

```
In [1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [2]: data=pd.read_csv("/home/student/Desktop/Titanic1.csv")
```

```
In [5]: from seaborn import load_dataset
```

```
In [15]: tips = load_dataset("tips")
tips
```

```
Out[15]:
```

	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

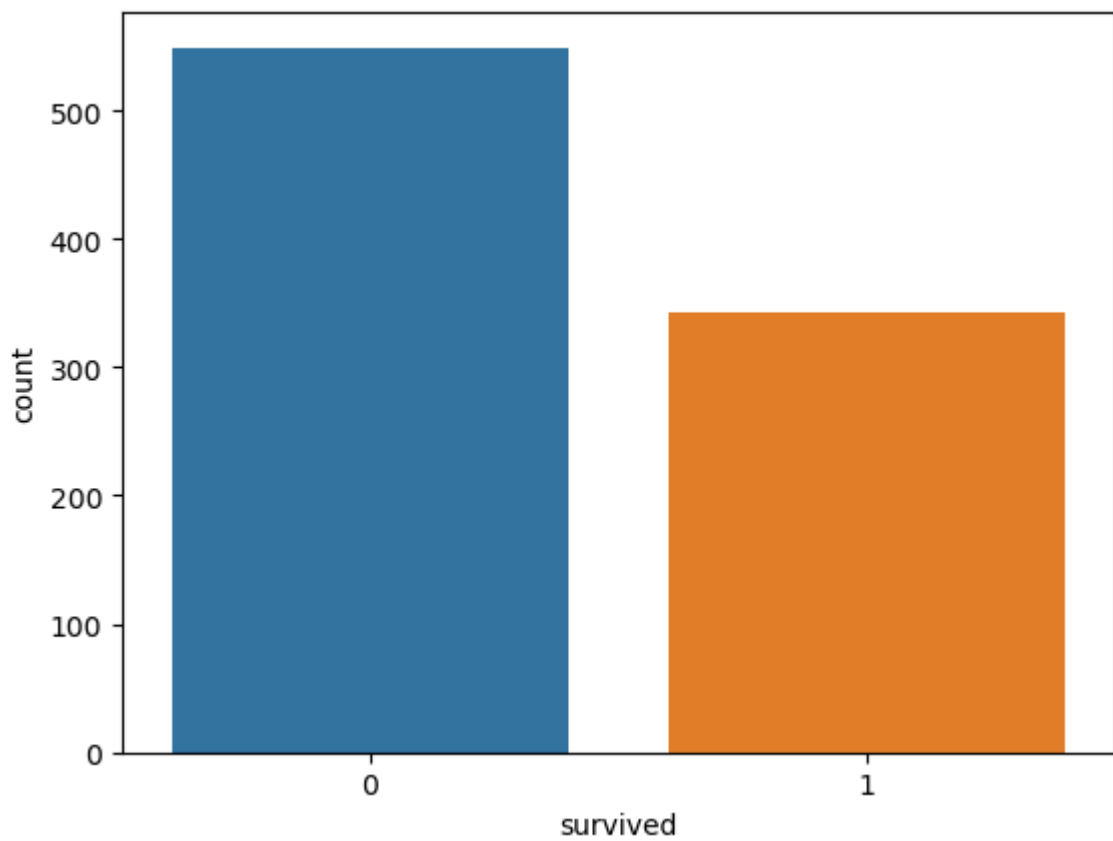
244 rows × 7 columns

```
In [7]: data.head()
```

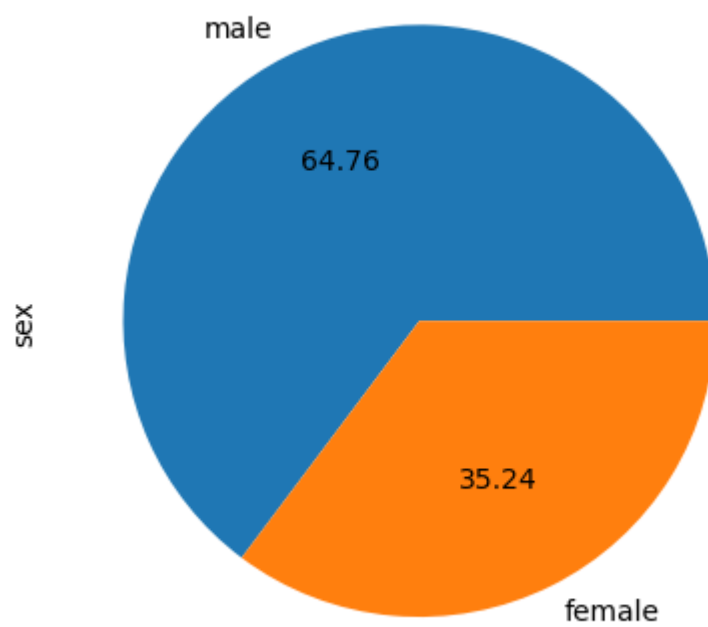
```
Out[7]:
```

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

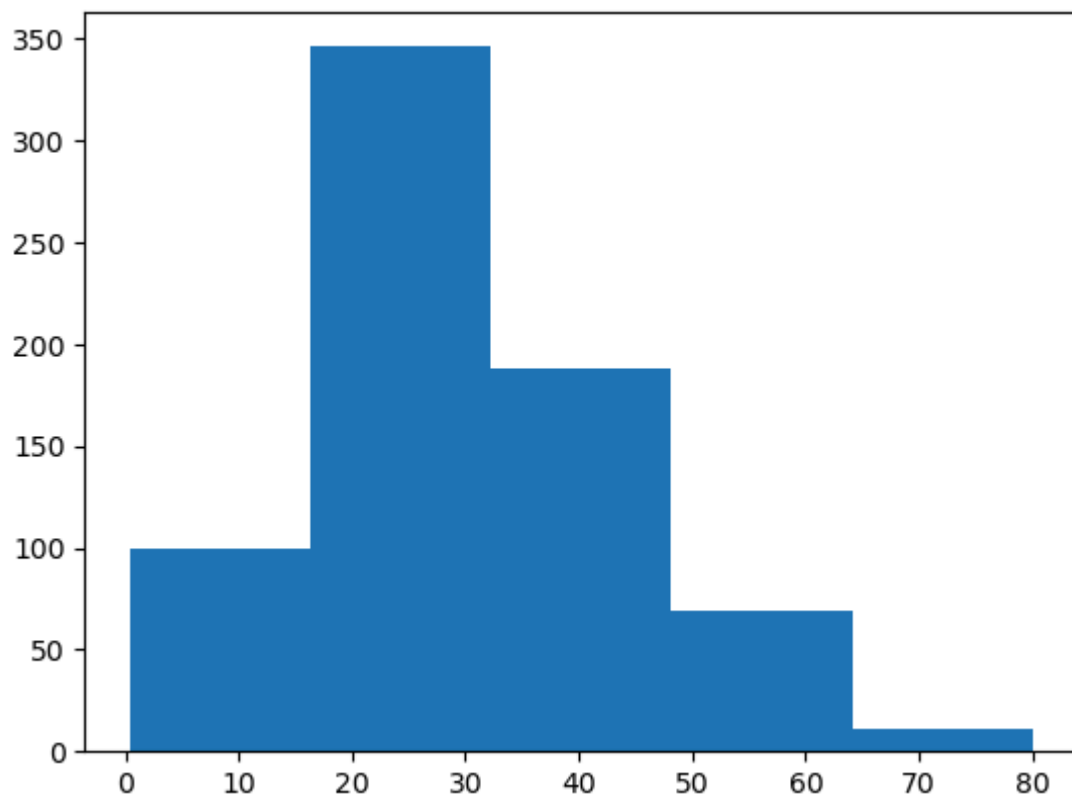
```
In [13]: sns.countplot(x='survived',data=data)
plt.show()
```



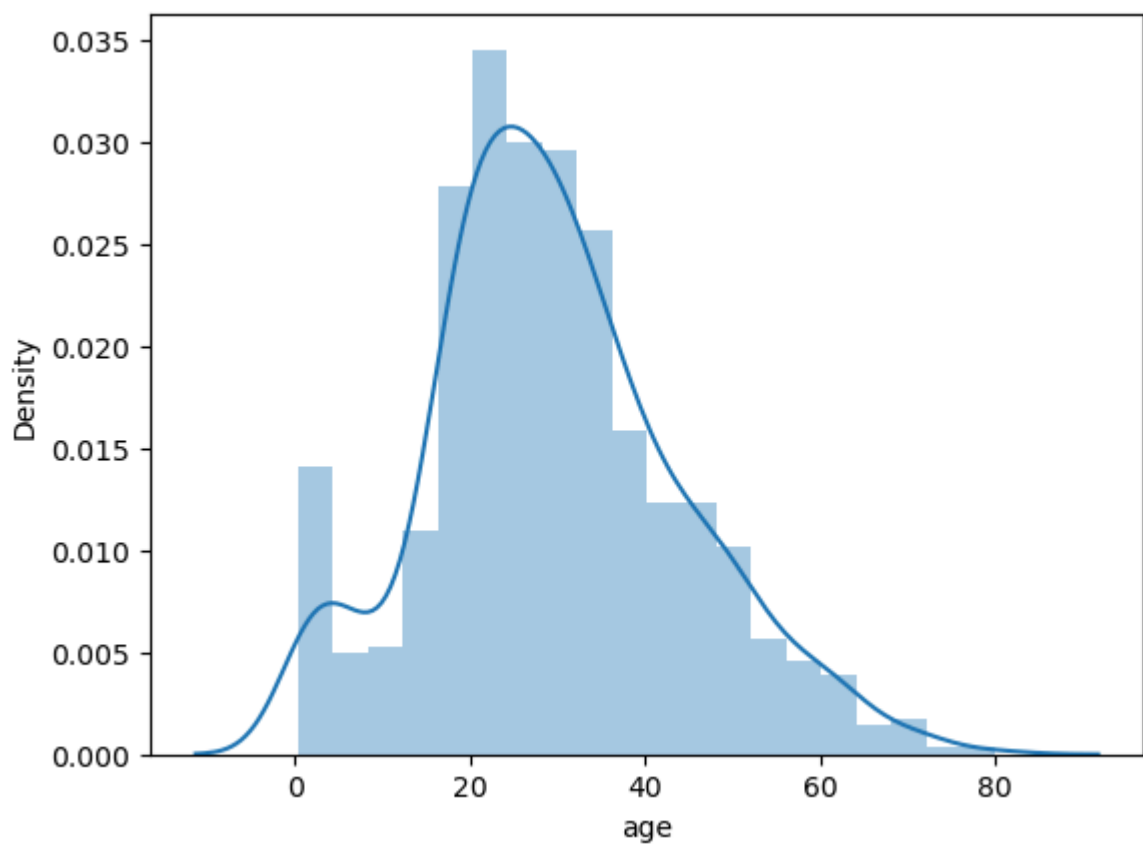
```
In [9]: data['sex'].value_counts().plot(kind="pie", autopct="%.2f")  
plt.show()
```



```
In [10]: plt.hist(data['age'], bins=5)  
plt.show()
```

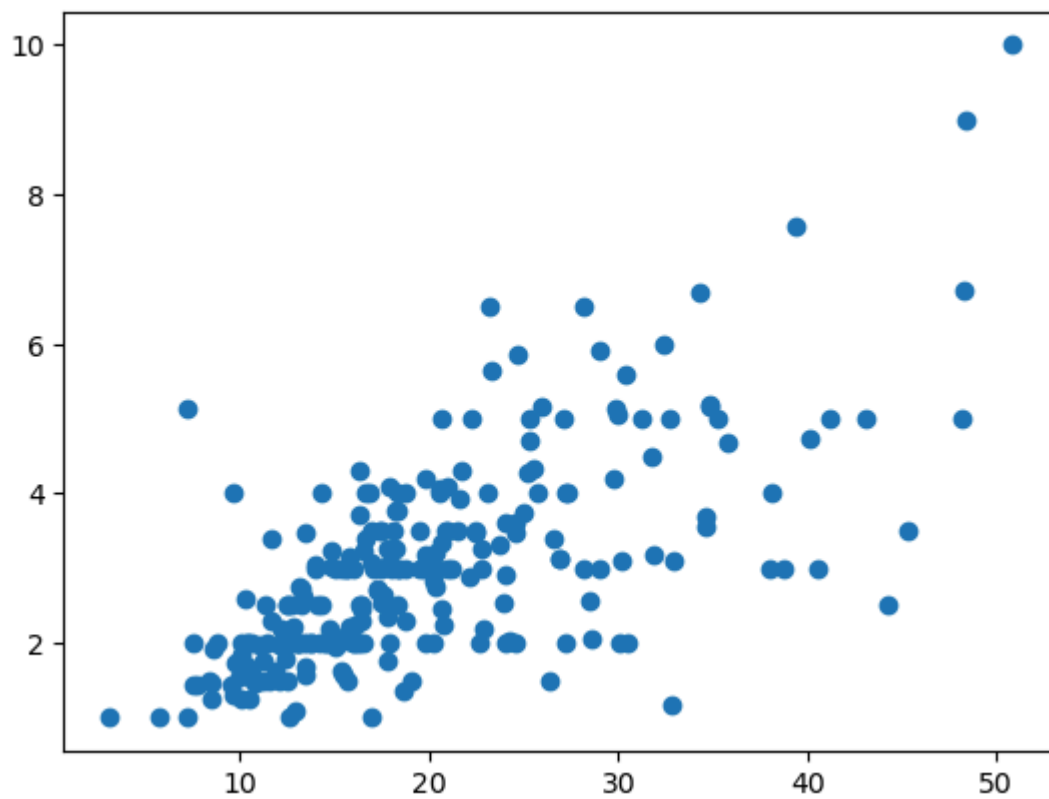


```
In [11]: sns.distplot(data['age'])  
plt.show()
```

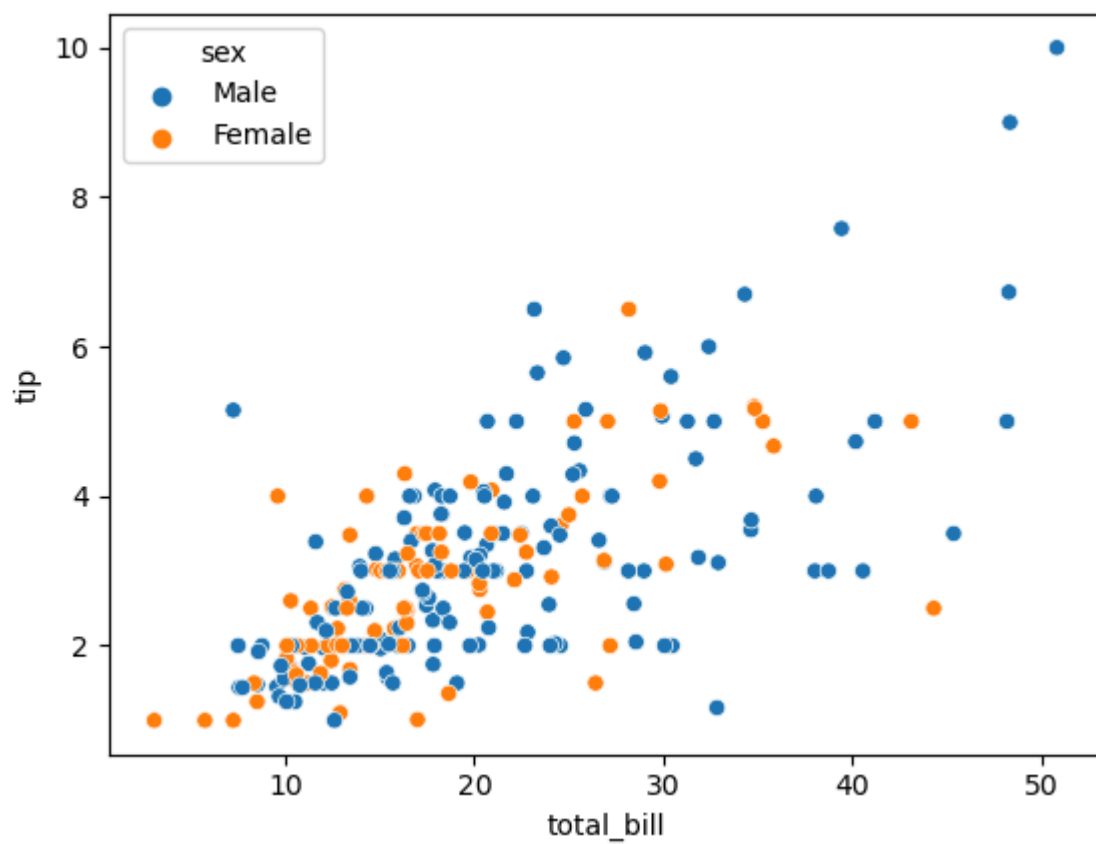


```
In [16]: plt.scatter(tips["total_bill"], tips["tip"])
```

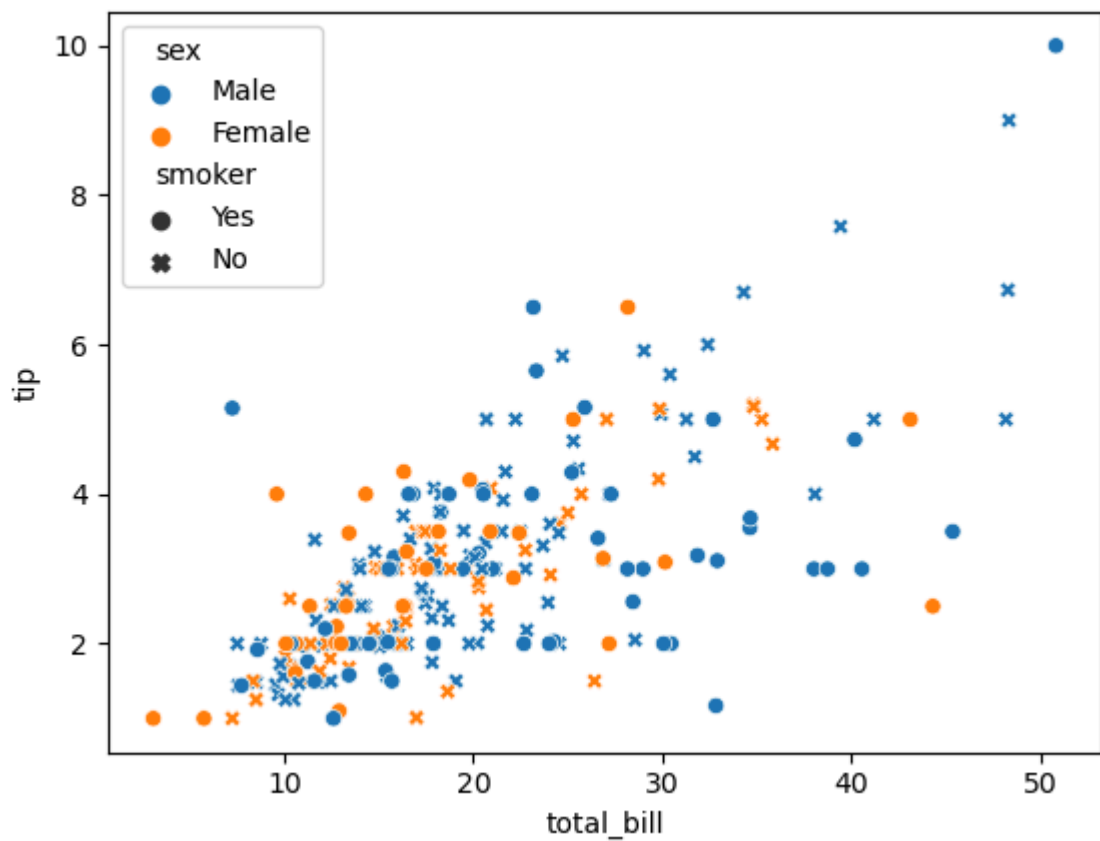
```
Out[16]: <matplotlib.collections.PathCollection at 0x7f549c0e1420>
```



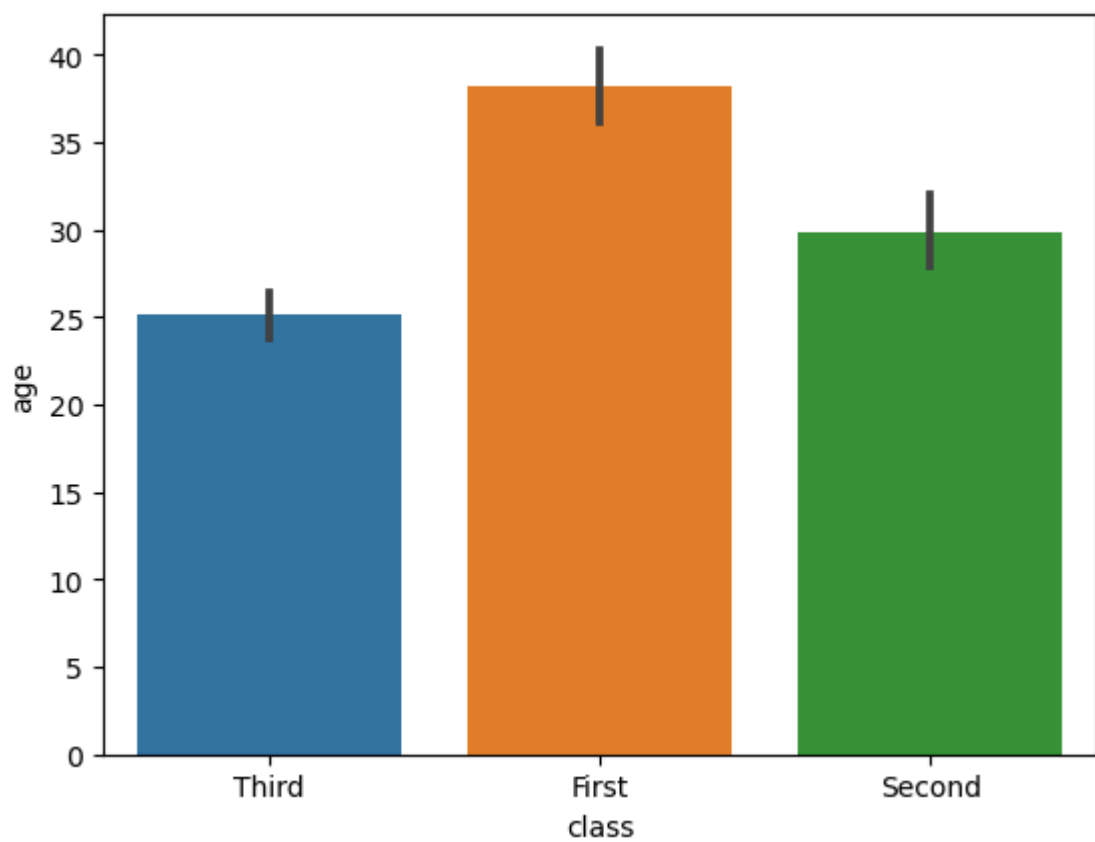
```
In [22]: sns.scatterplot(data=tips, x="total_bill", y="tip", hue=tips["sex"])  
plt.show()
```



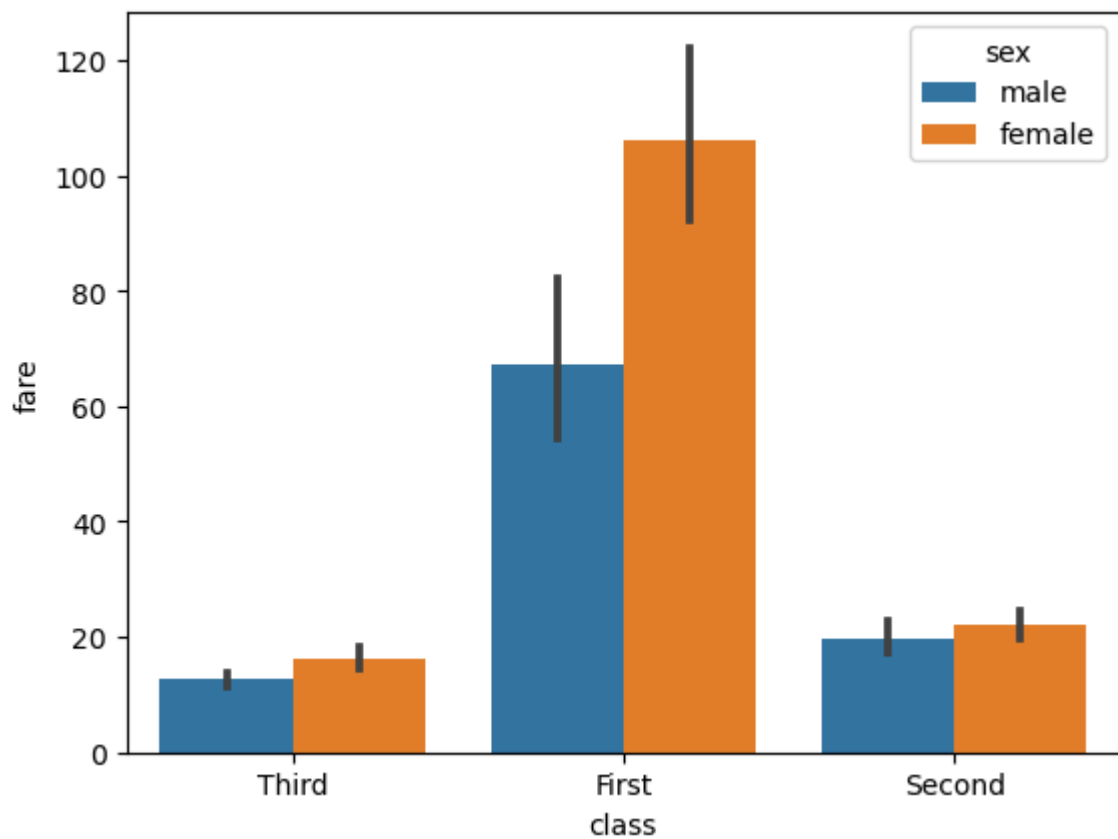
```
In [24]: sns.scatterplot(x="total_bill", y="tip", hue=tips["sex"], style=tips['smoker'], data=tips)  
plt.show()
```



```
In [32]: sns.barplot(x='class', y='age', data=data)
plt.show()
```

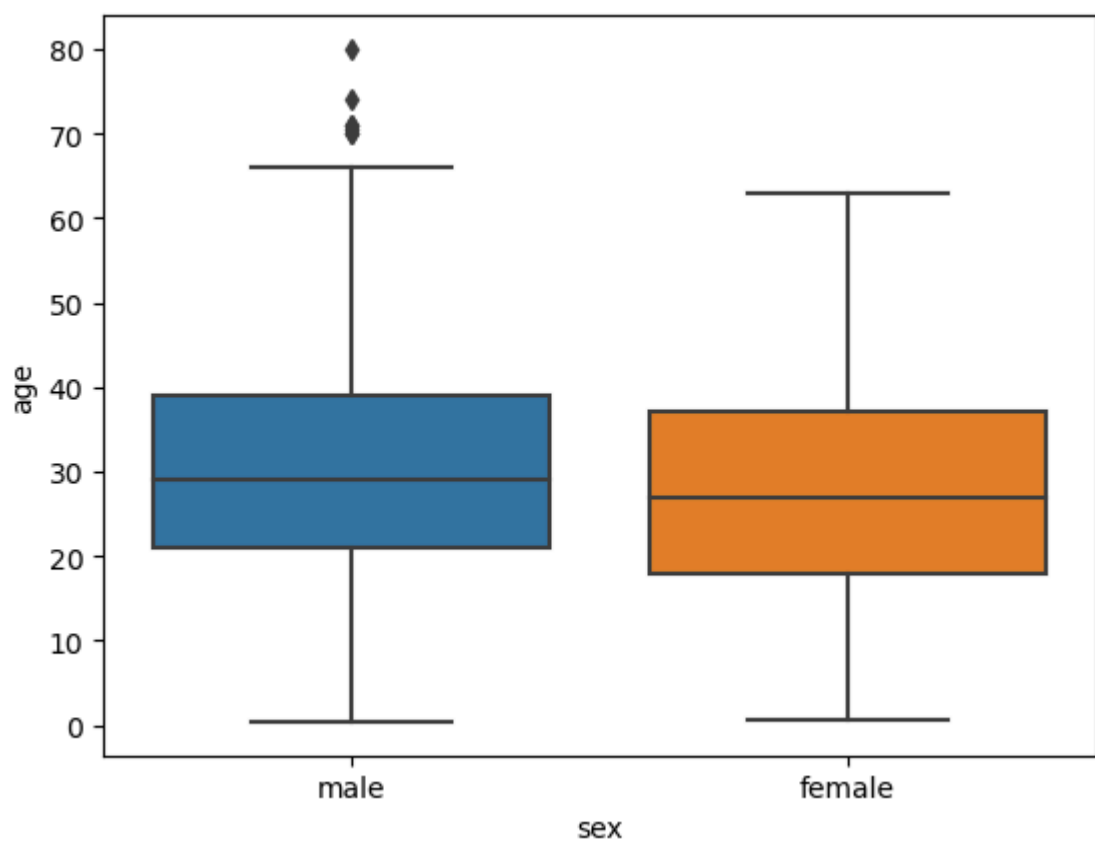


```
In [34]: sns.barplot(x='class', y='fare', data=data, hue = data["sex"])
plt.show()
```

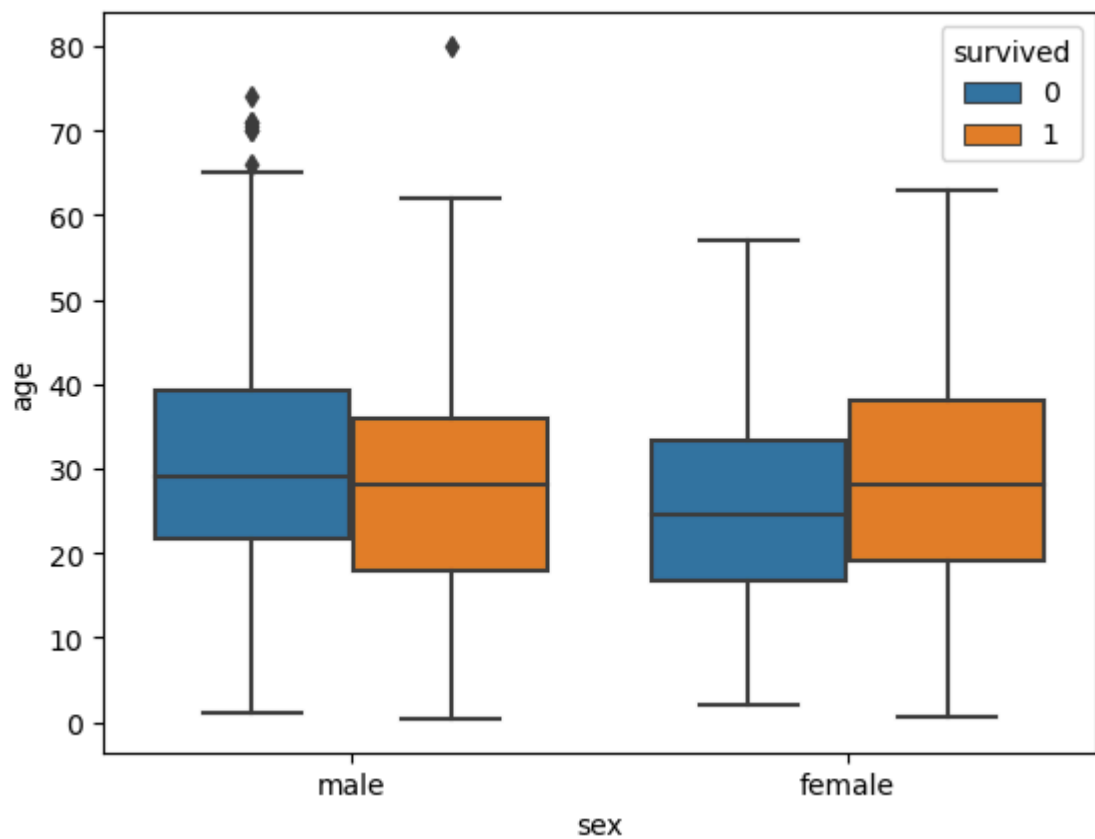


```
In [37]: sns.boxplot(x='sex',y="age",data=data)
```

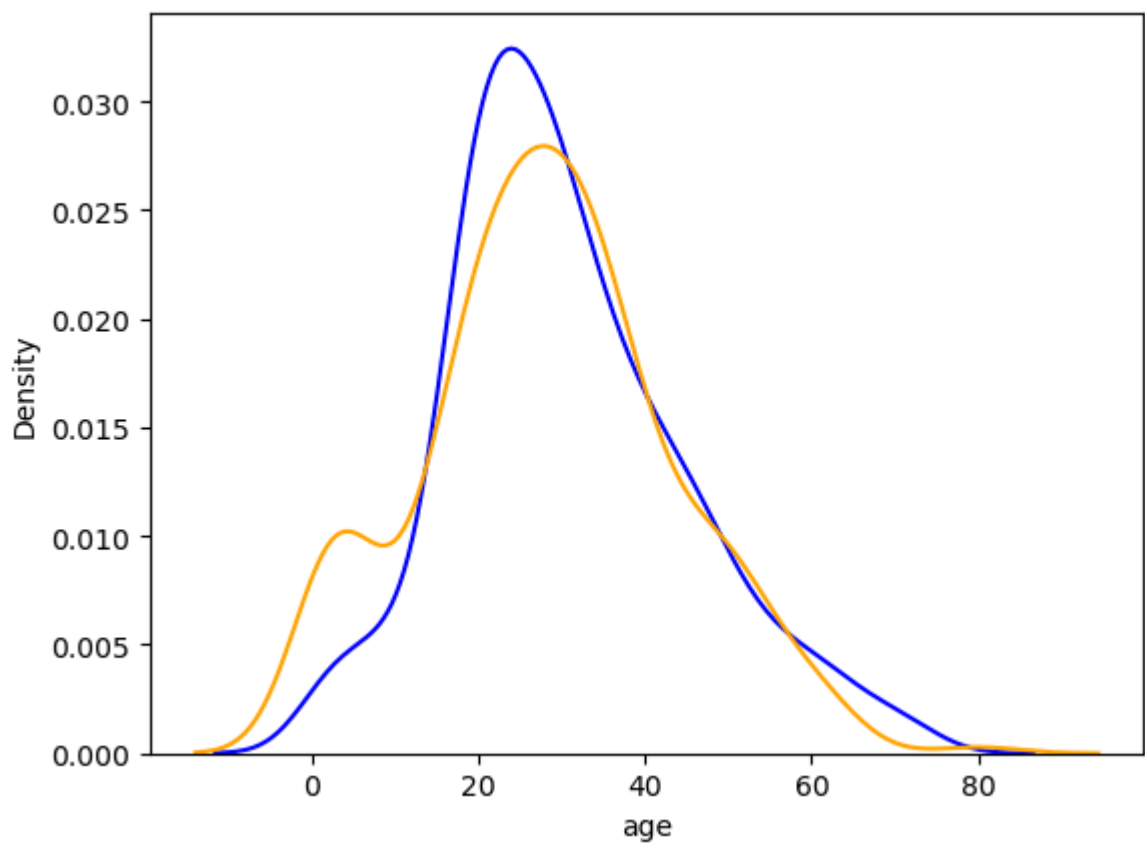
```
Out[37]: <Axes: xlabel='sex', ylabel='age'>
```



```
In [44]: sns.boxplot(x='sex', y="age",hue="survived",data=data)  
plt.show()
```



```
In [48]: sns.distplot(data[data['survived'] == 0]['age'], hist=False, color="blue")
sns.distplot(data[data['survived'] == 1]['age'], hist=False, color="orange")
plt.show()
```



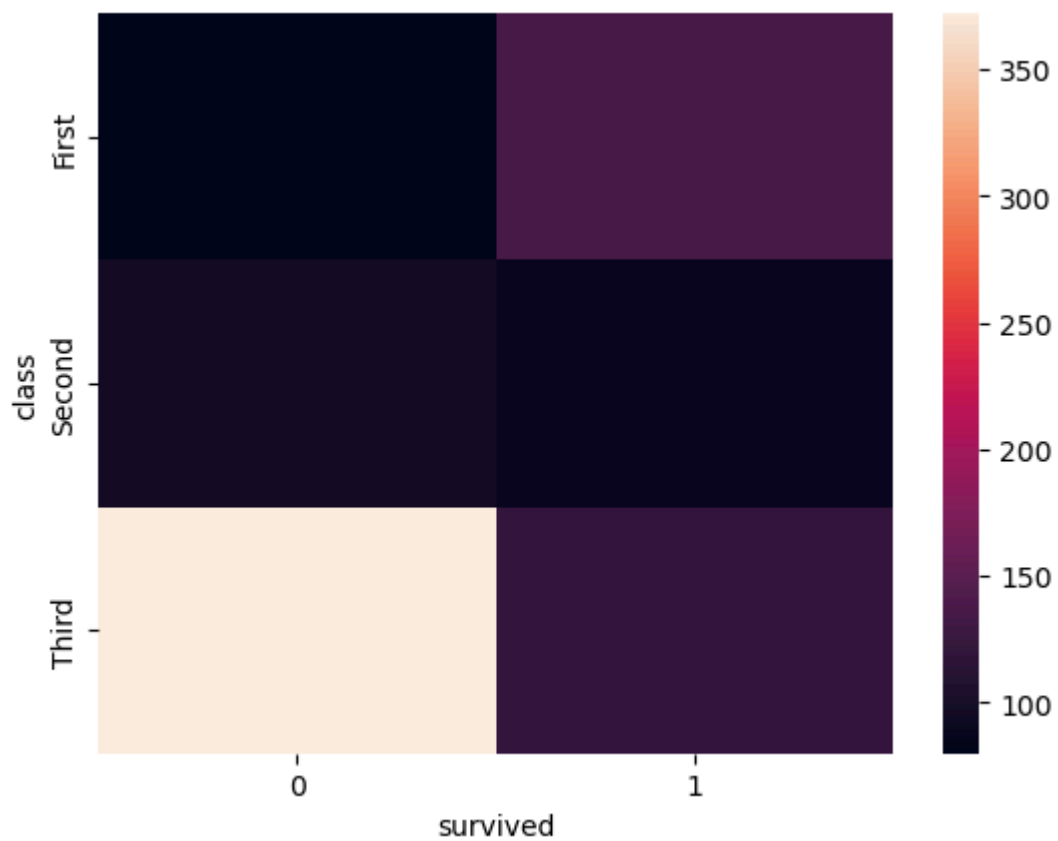
```
In [51]: pd.crosstab(data['class'], data['survived'])
```

```
Out[51]: survived    0    1
```

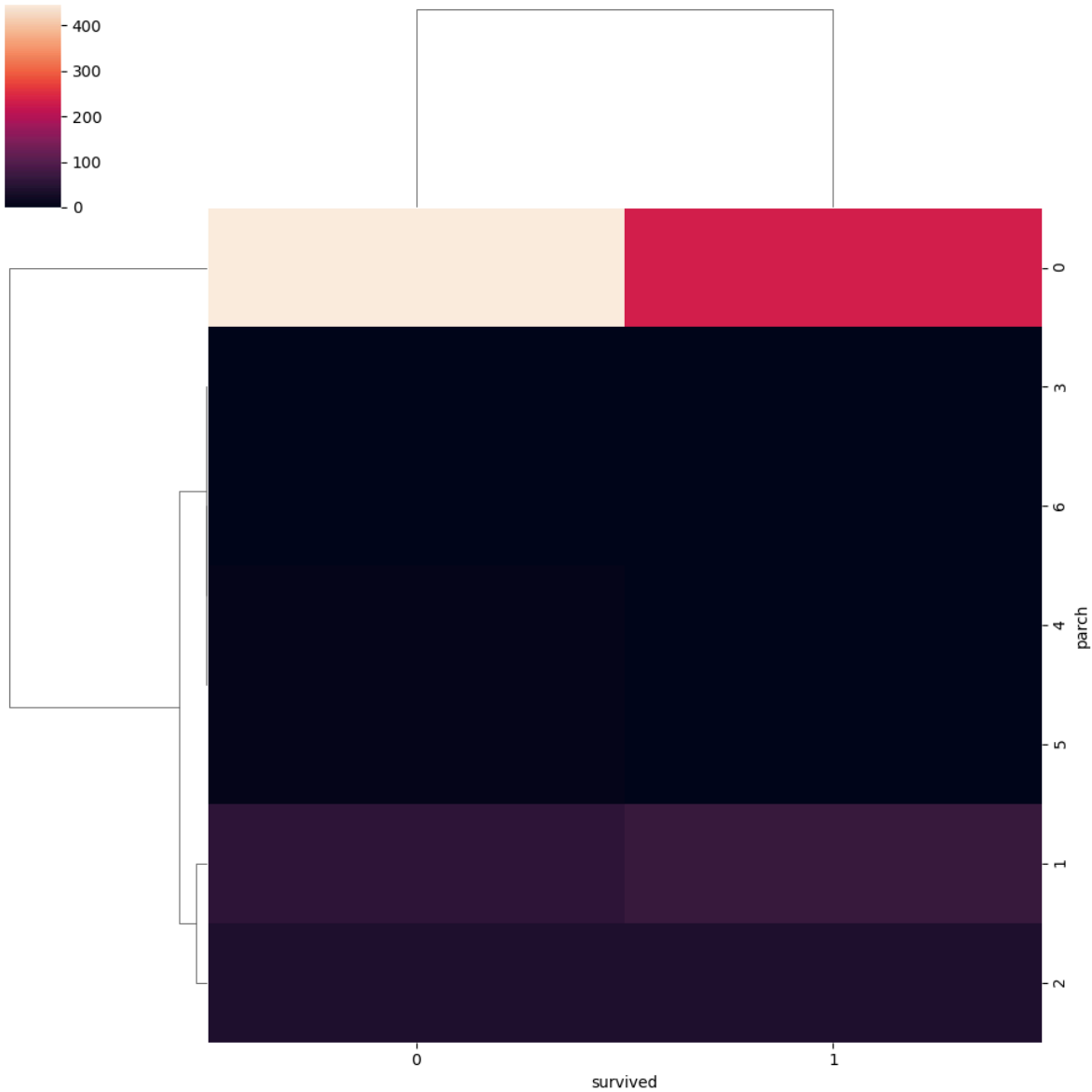
class		
First	80	136
Second	97	87
Third	372	119

```
In [52]: sns.heatmap(pd.crosstab(data['class'], data['survived']))
```

```
Out[52]: <Axes: xlabel='survived', ylabel='class'>
```



```
In [53]: sns.clustermap(pd.crosstab(data['parch'], data['survived']))  
plt.show()
```

In []: