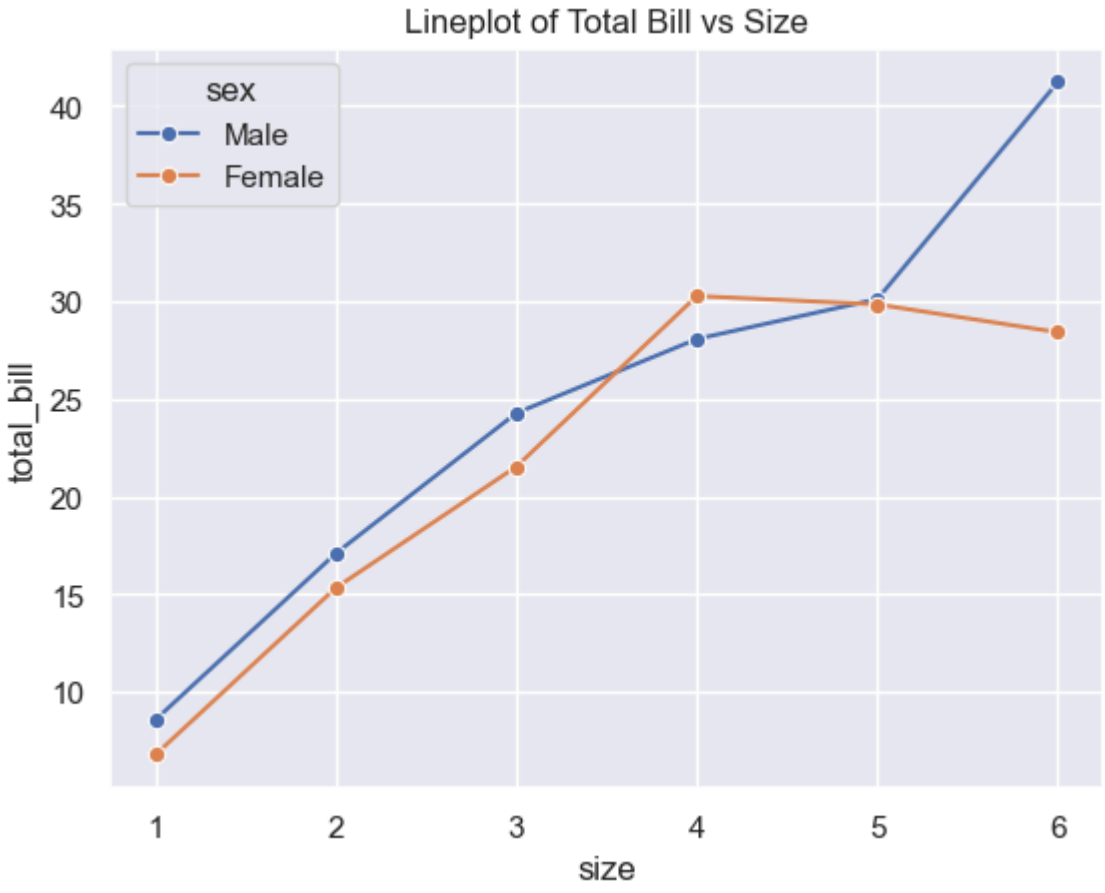
In [21]:
```
sns.lineplot(data=tips,x='size',y='total_bill',hue='sex',markers='o')
plt.title("Lineplot of Total Bill vs Size")
plt.show()
```



In [22]:
```
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()
```



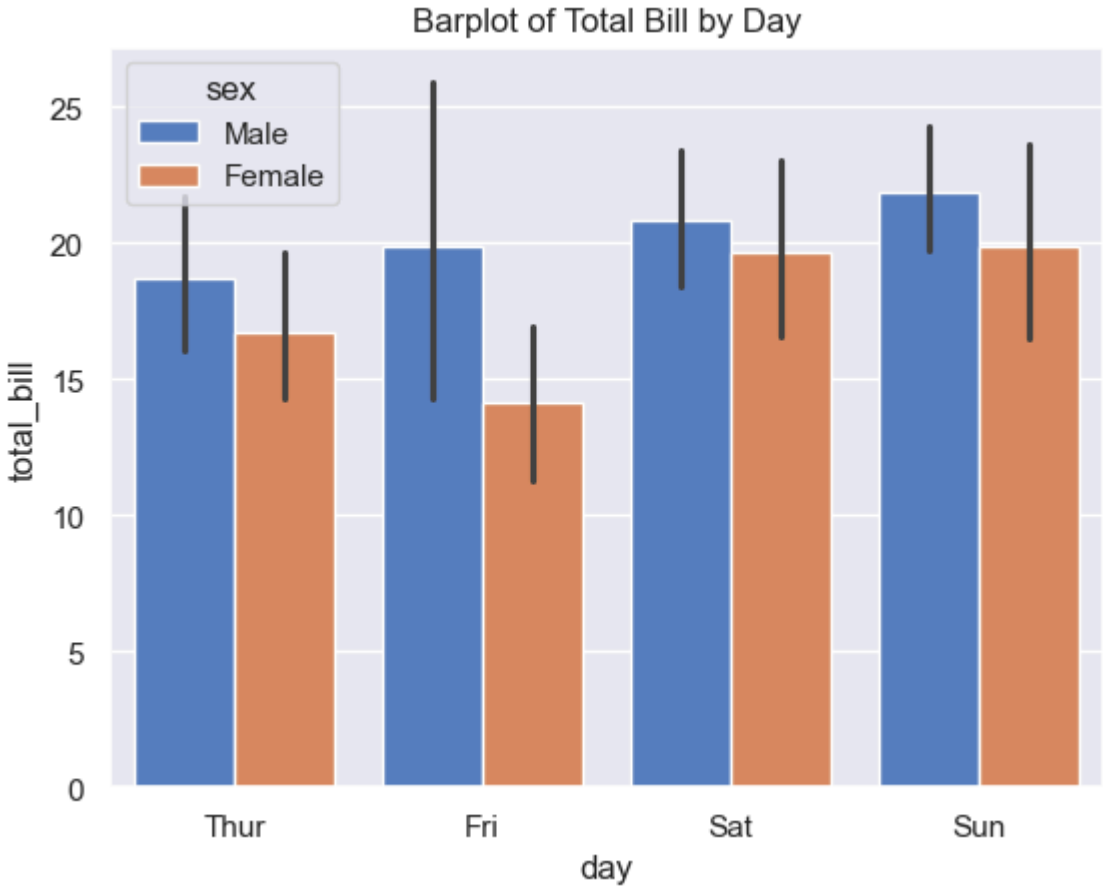
In [24]:
```
sns.lineplot(data=tips,x='size',y='total_bill',hue='sex',ci=None,marker='o')
plt.title("Lineplot of Total Bill vs Size")
plt.show()
```



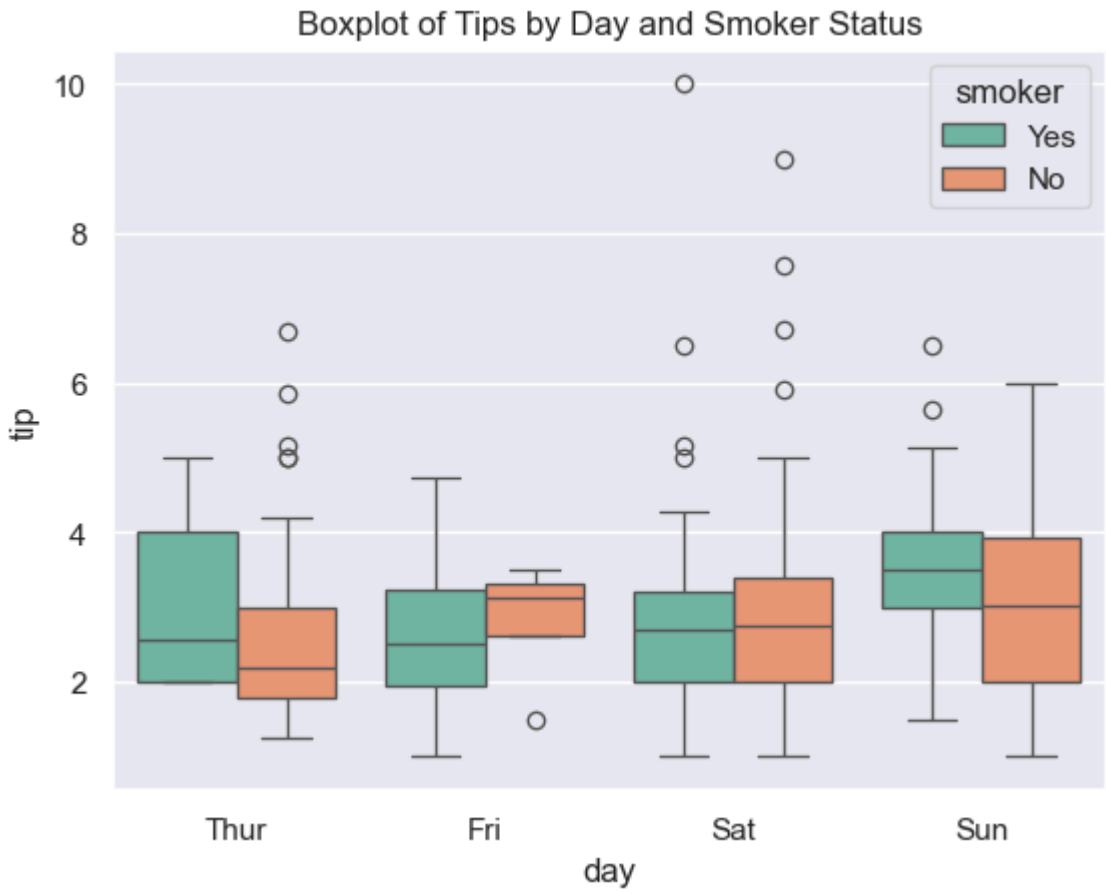
In [25]:
```
tips.columns
```

Out[25]:
```
Index(['total_bill', 'tip', 'sex', 'smoker', 'day', 'time', 'size'], dtype='obj
ect')
```

In [28]:
```
sns.barplot(data=tips,x='day',y='total_bill',hue='sex',palette='muted')
plt.title("Barplot of Total Bill by Day")
plt.show()
```



In [29]:
```
sns.boxplot(data=tips,x='day',y='tip',hue='smoker',palette='Set2')
plt.title("Boxplot of Tips by Day and Smoker Status")
plt.show()
```



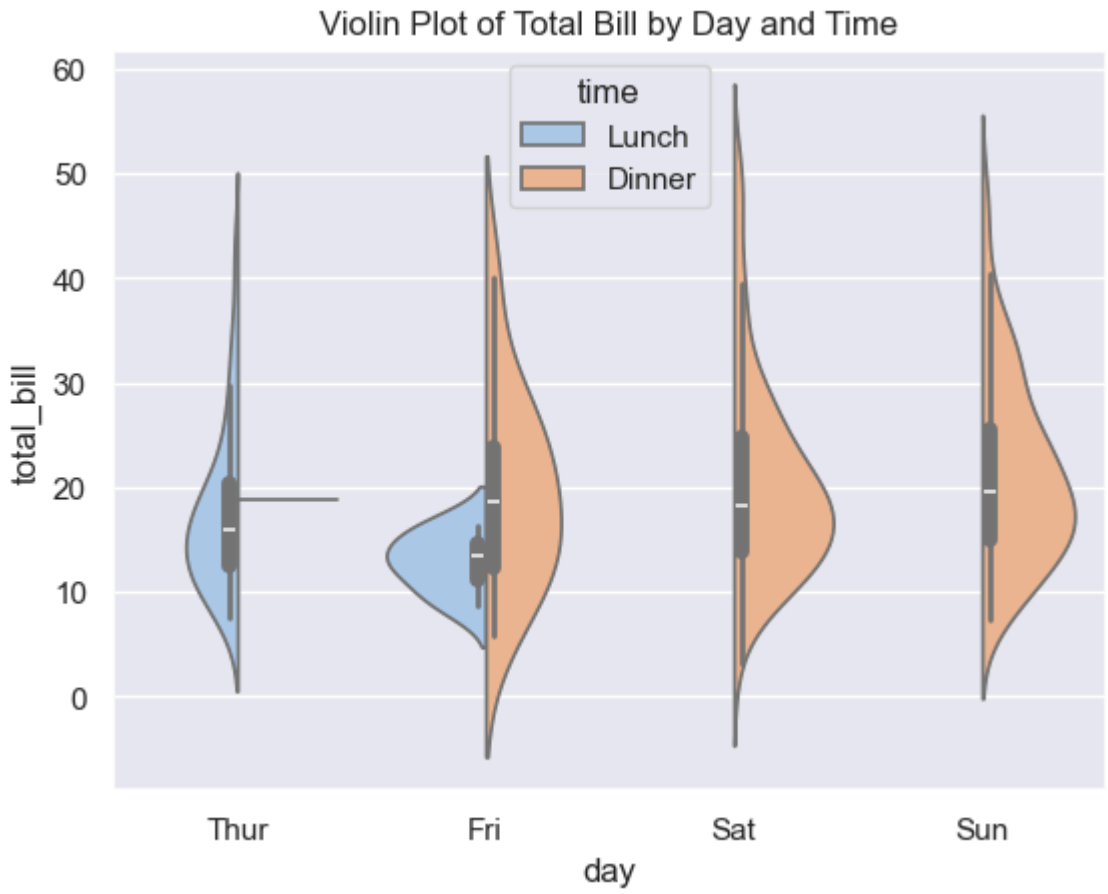
In [30]:
```
tips
```

Out[30]:

	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 [31]:
```
sns.violinplot(data=tips,x='day',y='total_bill',hue='time',split=True,palette='p
plt.title("Violin Plot of Total Bill by Day and Time")
plt.show()
```

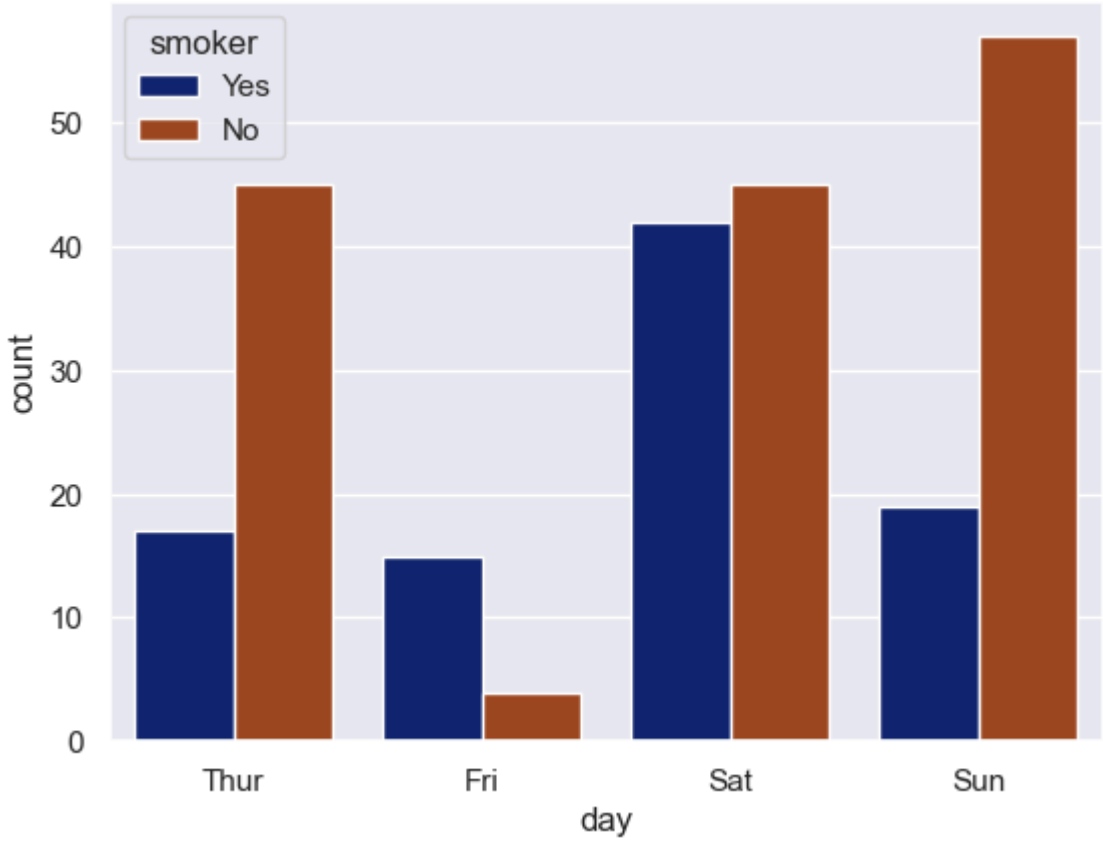


In [32]:
```
tips.columns
```

Out[32]:
```
Index(['total_bill', 'tip', 'sex', 'smoker', 'day', 'time', 'size'], dtype='obj
ect')
```

In [34]:
```
sns.countplot(data=tips,x='day',hue='smoker',palette='dark')
```

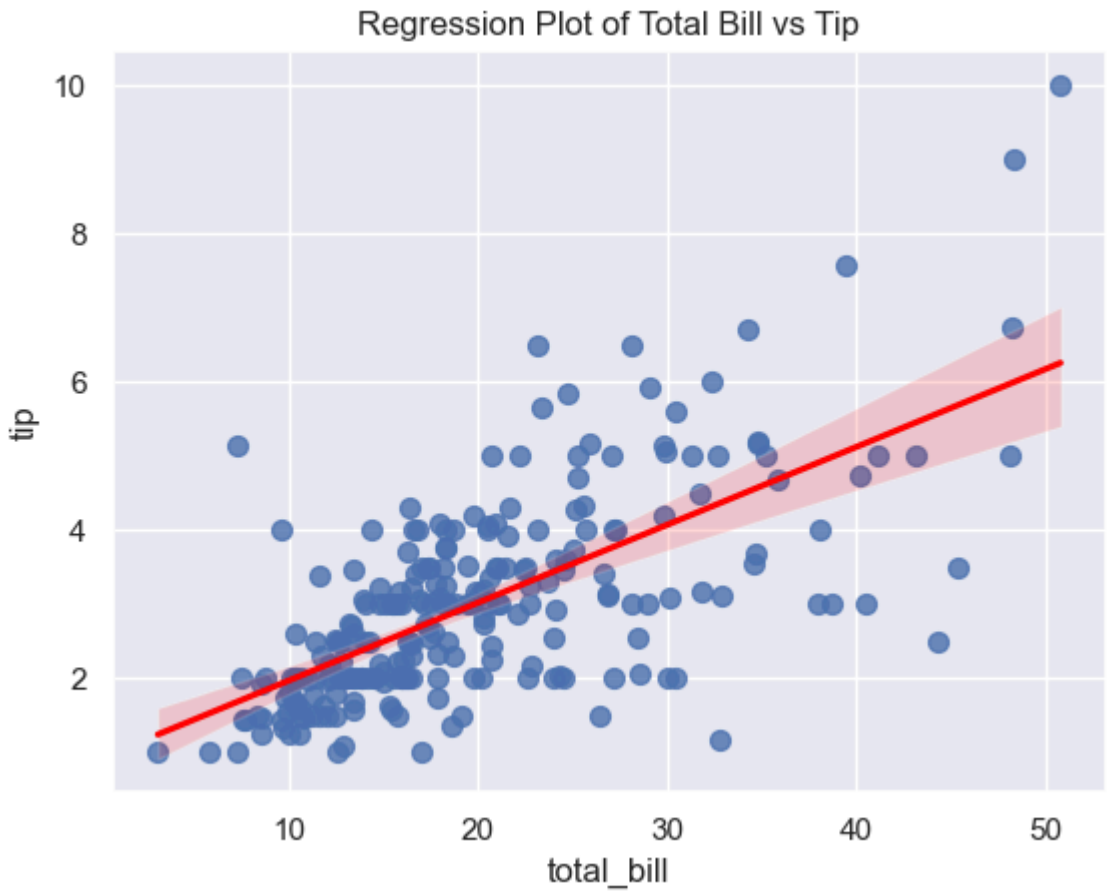
Out[34]:
```
<Axes: xlabel='day', ylabel='count'>
```



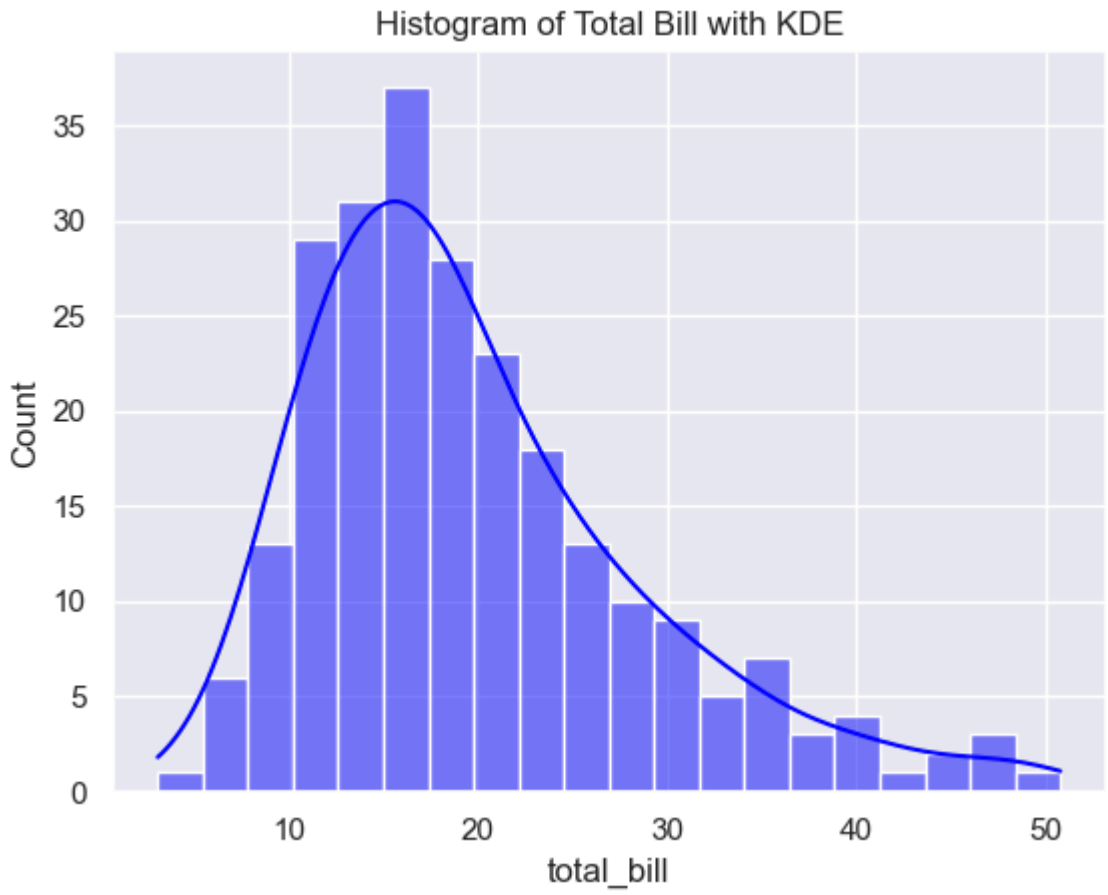
In [35]:
```
tips.columns
```

Out[35]:
```
Index(['total_bill', 'tip', 'sex', 'smoker', 'day', 'time', 'size'], dtype='obj
ect')
```

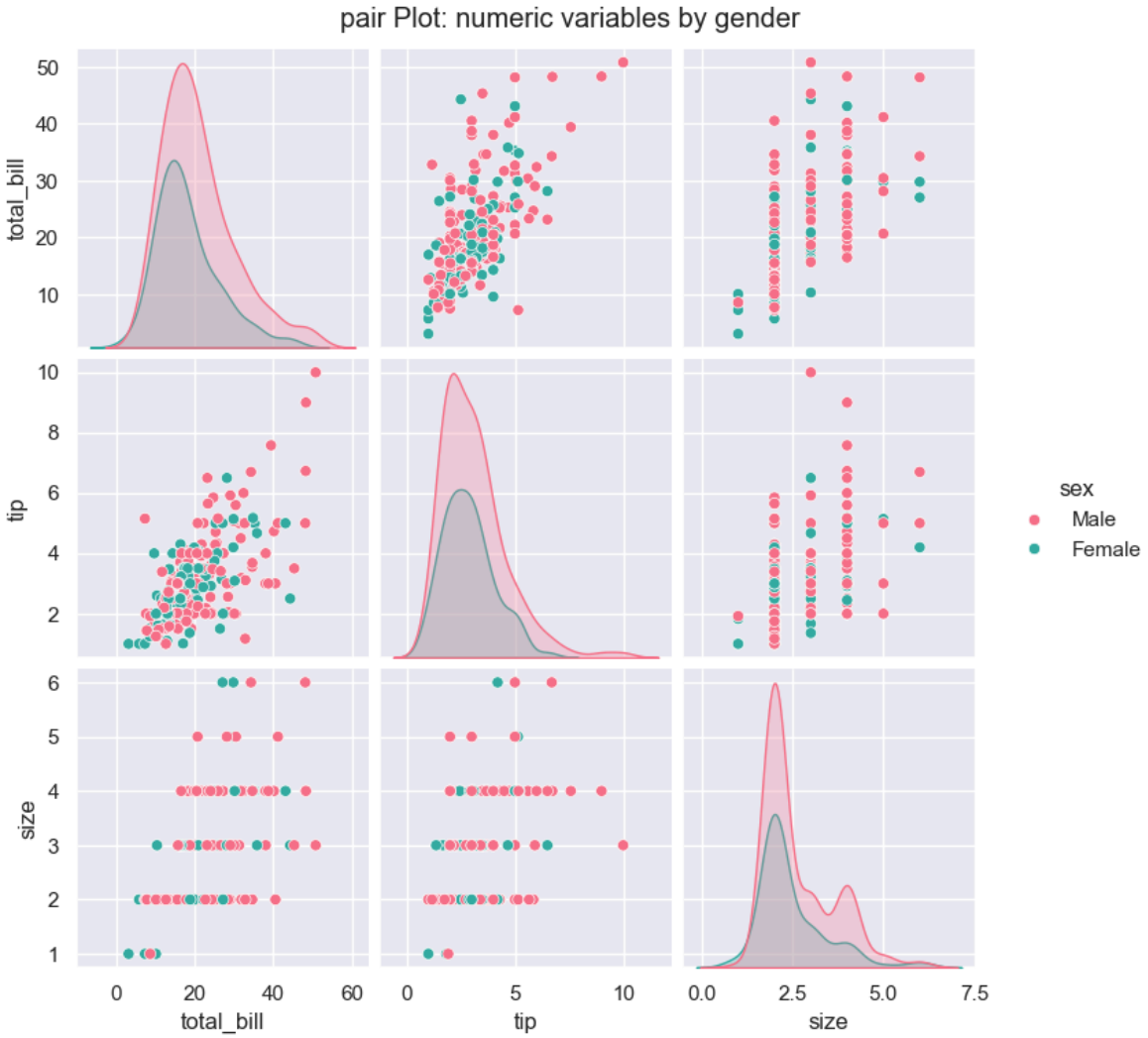
In [36]:
```
sns.regplot(data=tips,x='total_bill',y='tip',scatter_kws={'s':50}, line_kws={'co
plt.title("Regression Plot of Total Bill vs Tip")
plt.show()
```



In [37]:
```
sns.histplot(data=tips,x='total_bill',bins=20,kde=True,color='blue')
plt.title("Histogram of Total Bill with KDE")
plt.show()
```



In [40]:
```
sns.pairplot(tips,hue='sex',vars=["total_bill","tip","size"],palette='husl')
plt.suptitle("pair Plot: numeric variables by gender",y=1.02)
plt.show()
```



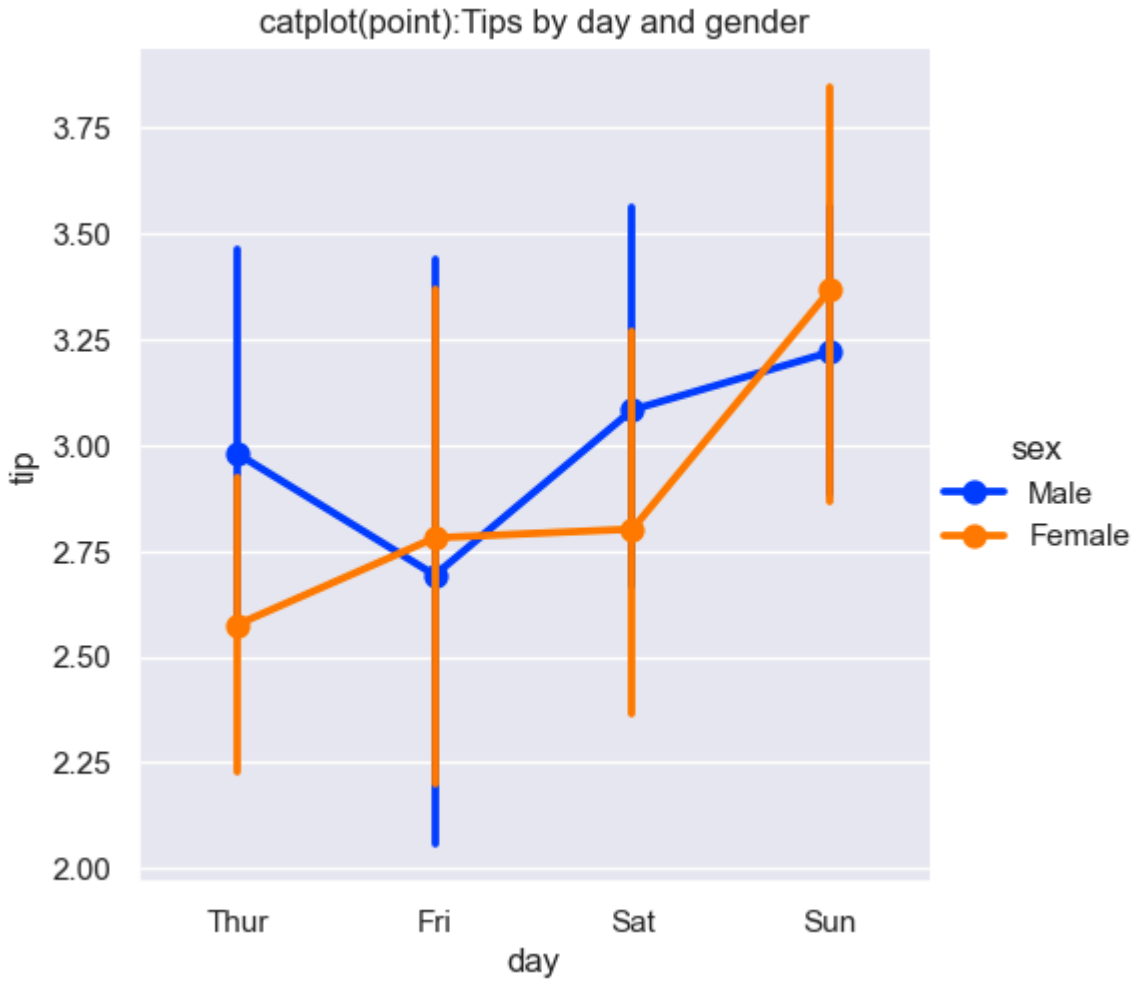
In [41]:
```
tips.columms
```

```
---------------------------------------------------------------------------
AttributeError                            Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_17644\3648796307.py in ?()
----> 1 tips.columms

D:\New folder\Lib\site-packages\pandas\core\generic.py in ?(self, name)
   6295             and name not in self._accessors
   6296             and self._info_axis._can_hold_identifiers_and_holds_name(nam
e)
   6297         ):
   6298             return self[name]
-> 6299         return object.__getattribute__(self, name)

AttributeError: 'DataFrame' object has no attribute 'columms'
```

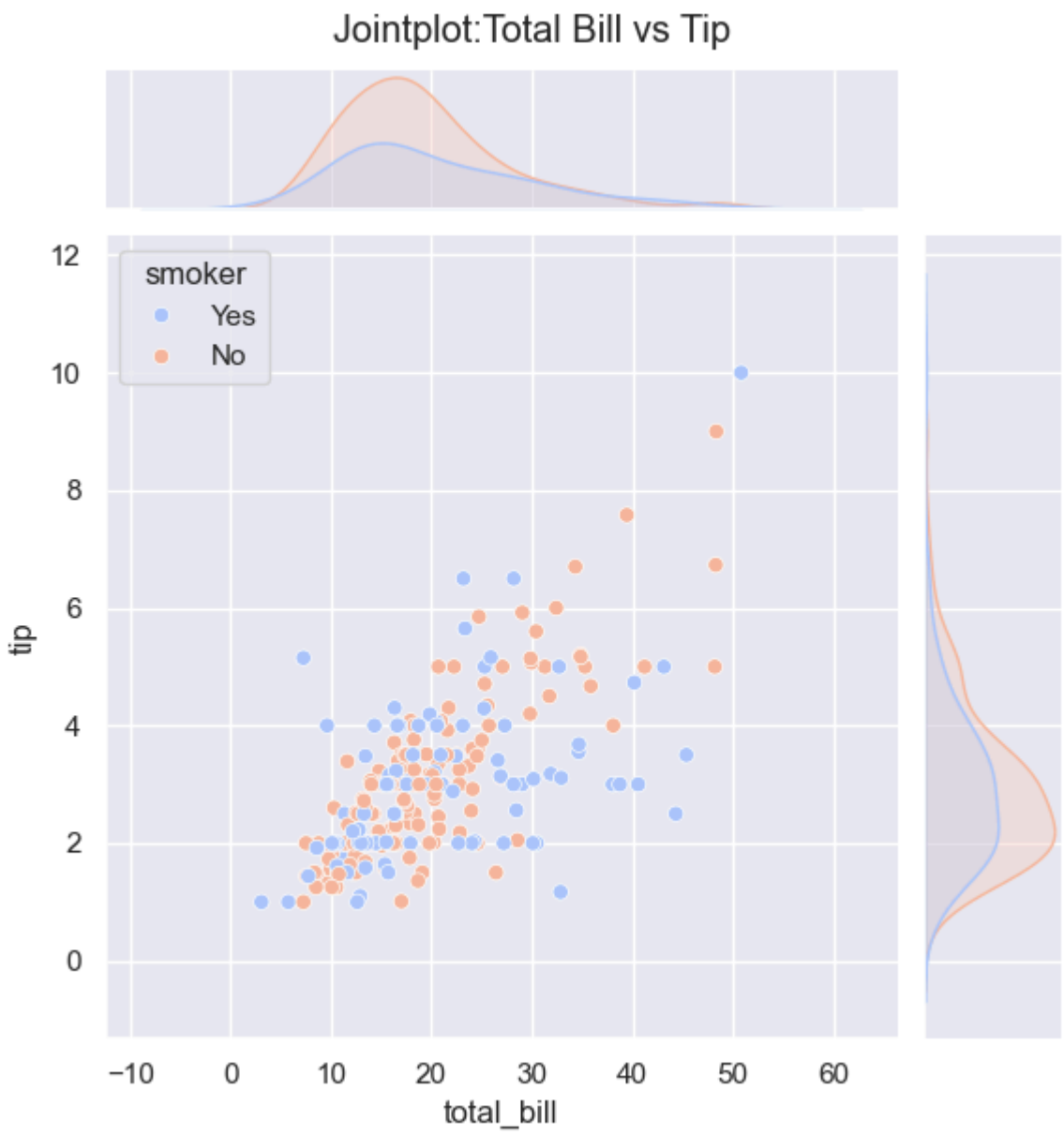
In [42]:
```
tips.columns
```

Out[42]:
```
Index(['total_bill', 'tip', 'sex', 'smoker', 'day', 'time', 'size'], dtype='obj
ect')
```

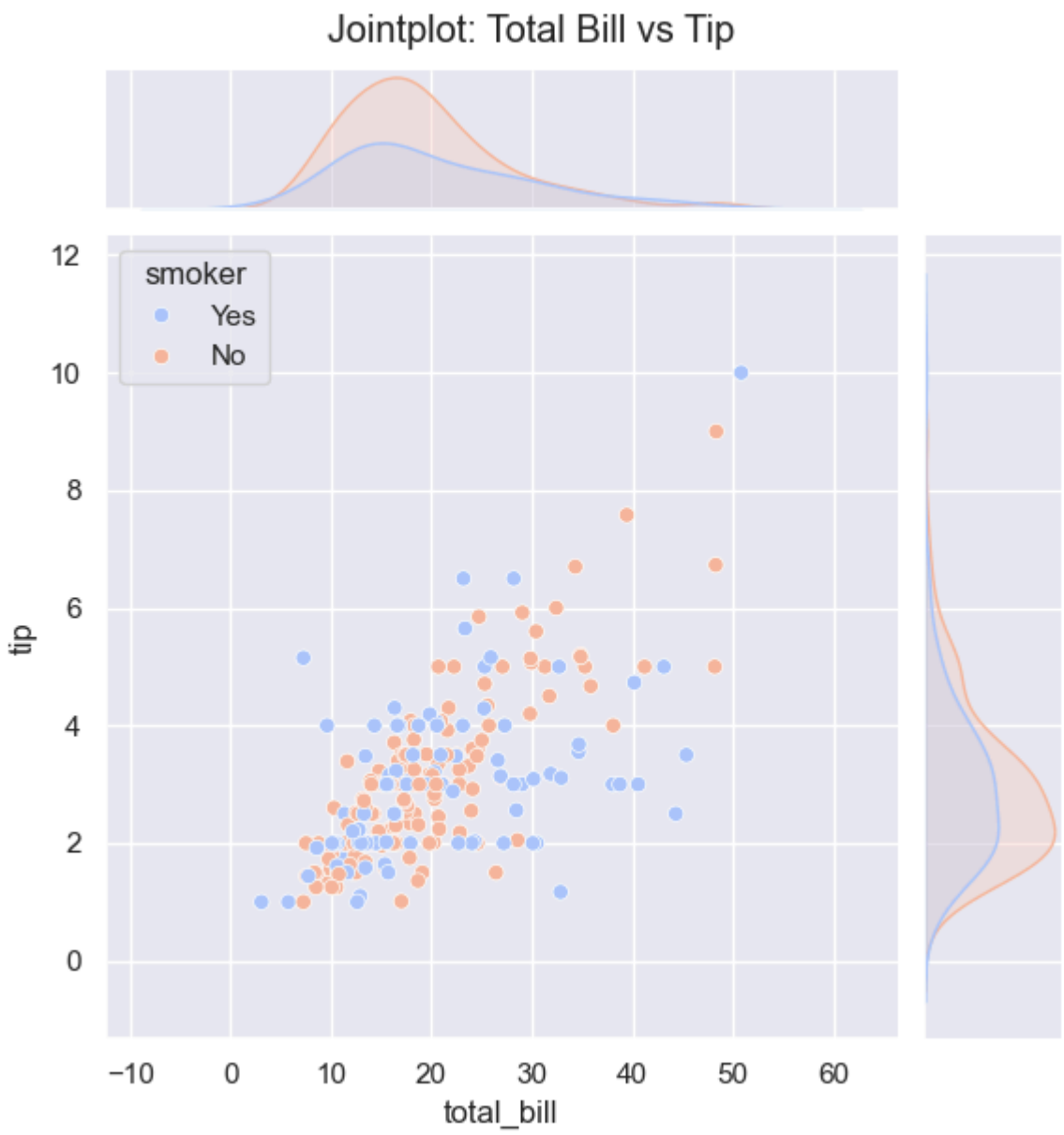
In [43]:
```
sns.catplot(data=tips,x='day',y='tip',hue='sex',kind='point',palette='bright')
plt.title("catplot(point):Tips by day and gender")
plt.show()
```



In [46]:
```
sns.jointplot(data=tips,x='total_bill',y='tip',kind='scatter',hue='smoker',color
plt.suptitle("Jointplot:Total Bill vs Tip",y=1.02)
plt.show()
```

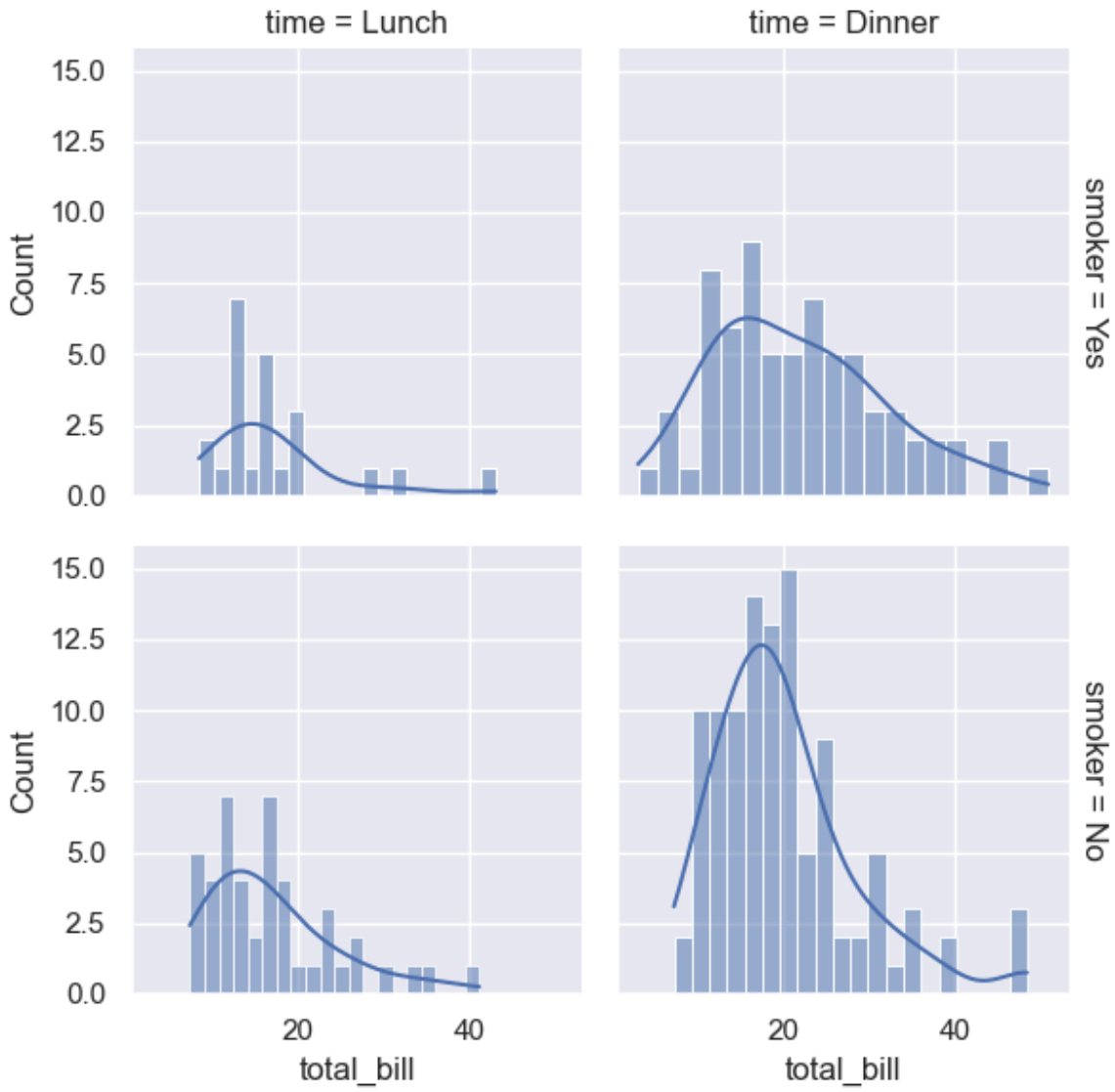


In [47]:
```
sns.jointplot(data=tips,x='total_bill',y='tip',kind='scatter',hue='smoker',palet
plt.suptitle("Jointplot: Total Bill vs Tip",y=1.02)
plt.show()
```

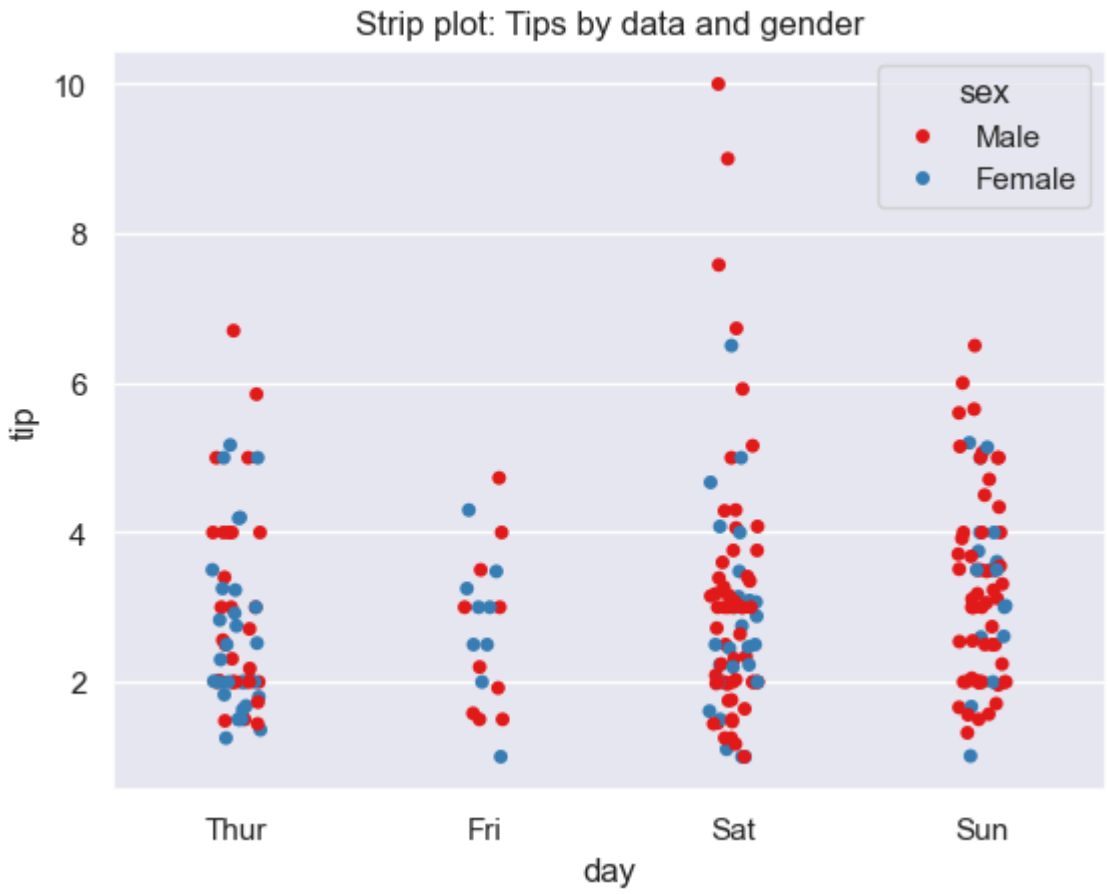


In [55]:
```
g=sns.FacetGrid(tips,col='time',row='smoker',margin_titles=True).map(sns.histplo
g
```

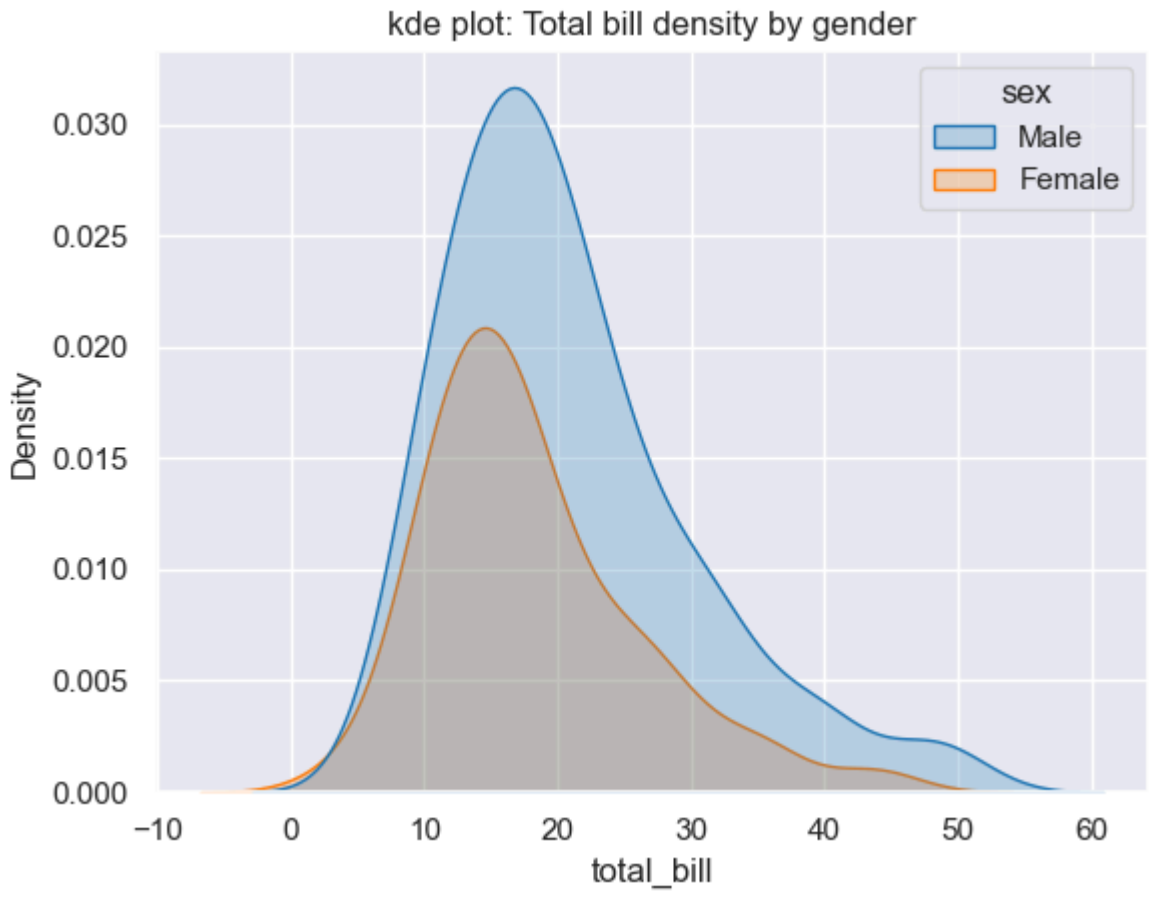
Out[55]: <seaborn.axisgrid.FacetGrid at 0x14a4dc86490>



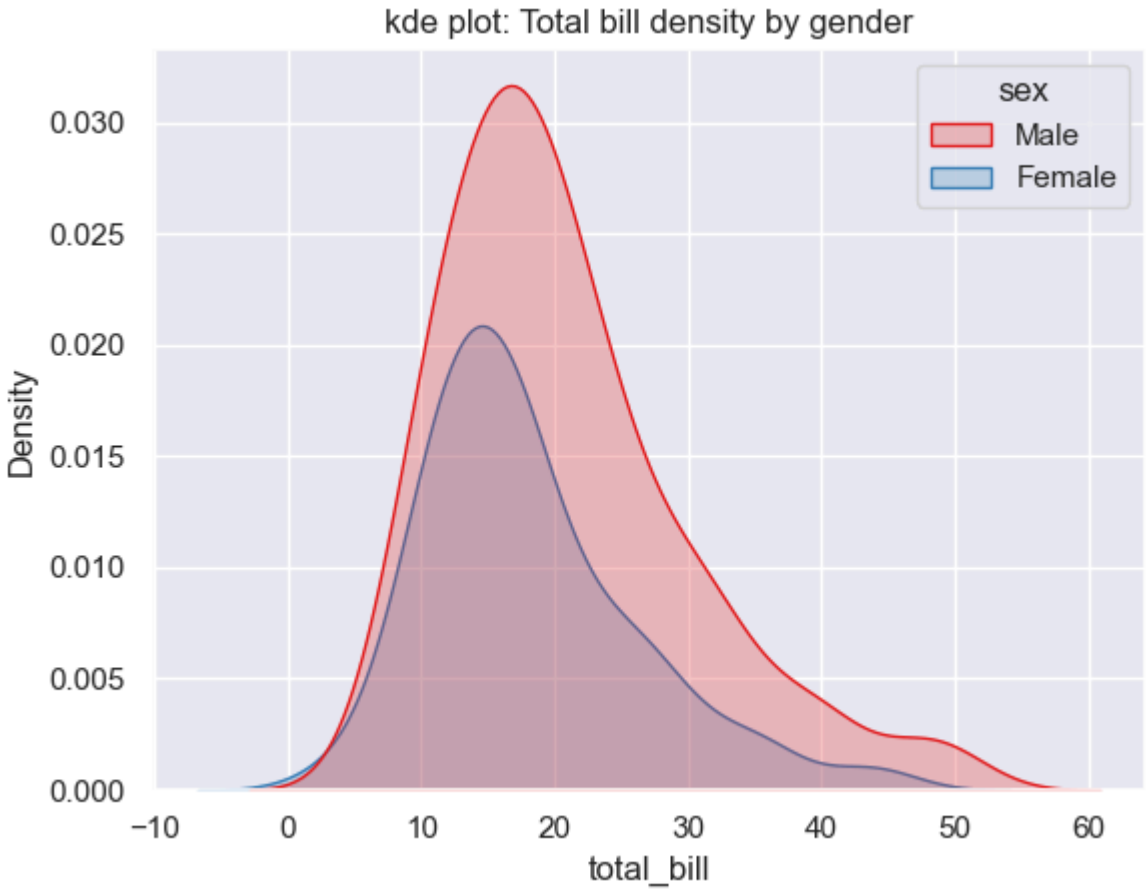
In [57]:
```
sns.stripplot(data=tips,x='day',y='tip',hue='sex',jitter=True,palette='Set1')
plt.title("Strip plot: Tips by data and gender")
plt.show()
```



In [58]:
```
sns.kdeplot(data=tips,x='total_bill',hue='sex',fill=True,palette='tab10')
plt.title("kde plot: Total bill density by gender")
plt.show()
```



In [59]:
```
sns.kdeplot(data=tips,x='total_bill',hue='sex',fill=True,palette='Set1')
plt.title("kde plot: Total bill density by gender")
plt.show()
```



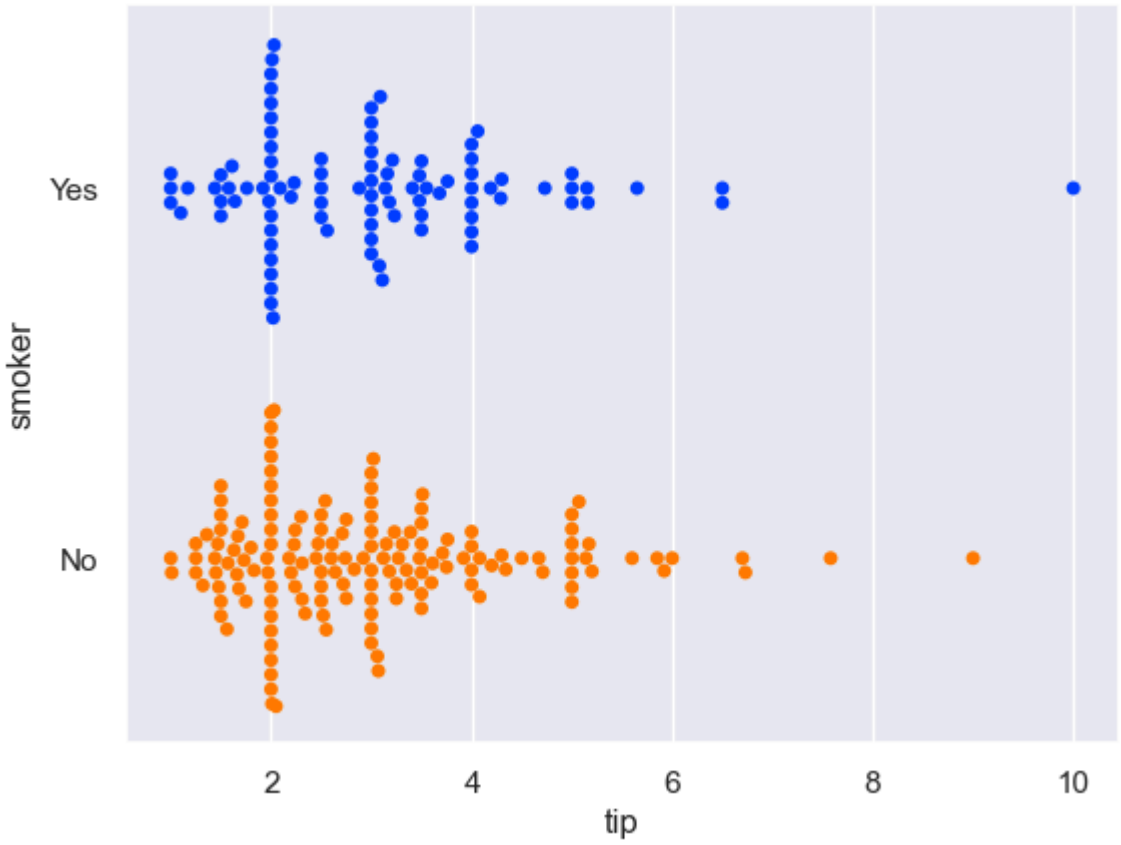
In [60]:
```
tips.head()
```

Out[60]:

	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 [70]:
```
sns.swarmplot(data=tips,x='tip',y='smoker',hue='smoker',palette='bright')
```

Out[70]:
```
<Axes: xlabel='tip', ylabel='smoker'>
```



In [ ]: