In [6]:
```python
import seaborn as sns
import pandas as pd
tips=pd.read_excel("D:\\bizschoolpython\\tips.xlsx")
tips
```

Out[6]:

|	Unnamed: 0	total_bill	tip	sex	smoker	day	time	size
0	0	16.99	1.01	Female	No	Sun	Dinner	2
1	1	10.34	1.66	Male	No	Sun	Dinner	3
2	2	21.01	3.50	Male	No	Sun	Dinner	3
3	3	23.68	3.31	Male	No	Sun	Dinner	2
4	4	24.59	3.61	Female	No	Sun	Dinner	4
...	...	...	...	...	...	...	...	...
239	239	29.03	5.92	Male	No	Sat	Dinner	3
240	240	27.18	2.00	Female	Yes	Sat	Dinner	2
241	241	22.67	2.00	Male	Yes	Sat	Dinner	2
242	242	17.82	1.75	Male	No	Sat	Dinner	2
243	243	18.78	3.00	Female	No	Thur	Dinner	2

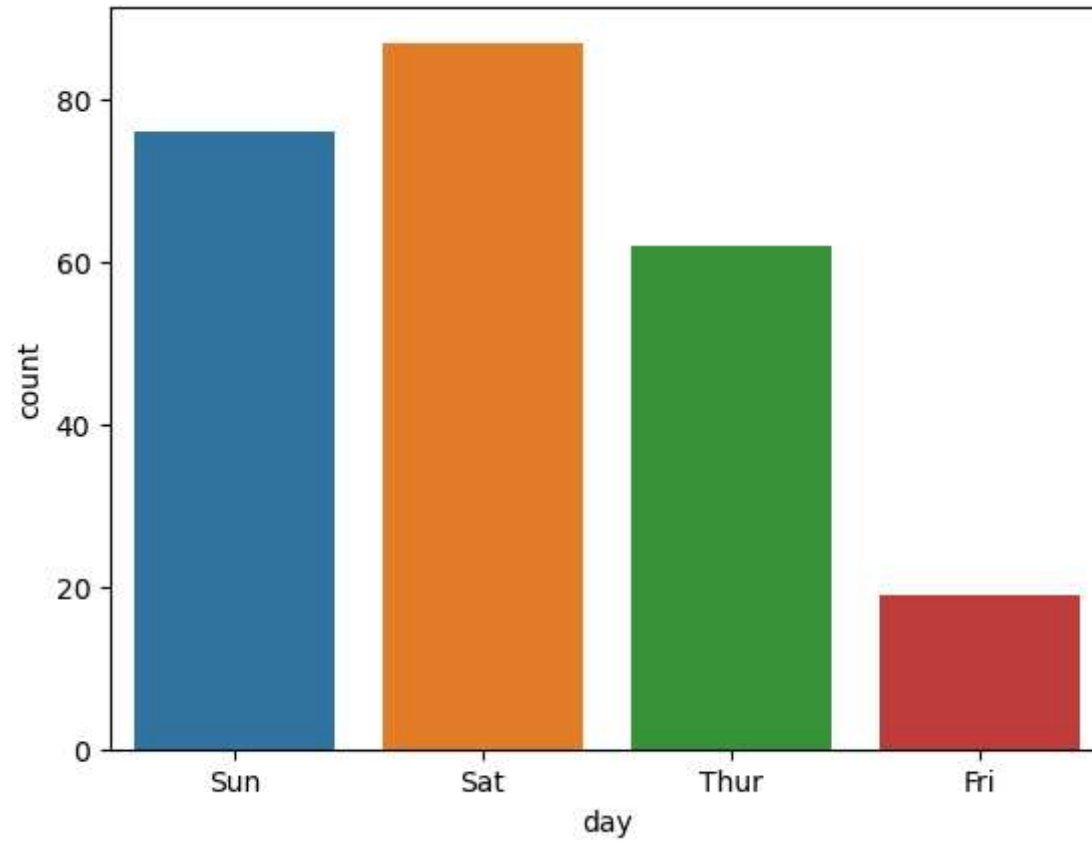244 rows × 8 columns

In [8]:
```python
sns.barplot(x='sex',y='total_bill',data=tips)
#average total bill for Male is slightly higher than female
```
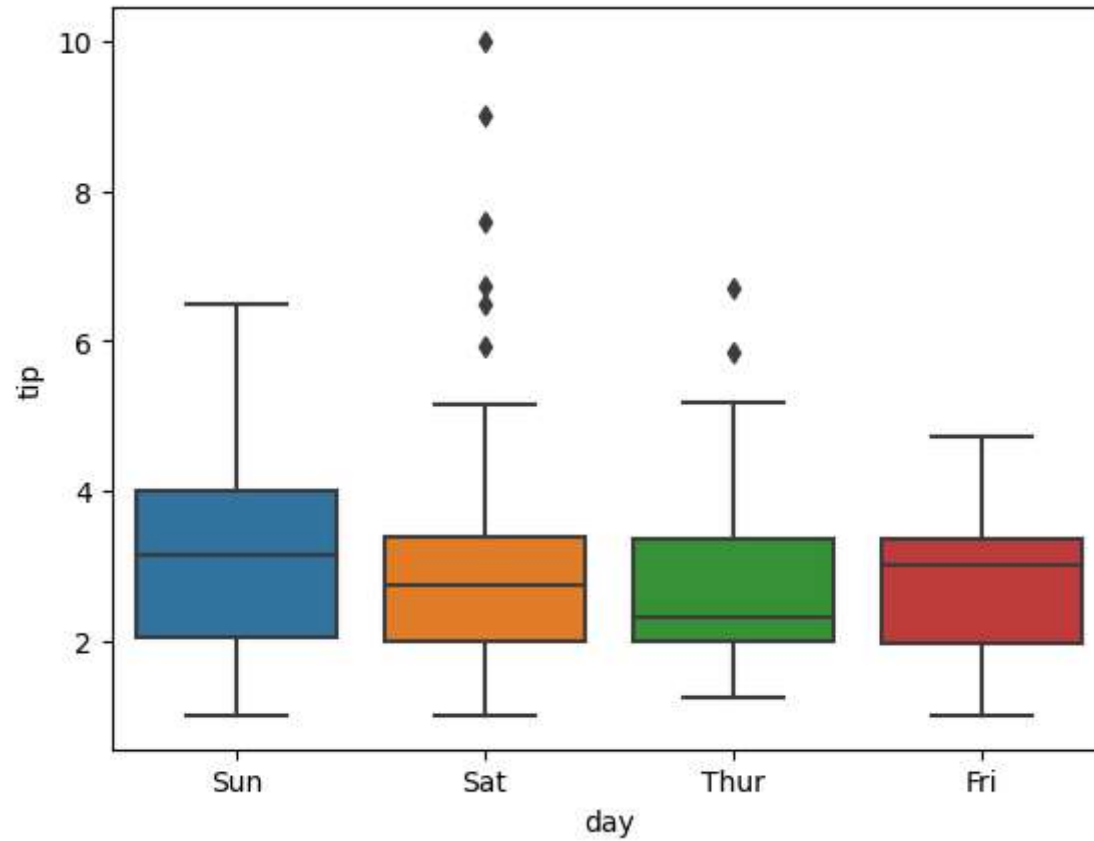
Out[8]:
```
<Axes: xlabel='sex', ylabel='total_bill'>
```
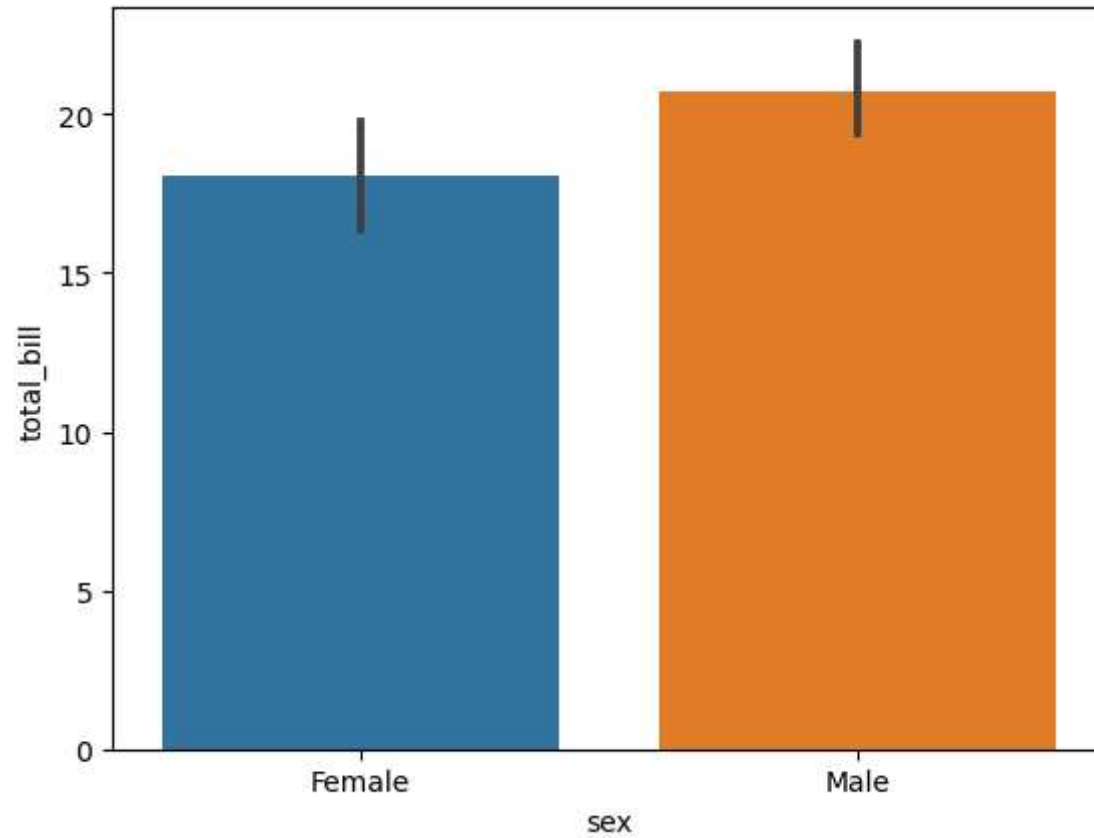
```python
#coutplot counts number of occurences
sns.countplot(x='day',data=tips)
```
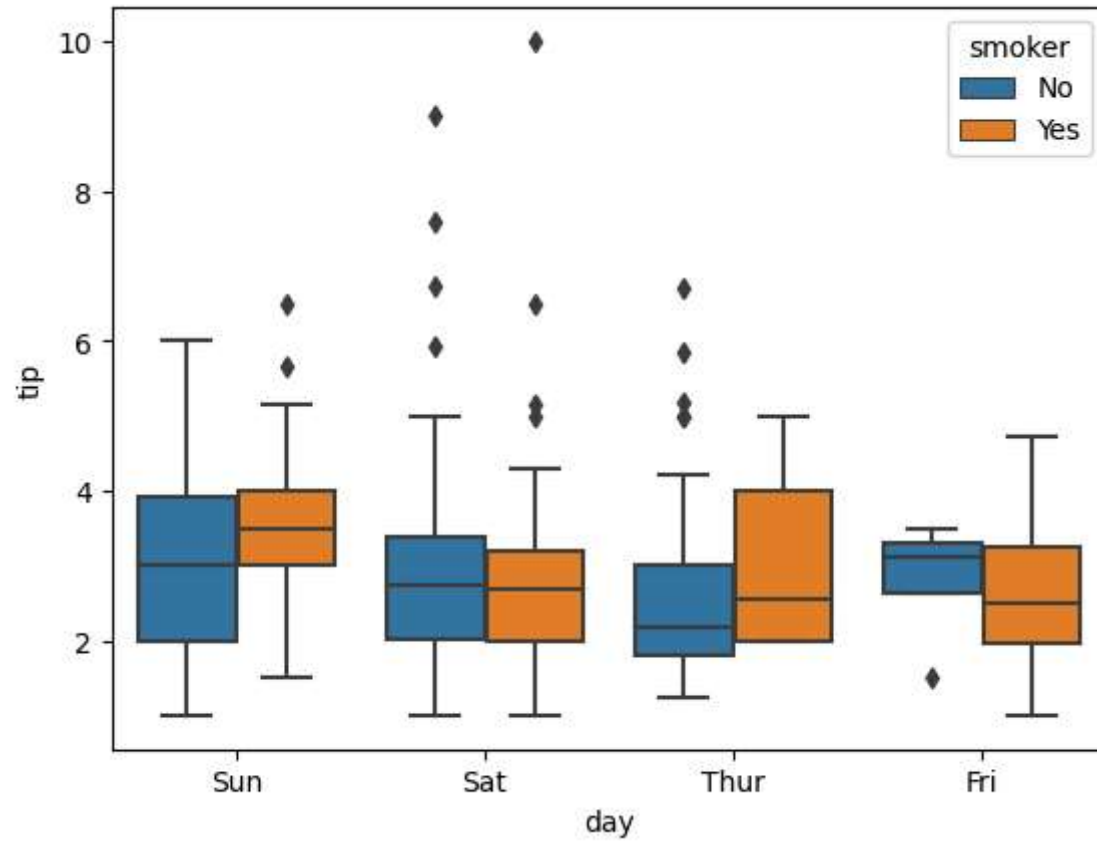
`<Axes: xlabel='day', ylabel='count'>`

```
In [10]:  #distribution with quatitive data
          sns.boxplot(x='day', y="tip", data=tips)
```
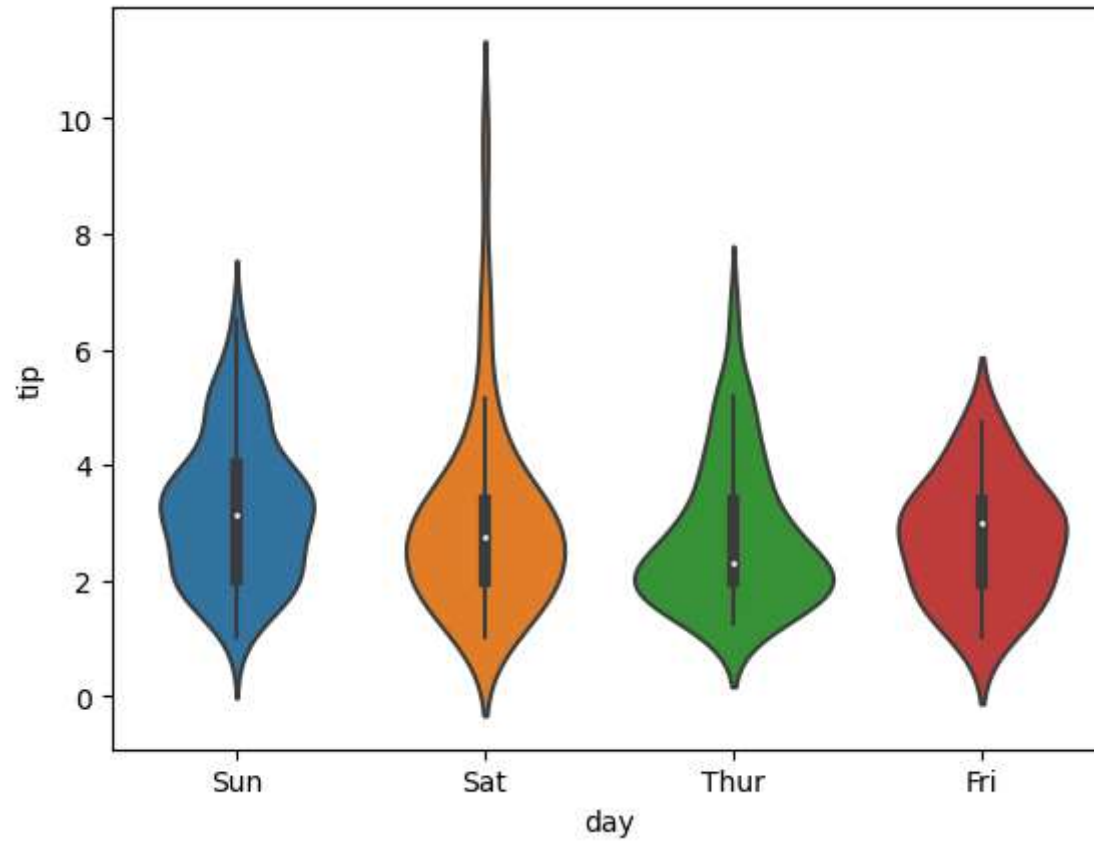
```
Out[10]:  <Axes: xlabel='day', ylabel='tip'>
```

In [11]:
```python
#add an attribute
sns.boxplot(x='day', y="tip", data=tips,hue="smoker")
```
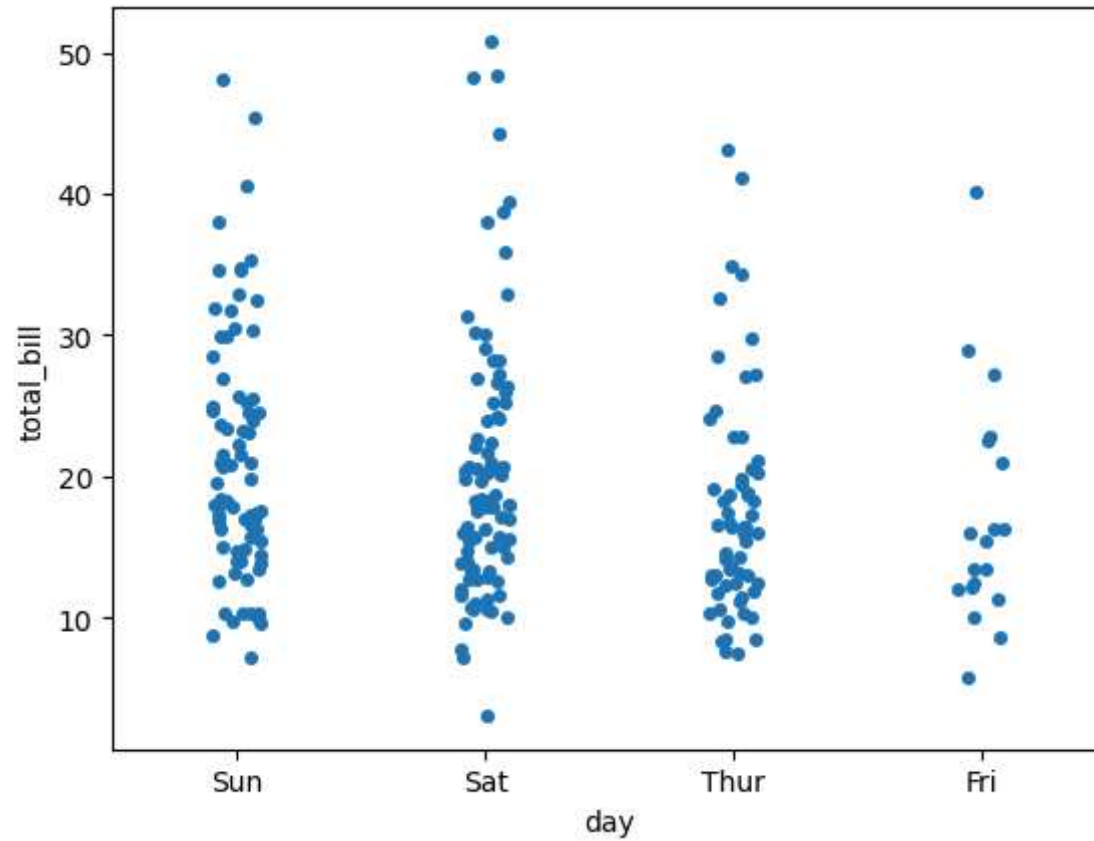
Out[11]: `<Axes: xlabel='day', ylabel='tip'>`

```
In [13]:   sns.violinplot(x='day',y='tip',data=tips)
```
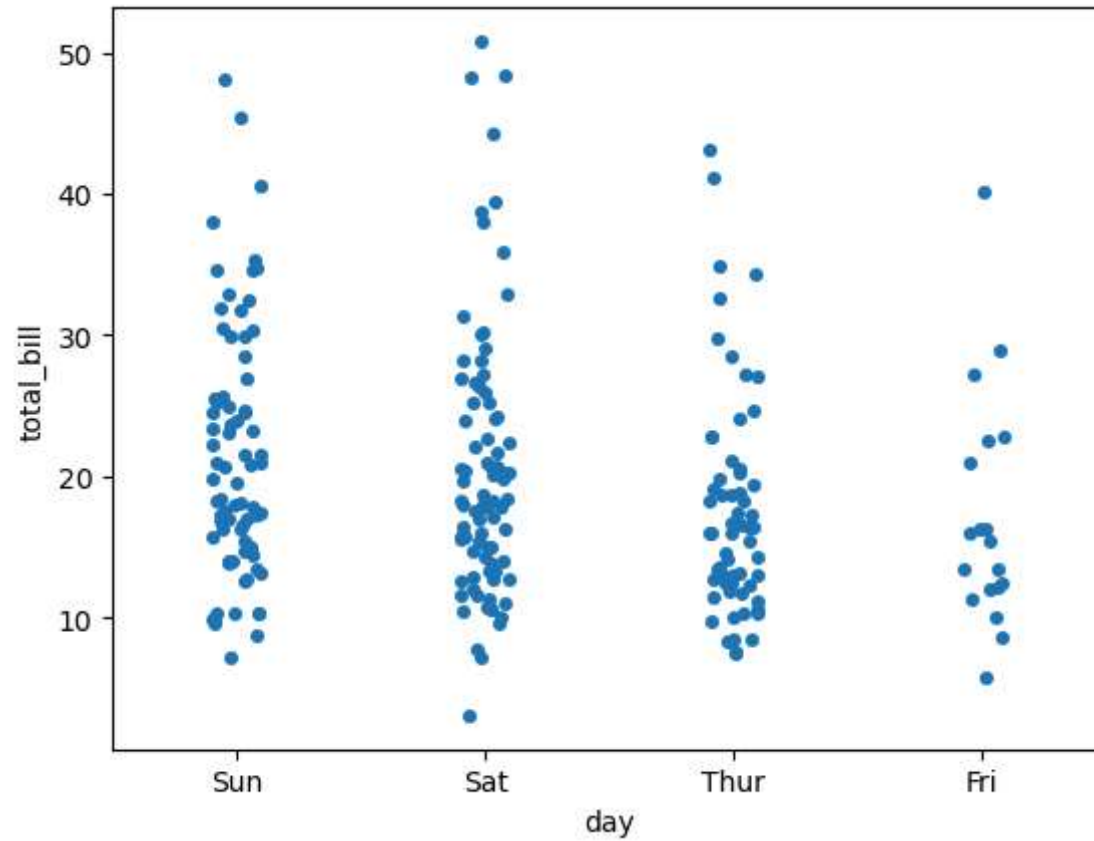
Out[13]:   <Axes: xlabel='day', ylabel='tip'>

```python
#strip plot based on the category
sns.stripplot(x='day', y='total_bill', data=tips)
```

`<Axes: xlabel='day', ylabel='total_bill'>`
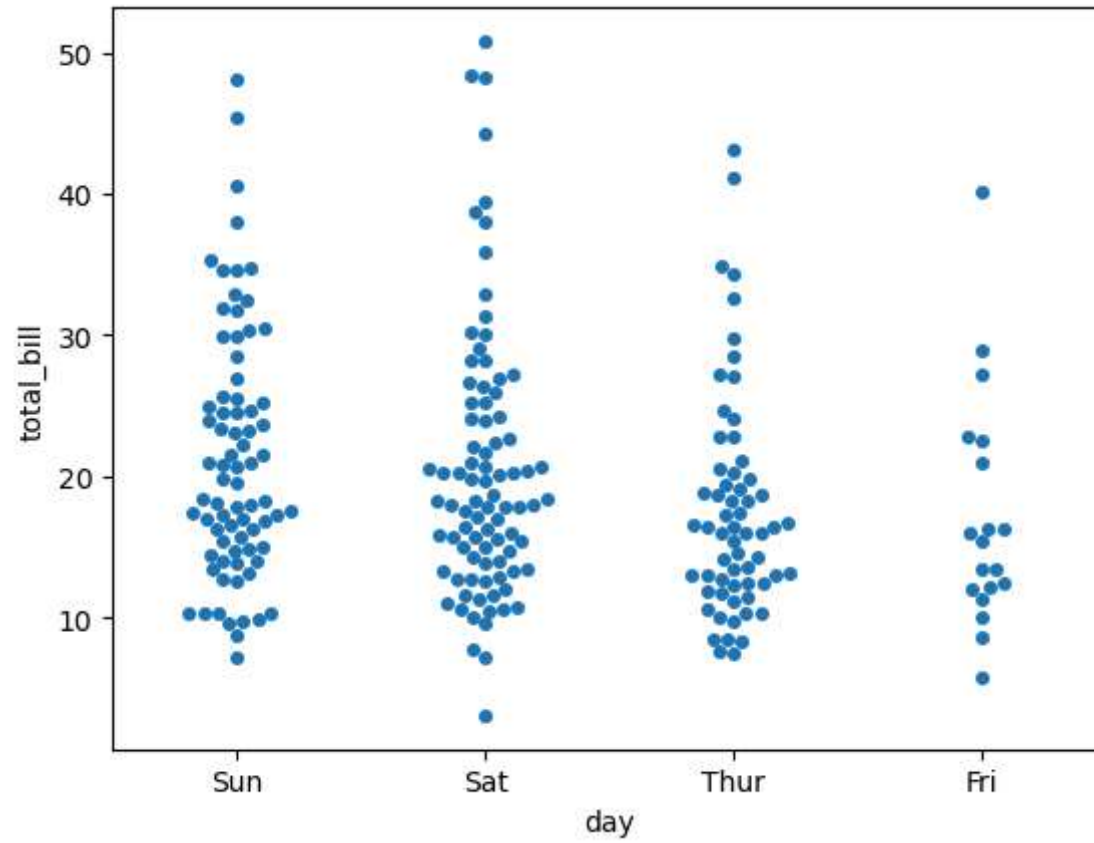
```
In [15]:   # to the same strip plot add jitter = true
           sns.stripplot(x='day', y='total_bill', data=tips, jitter=True)
```

Out[15]:   <Axes: xlabel='day', ylabel='total_bill'>

In [17]:
```python
# is a strip plot, scatter plot+ strip plot + violin plot
sns.swarmplot(x='day', y='total_bill', data=tips)
```

Out[17]:   <Axes: xlabel='day', ylabel='total_bill'>

In [ ]: