

```
In [1]: # Name:- Atharv Santosh Danave  
# Roll no. :- 11  
# Practical No. :- 09  
# Academic Year :- 2025
```

```
In [2]: import pandas as pd  
import numpy as np
```

```
In [3]: import matplotlib as plt
```

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

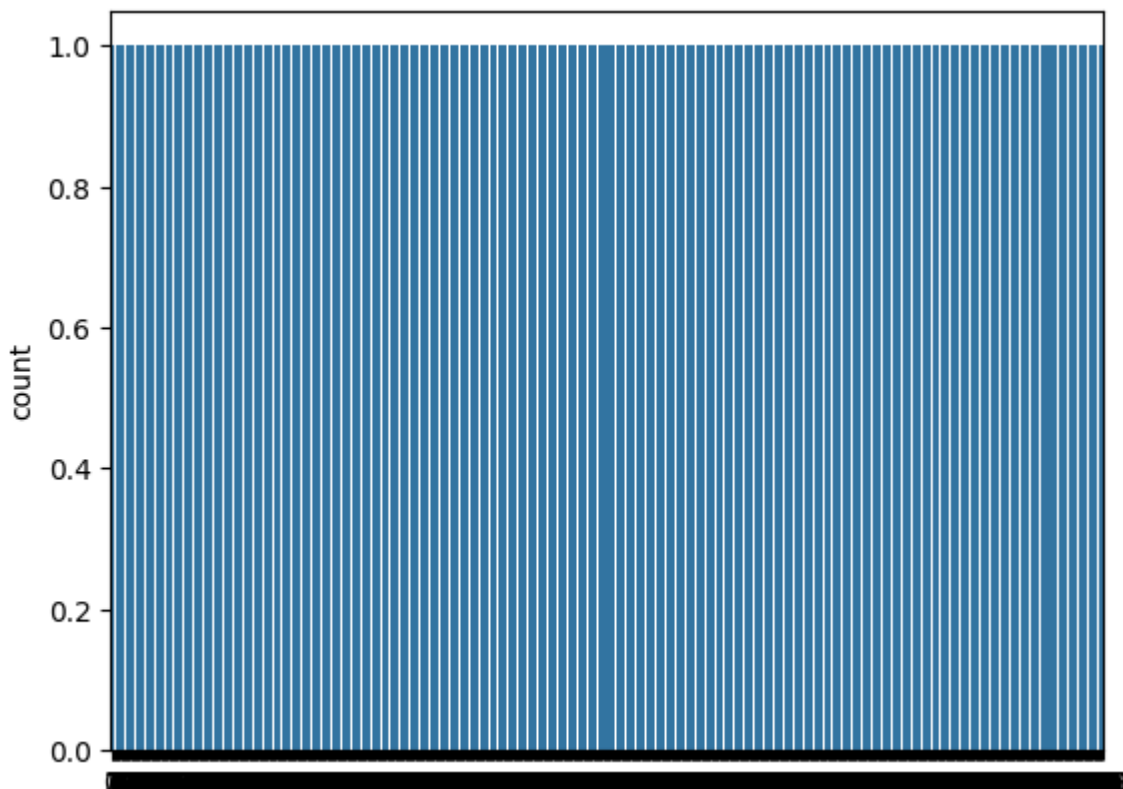
```
In [5]: import matplotlib.pyplot as plt
```

```
In [6]: from seaborn import load_dataset
```

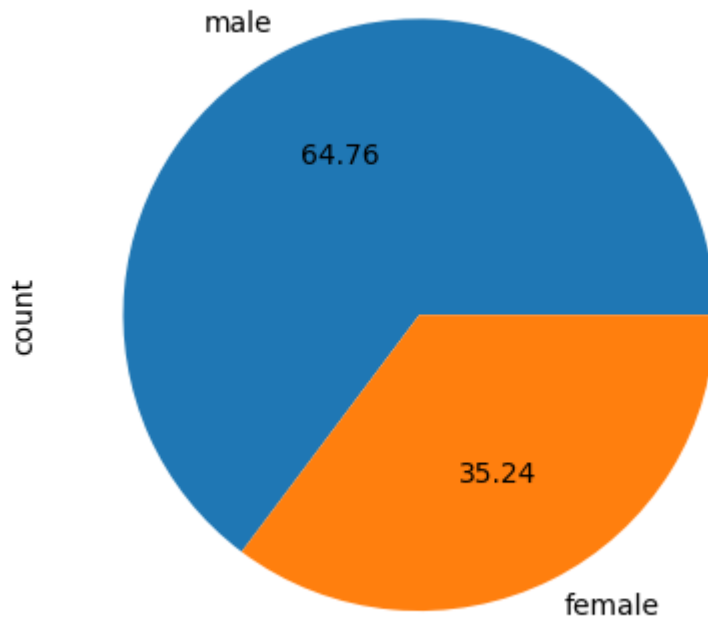
```
In [7]: data = pd.read_csv("/home/atharv/Downloads/train.csv")
```

```
In [8]: tips = load_dataset("tips")
```

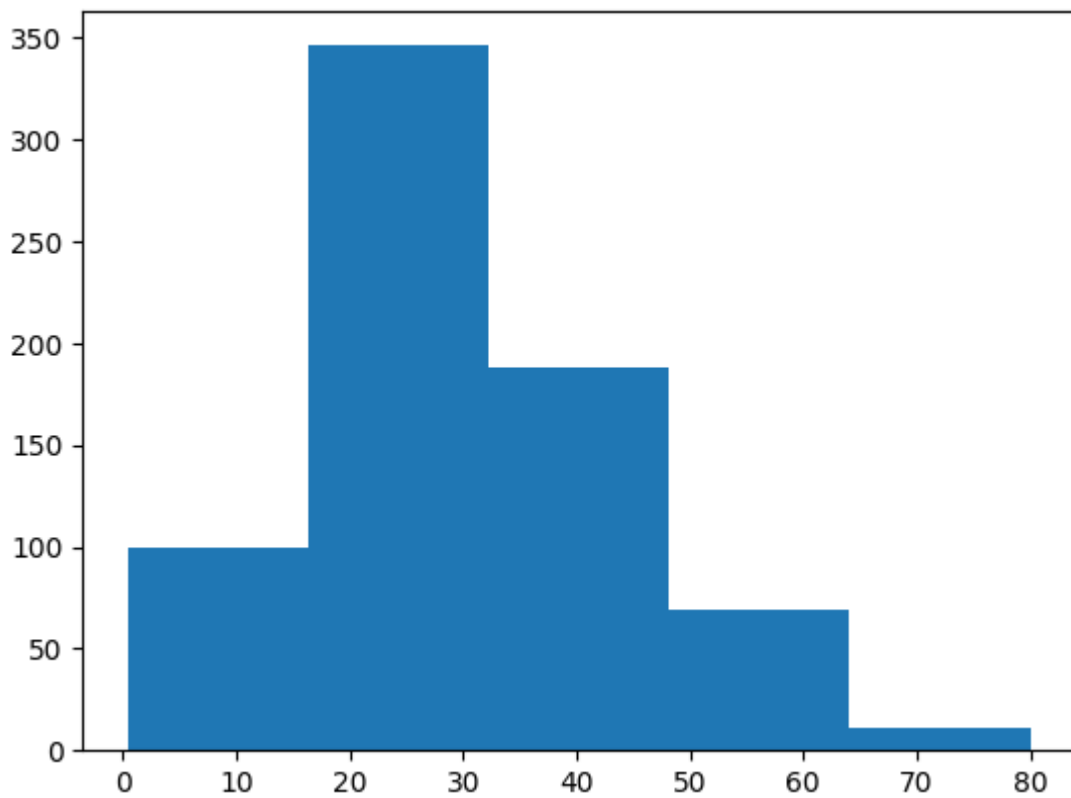
```
In [9]: sns.countplot(data['survived'])  
plt.show()
```



```
In [11]: data['sex'].value_counts().plot(kind="pie", autopct="%.2f")  
plt.show()
```



```
In [13]: plt.hist(data['age'], bins=5)  
plt.show()
```



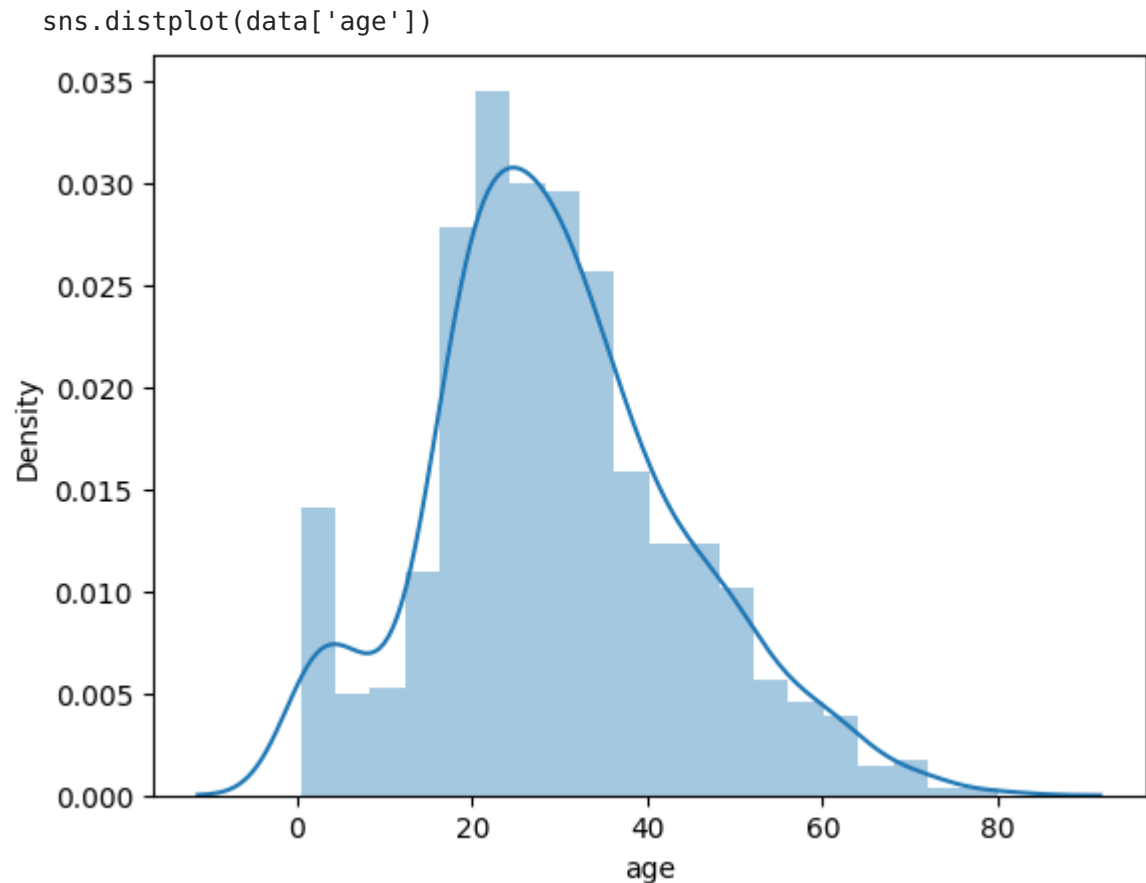
```
In [14]: sns.distplot(data['age'])  
plt.show()
```

```
/tmp/ipykernel_4482/3668578308.py:1: UserWarning:
```

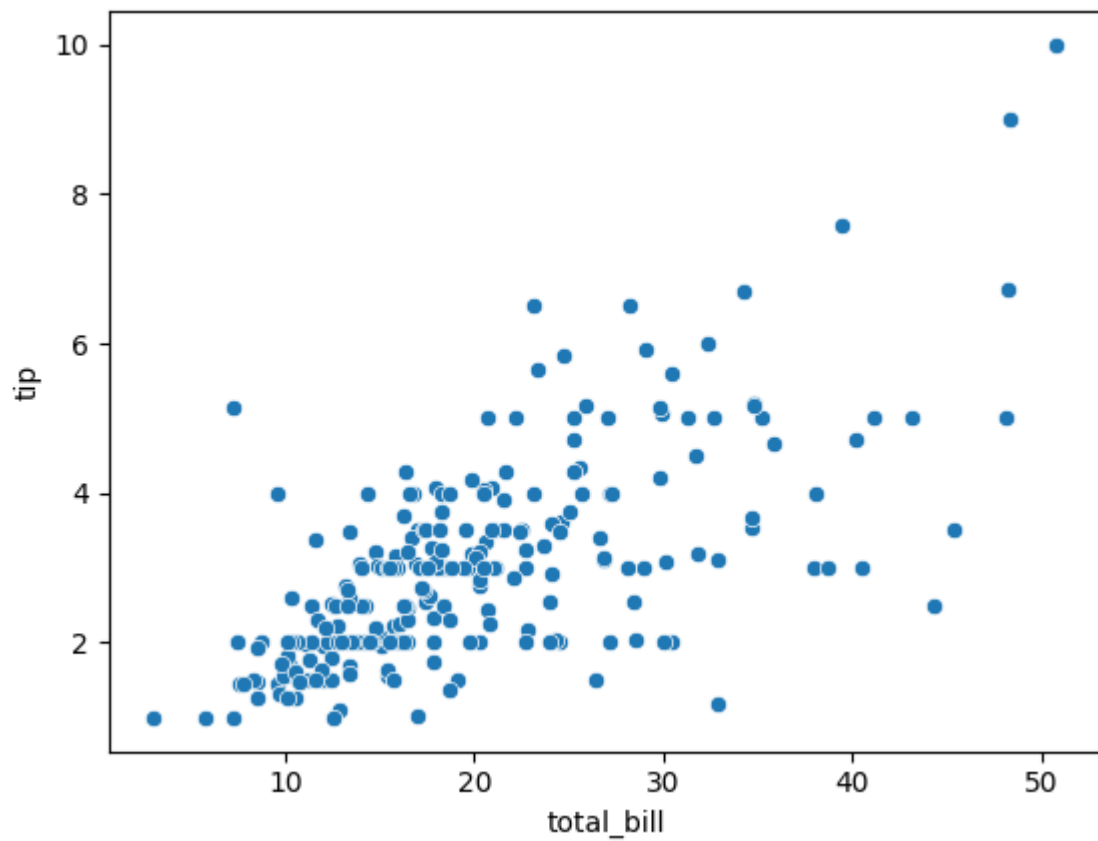
```
`distplot` is a deprecated function and will be removed in seaborn v0.14.0.
```

Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

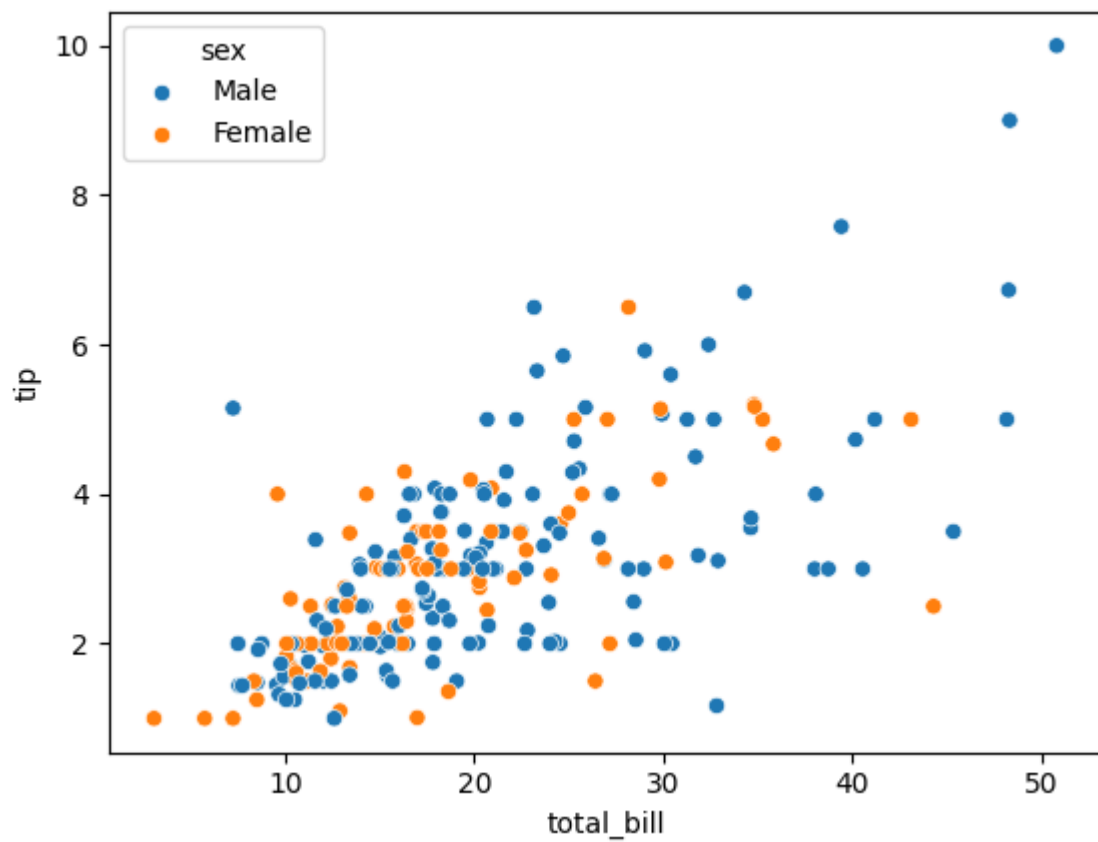
For a guide to updating your code to use the new functions, please see <https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751>



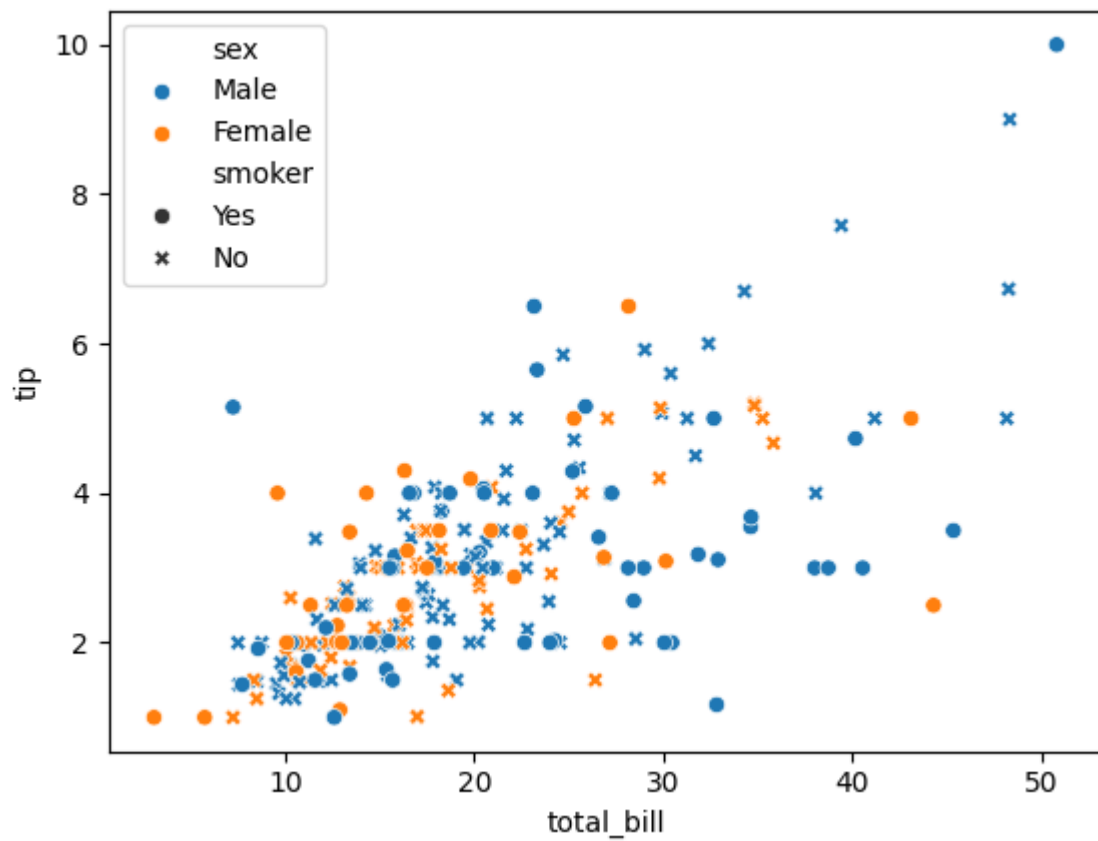
```
In [15]: sns.scatterplot(x="total_bill", y="tip", data=tips)
plt.show()
```



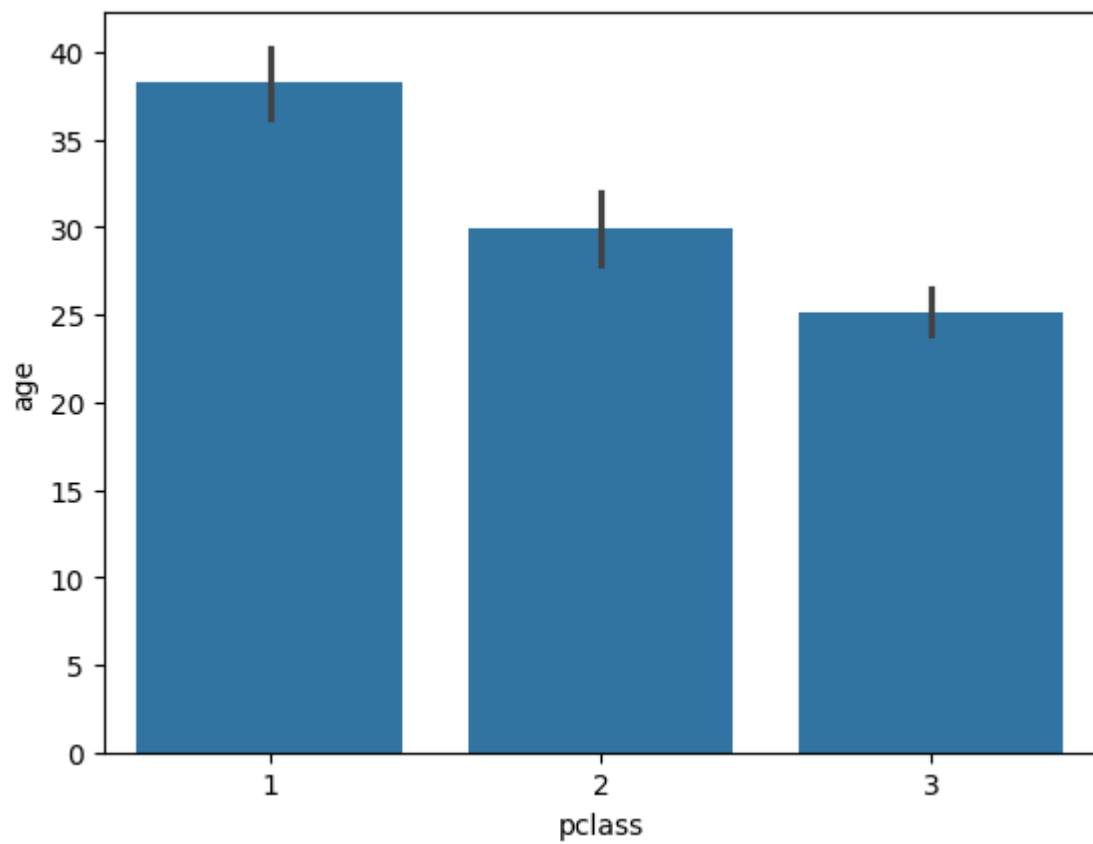
```
In [16]: sns.scatterplot(x="total_bill", y="tip", hue="sex", data=tips)
plt.show()
```



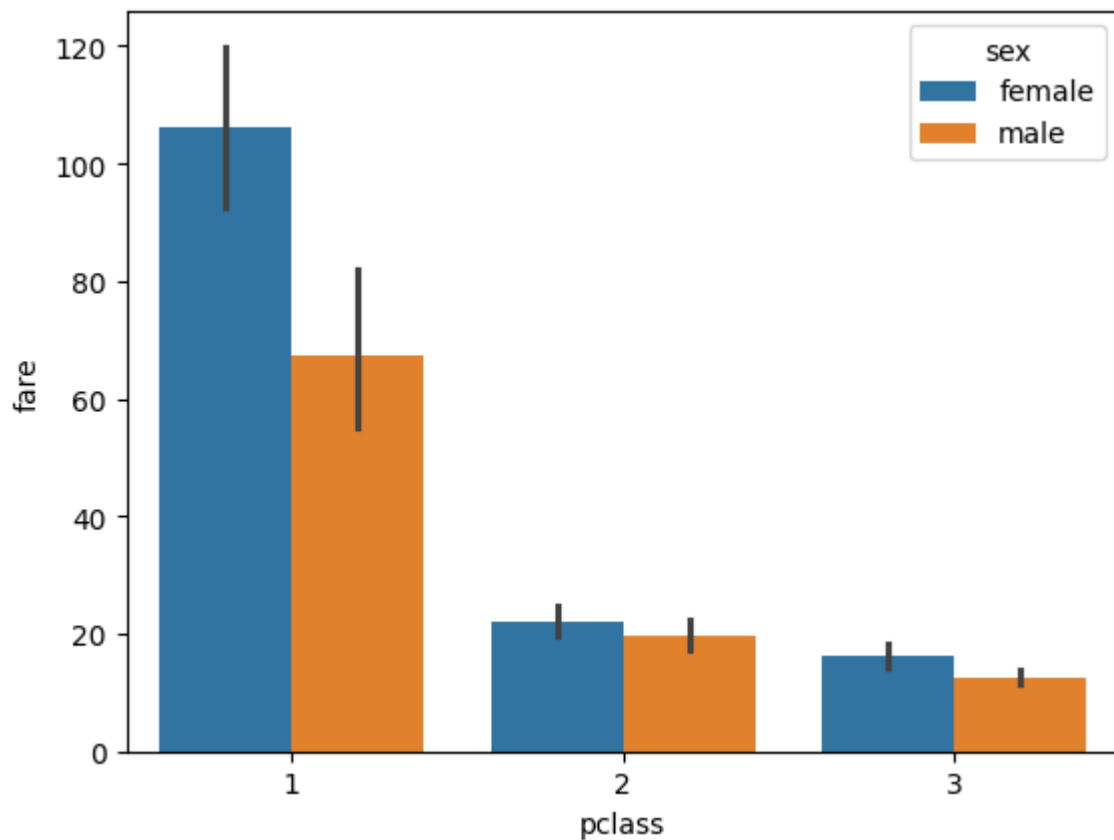
```
In [17]: sns.scatterplot(x="total_bill", y="tip", hue="sex", style="smoker", data=
plt.show()
```



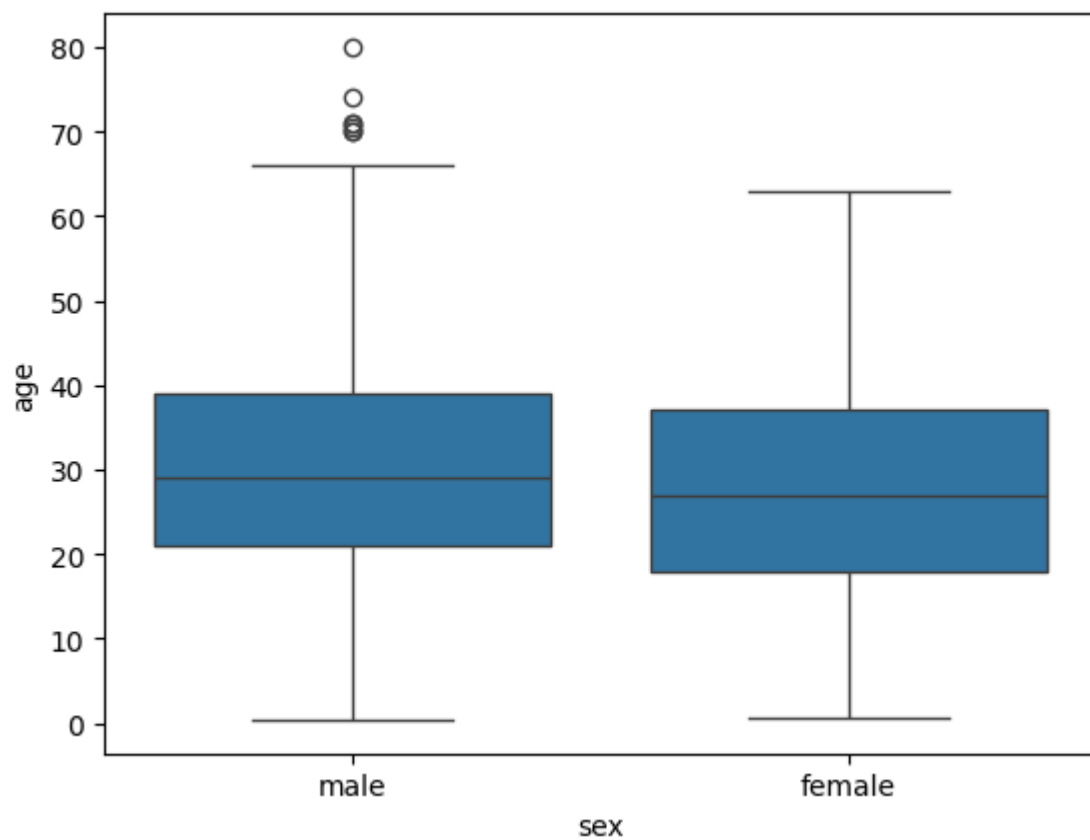
```
In [20]: sns.barplot(x='pclass', y='age', data=data)
plt.show()
```



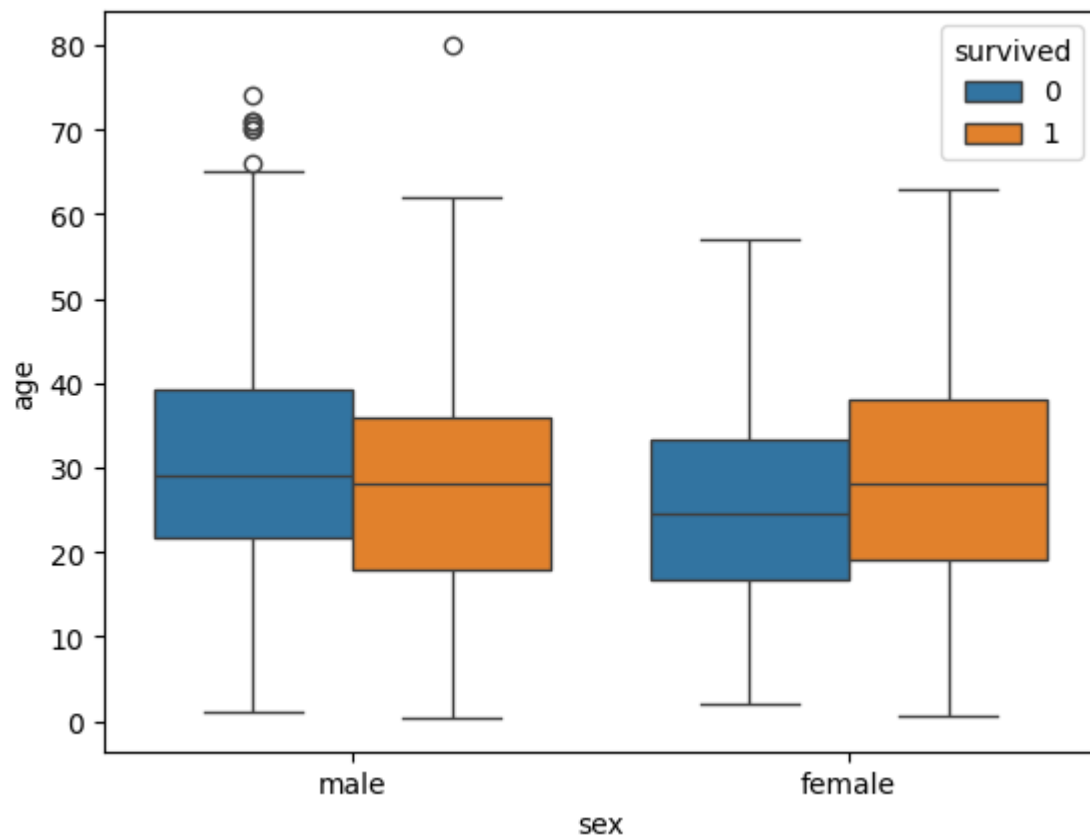
```
In [21]: sns.barplot(x='pclass', y='fare', hue='sex', data=data)
plt.show()
```



```
In [22]: sns.boxplot(x='sex', y='age', data=data)
plt.show()
```



```
In [24]: sns.boxplot(x='sex', y='age', hue='survived', data=data)
plt.show()
```



```
In [26]: sns.distplot(data[data['survived'] == 0]['age'], hist=False, color="blue")
sns.distplot(data[data['survived'] == 1]['age'], hist=False, color="orange")
plt.show()
```

```
/tmp/ipykernel_4482/1485369868.py:1: UserWarning:
```

```
`distplot` is a deprecated function and will be removed in seaborn v0.14.0.
```

Please adapt your code to use either ``displot`` (a figure-level function with similar flexibility) or ``kdeplot`` (an axes-level function for kernel density plots).

For a guide to updating your code to use the new functions, please see <https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751>

```
sns.distplot(data[data['survived'] == 0]['age'], hist=False, color="blue")
```

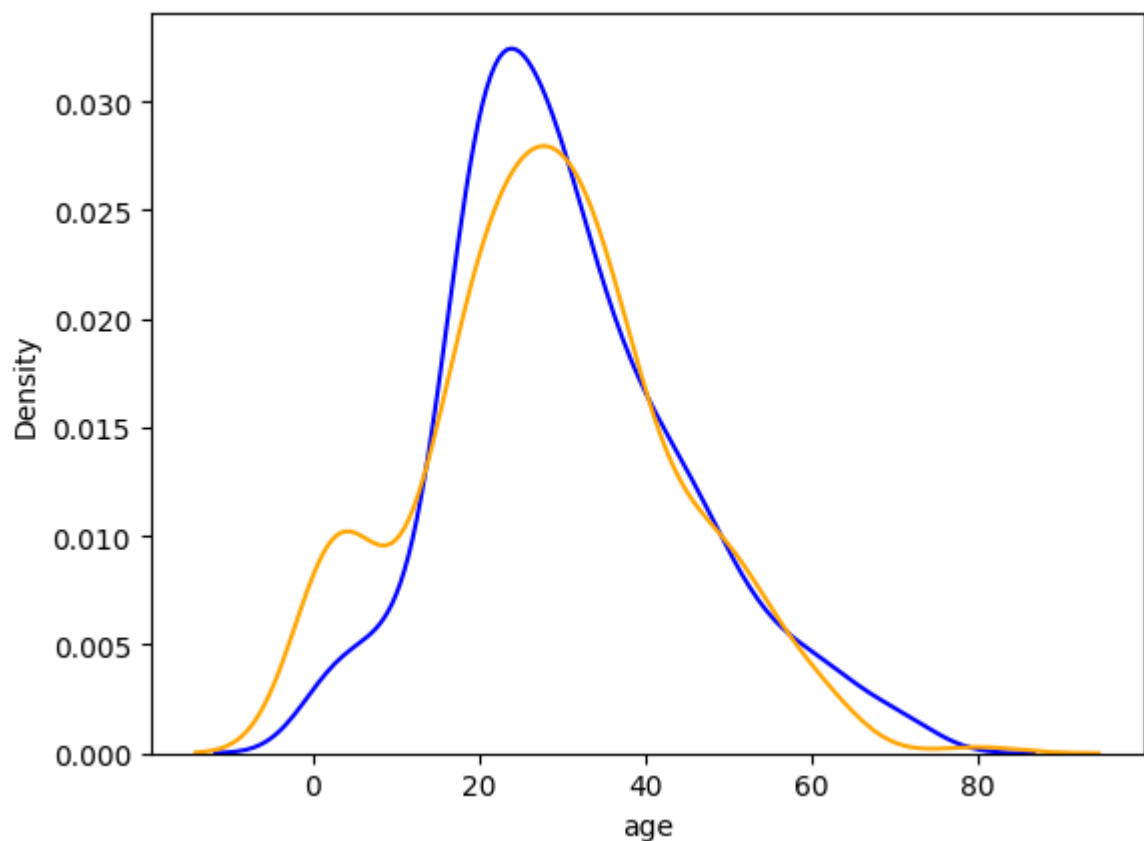
```
/tmp/ipykernel_4482/1485369868.py:2: UserWarning:
```

```
`distplot` is a deprecated function and will be removed in seaborn v0.14.0.
```

Please adapt your code to use either ``displot`` (a figure-level function with similar flexibility) or ``kdeplot`` (an axes-level function for kernel density plots).

For a guide to updating your code to use the new functions, please see <https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751>

```
sns.distplot(data[data['survived'] == 1]['age'], hist=False, color="orange")
```



```
In [27]: pd.crosstab(data['pclass'], data['survived'])
```

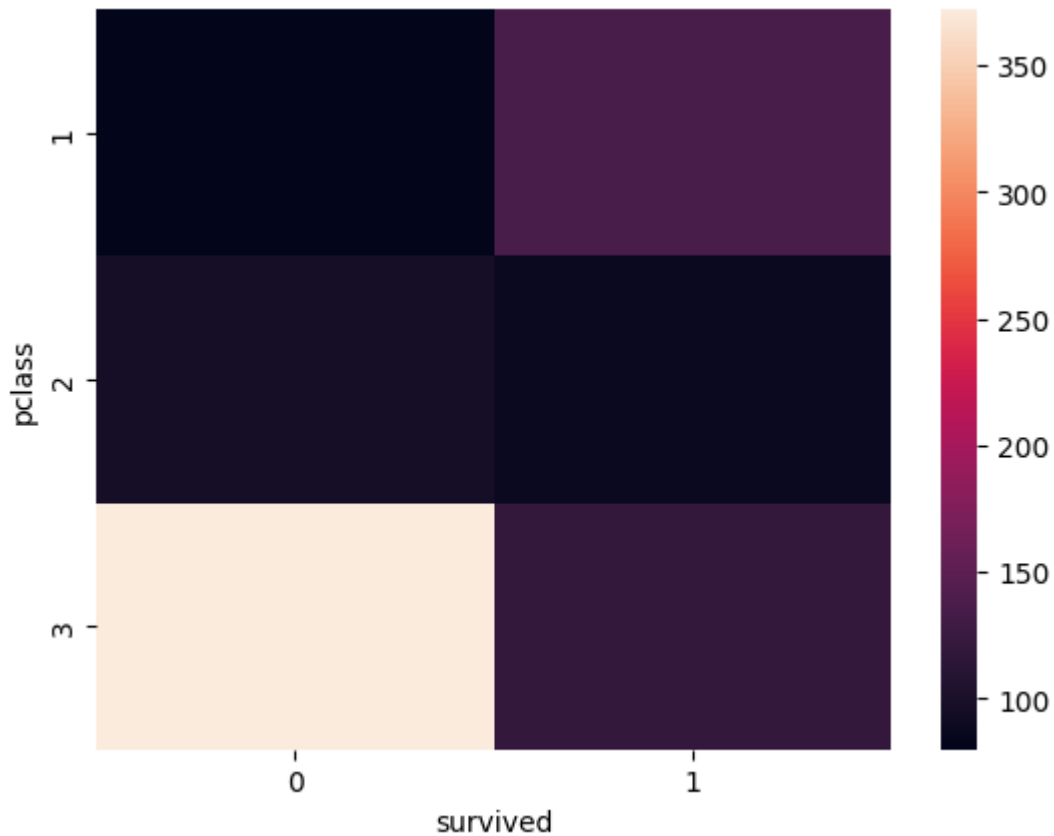


```
Out[27]: survived    0    1
```

pclass		
1	80	136
2	97	87
3	372	119

```
In [28]: sns.heatmap(pd.crosstab(data['pclass'],data['survived']))
```

```
Out[28]: <Axes: xlabel='survived', ylabel='pclass'>
```



```
In [29]: sns.clustermap(pd.crosstab(data['parch'],data['survived']))  
plt.show()
```

