

ASSIGNMENT - 9

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

```
In [2]: data = pd.read_csv("titanic_Dataset.csv")
```

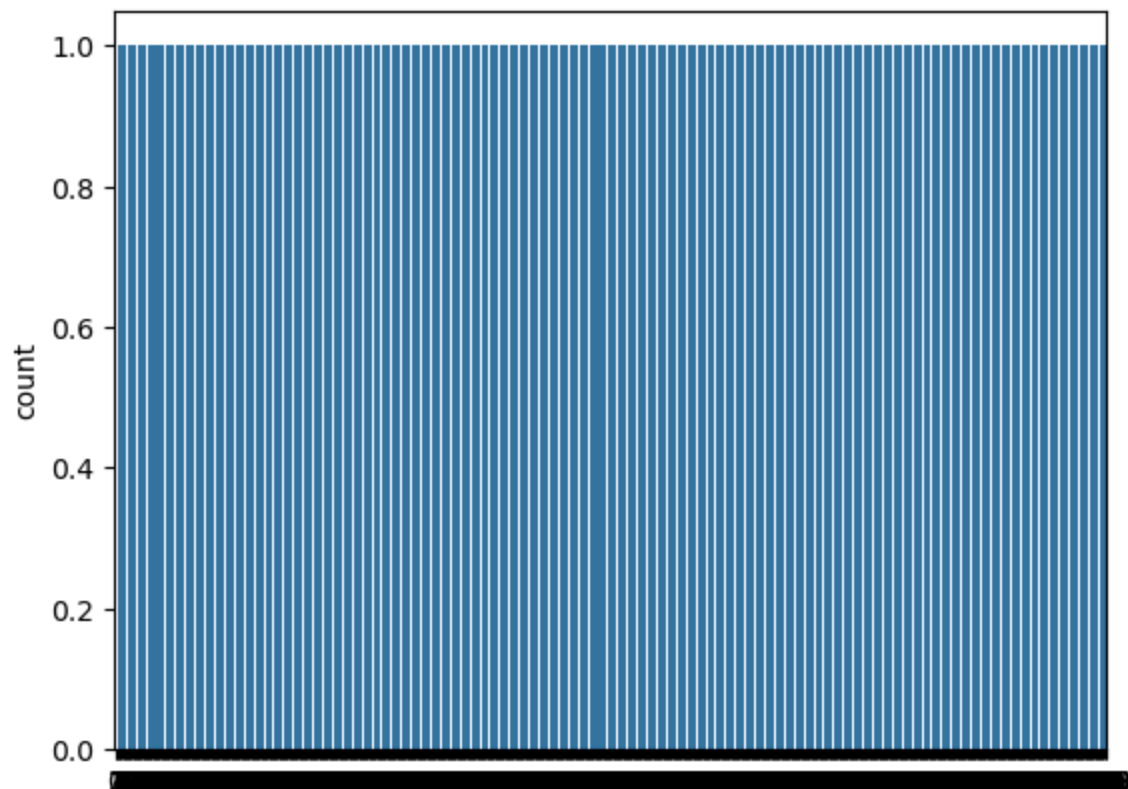
```
In [3]: data.head(3)
```

```
Out[3]:
```

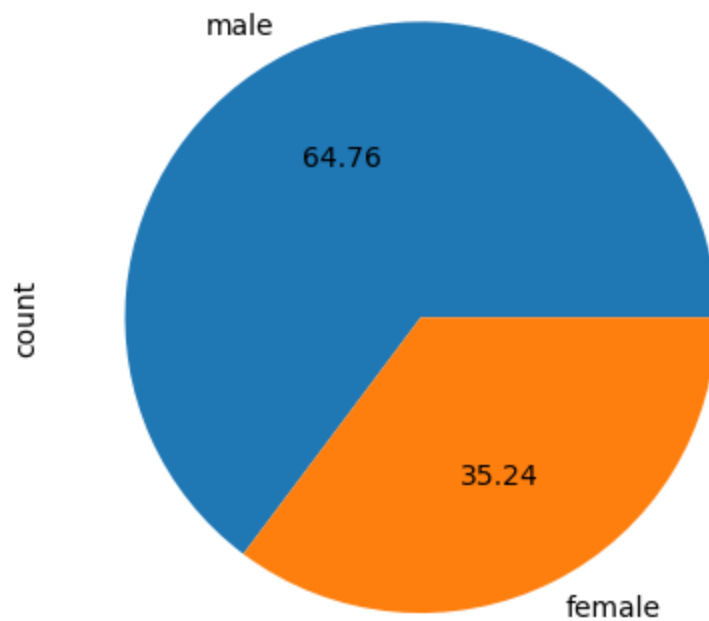
	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Tic
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	21
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17
2	3	1	3	Heikkinen, Miss. Laina	female	26.0	0	0	STON/ 3101

```
In [4]: tips = load_dataset("tips")
```

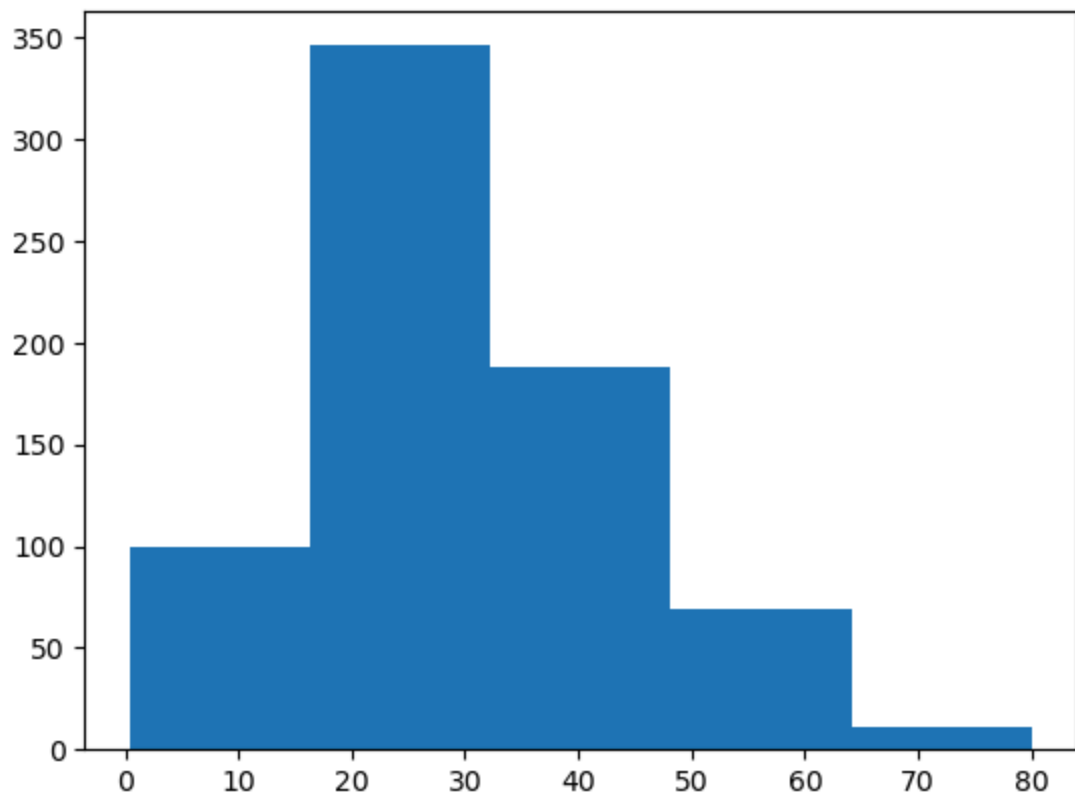
```
In [5]: sns.countplot(data['Survived'])
plt.show()
```



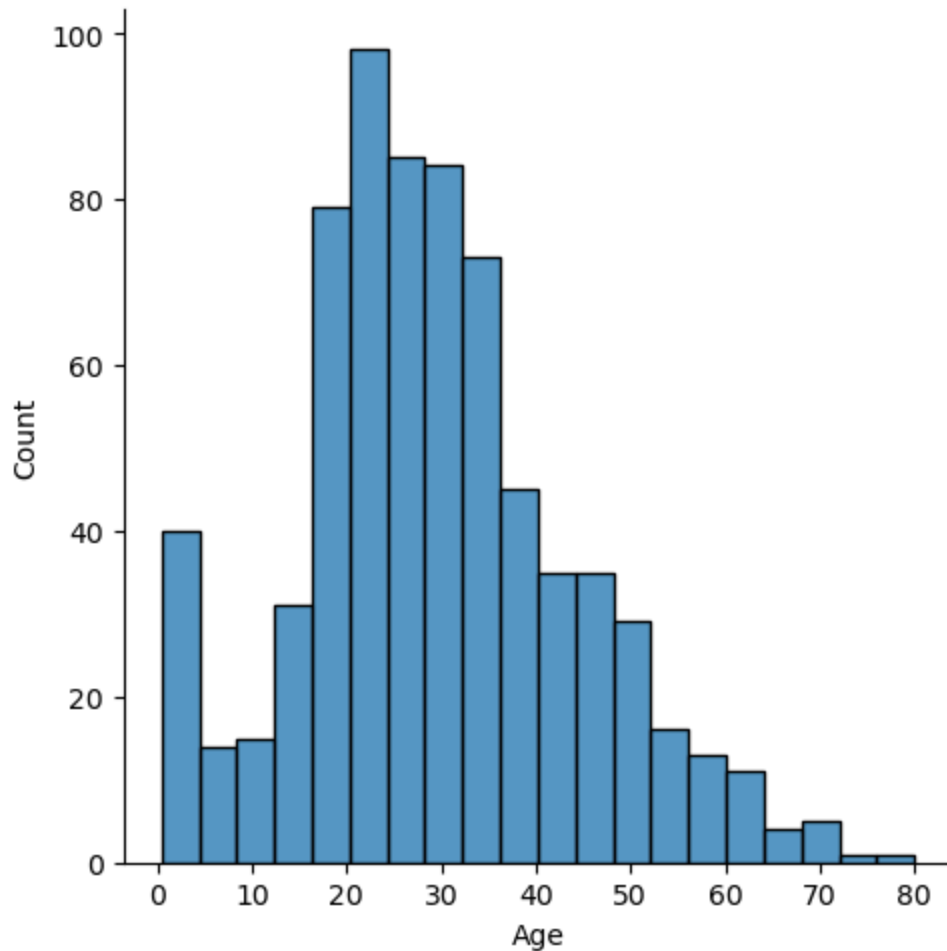
```
In [6]: data['Sex'].value_counts().plot(kind="pie", autopct="%.2f")  
plt.show()
```



```
In [7]: plt.hist(data['Age'], bins=5)  
plt.show()
```



```
In [9]: sns.displot(data['Age'])  
plt.show()
```



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

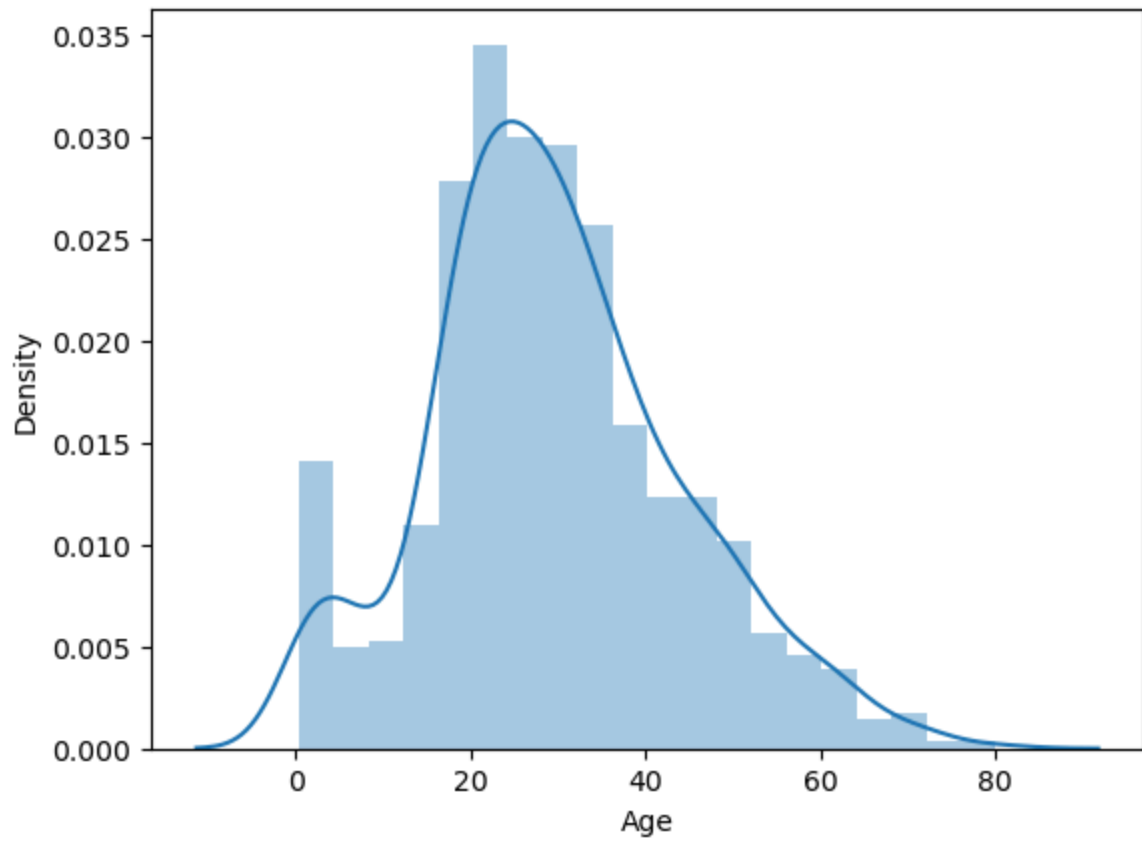
C:\Users\admin\AppData\Local\Temp\ipykernel_2836\3208151894.py:1: UserWarning:

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

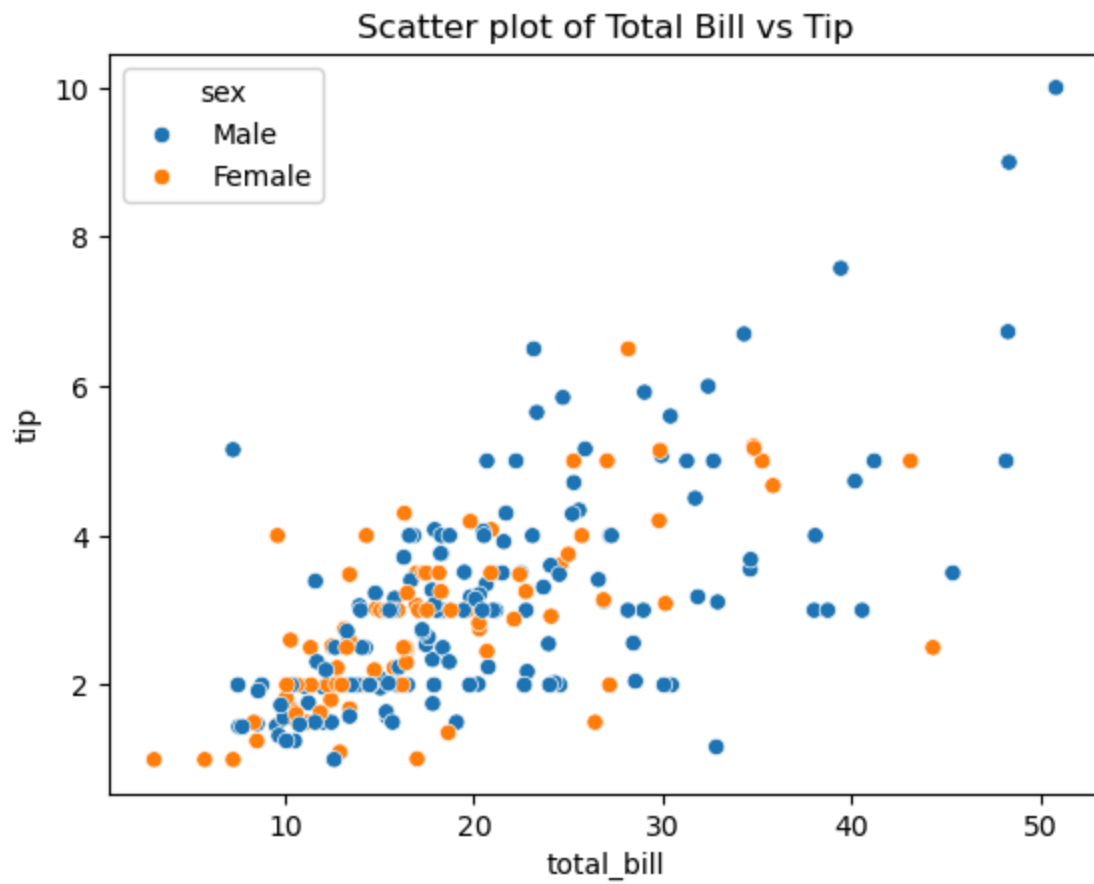
Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

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

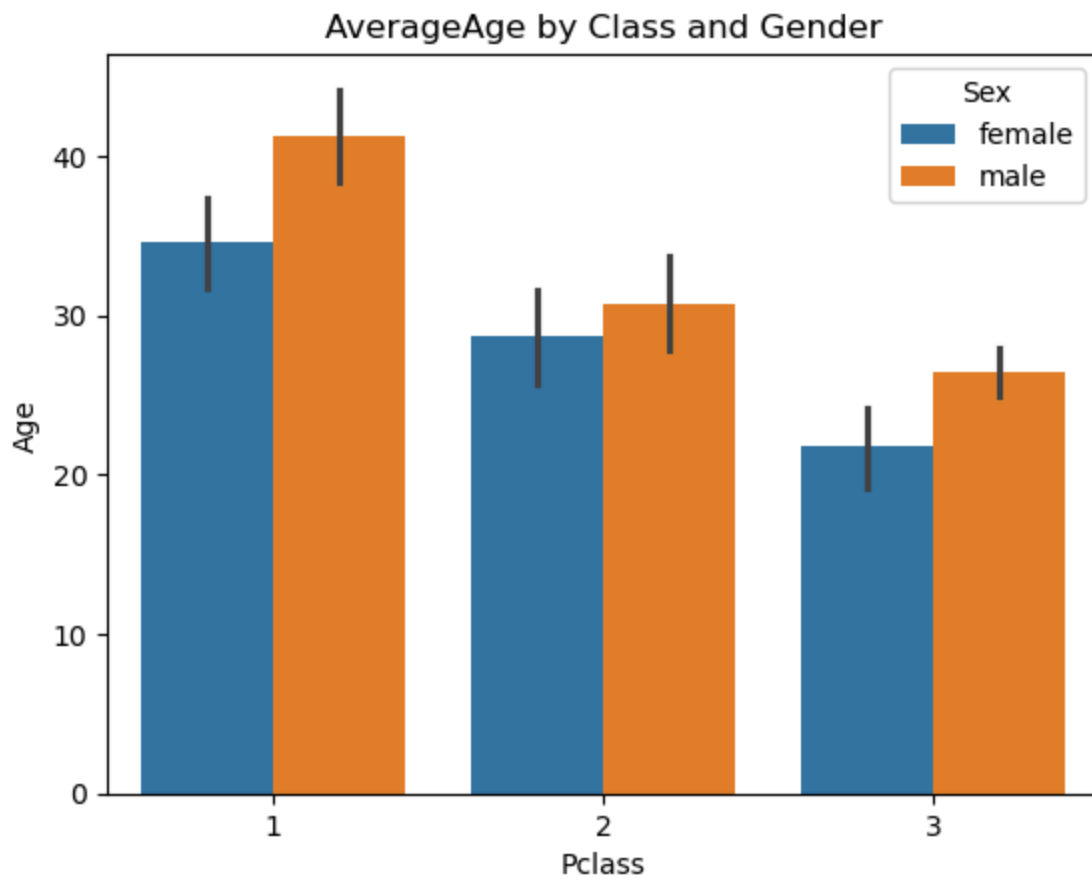
```
sns.distplot(data['Age'])
```



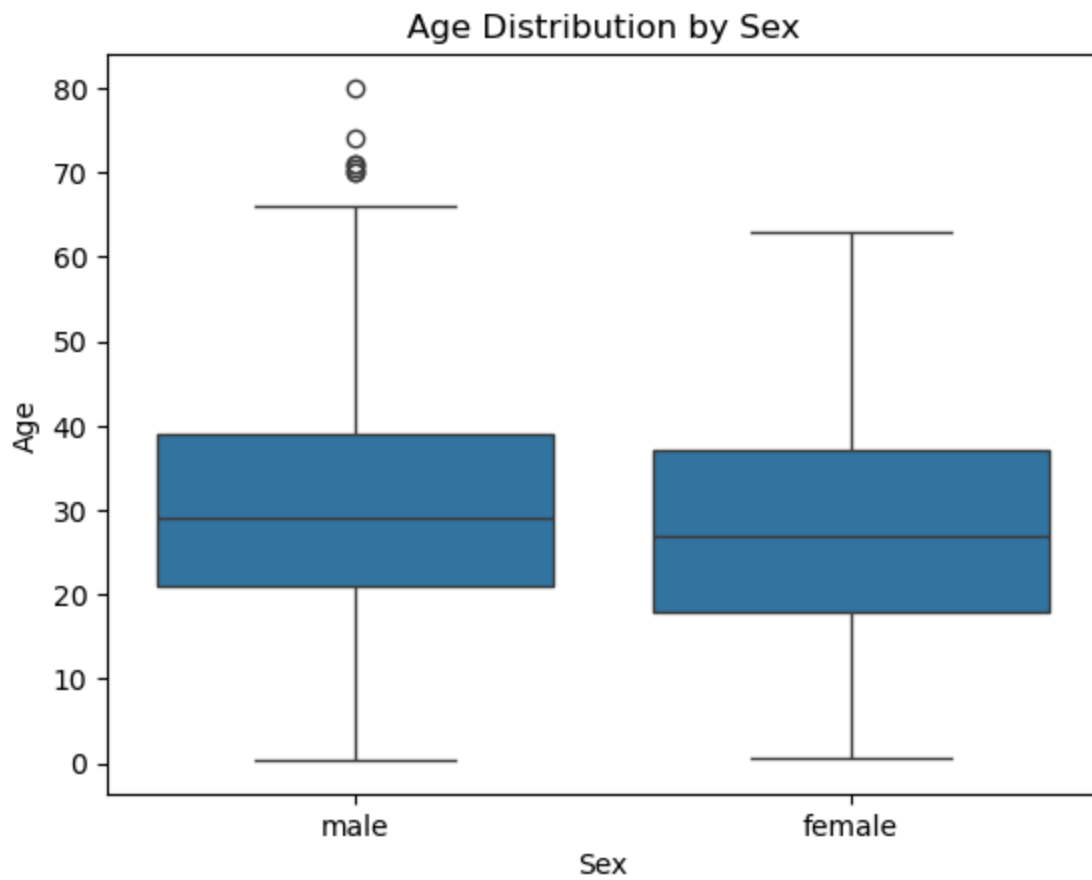
```
In [12]: sns.scatterplot(x="total_bill", y="tip", hue="sex", data=tips)
plt.title("Scatter plot of Total Bill vs Tip")
plt.show()
```



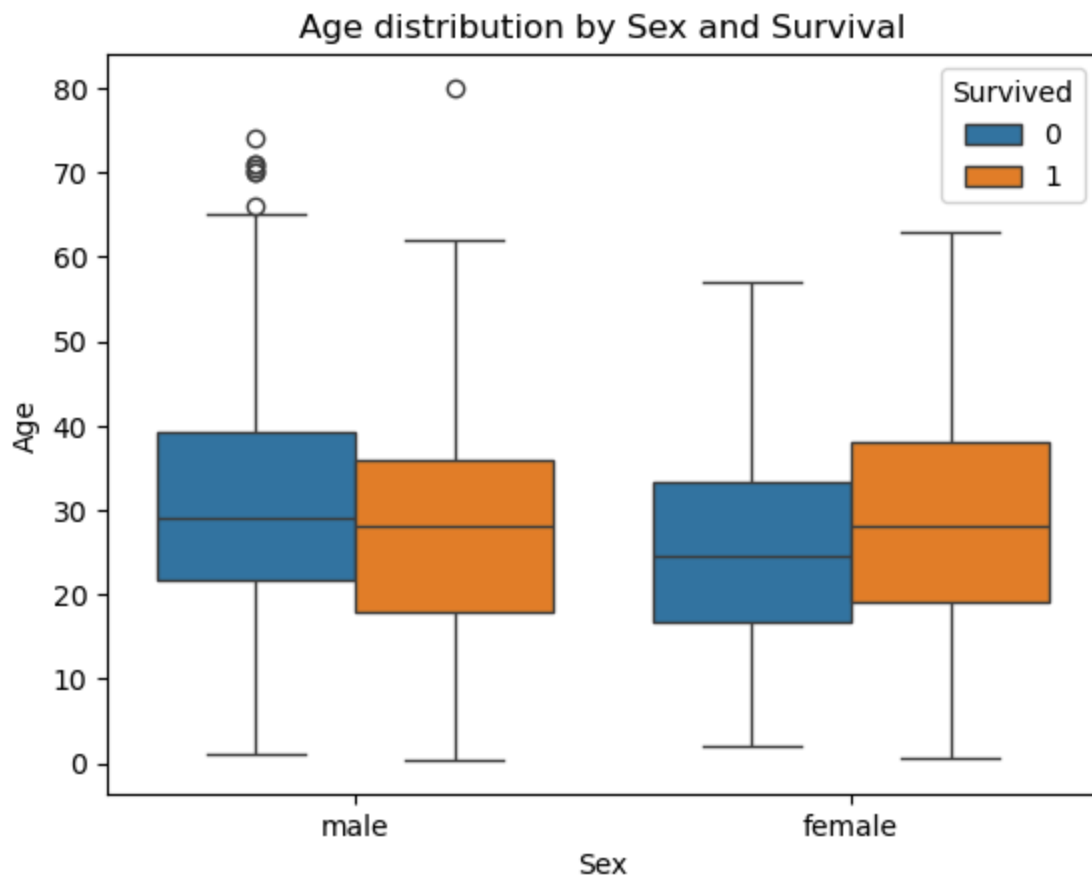
```
In [13]: sns.barplot(x='Pclass', y='Age', hue='Sex', data=data)
plt.title("AverageAge by Class and Gender")
plt.show()
```



```
In [14]: sns.boxplot(x='Sex', y='Age', data=data)
plt.title("Age Distribution by Sex")
plt.show()
```



```
In [15]: sns.boxplot(x='Sex', y='Age', hue='Survived', data=data)
plt.title("Age distribution by Sex and Survival")
plt.show()
```

```
In [16]: sns.distplot(data[data['Survived'] == 0]['Age'], hist=False, color="blue")
sns.distplot(data[data['Survived'] == 1]['Age'], hist=False, color="orange")
plt.show()
```

```
C:\Users\admin\AppData\Local\Temp\ipykernel_2836\3376507986.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>

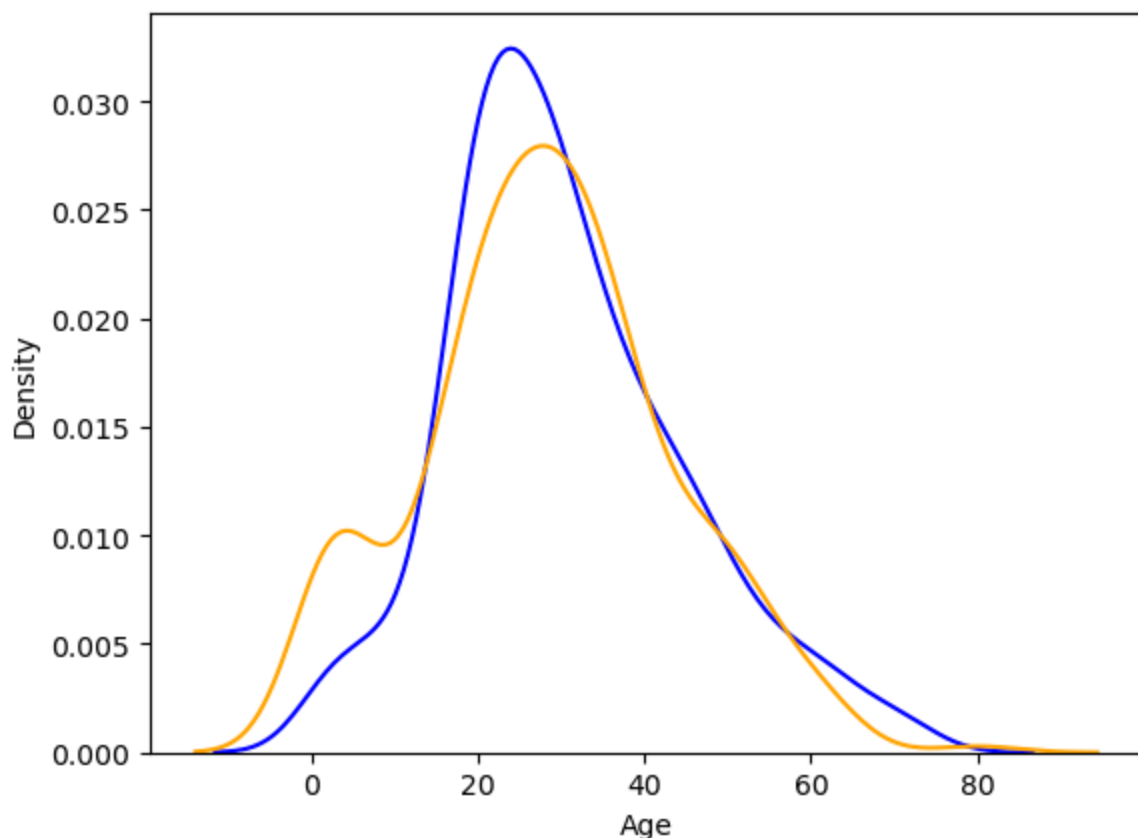
```
sns.distplot(data[data['Survived'] == 0]['Age'], hist=False, color="blue")
C:\Users\admin\AppData\Local\Temp\ipykernel_2836\3376507986.py:2: UserWarning:
```

``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")
```



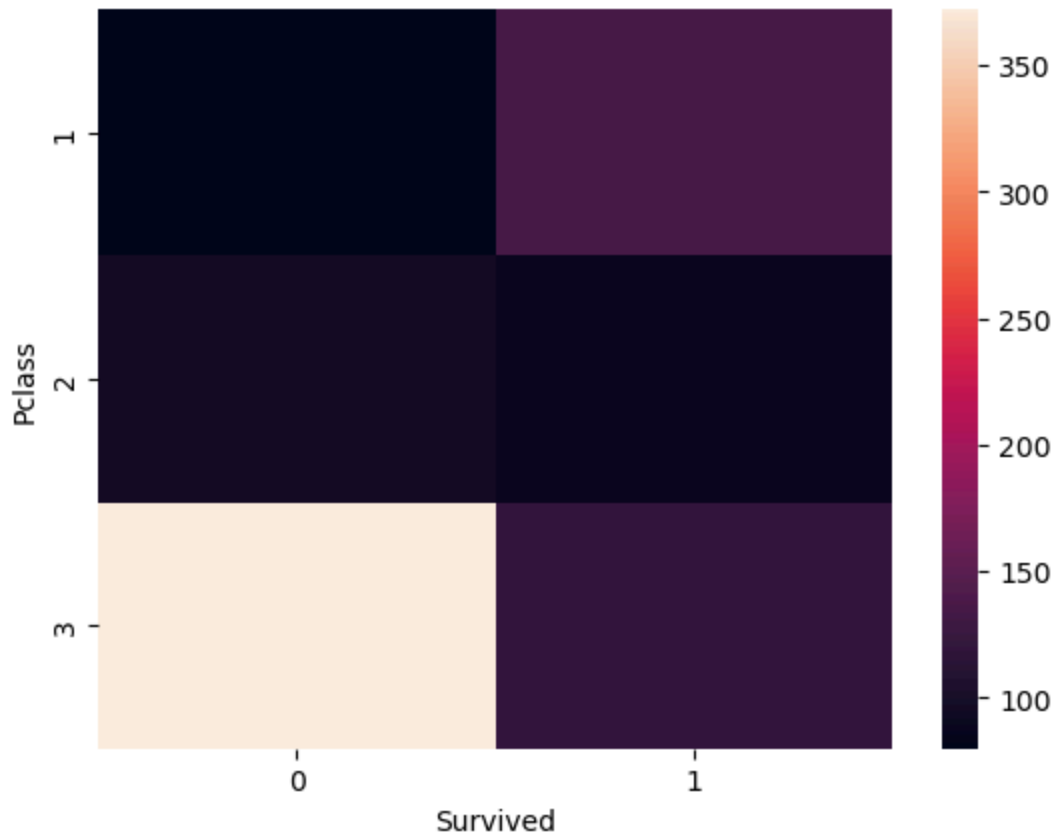
```
In [17]: pd.crosstab(data['Pclass'], data['Survived'])
```

```
Out[17]: Survived    0    1
```

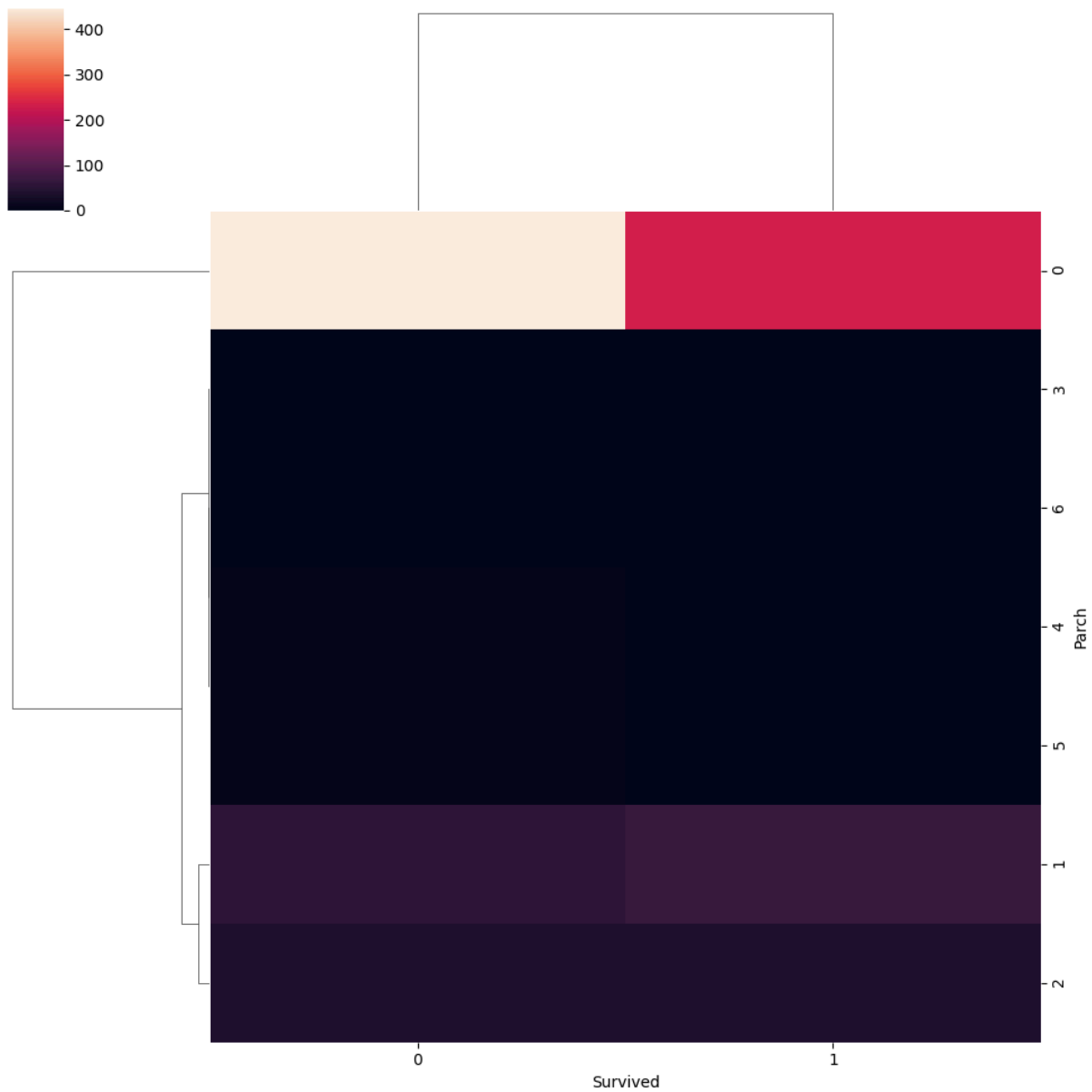
Pclass		
1	80	136
2	97	87
3	372	119

```
In [18]: sns.heatmap(pd.crosstab(data['Pclass'], data['Survived']))
```

```
Out[18]: <Axes: xlabel='Survived', ylabel='Pclass'>
```



```
In [19]: sns.clustermap(pd.crosstab(data['Parch'], data['Survived']))  
plt.show()
```



In []: