```python
import matplotlib.pyplot as plt
import seaborn as sns
import pandas as pd
import numpy as np

df = pd.read_csv("tiatanic.csv")
print(df.head())
```

```
   PassengerId  Survived  Pclass  \
0            1         0       3
1            2         1       1
2            3         1       3
3            4         1       1
4            5         0       3

                                                Name     Sex   Age
SibSp  \
0                            Braund, Mr. Owen Harris    male  22.0
1
1  Cumings, Mrs. John Bradley (Florence Briggs Th...  female  38.0
1
2                             Heikkinen, Miss. Laina  female  26.0
0
3       Futrelle, Mrs. Jacques Heath (Lily May Peel)  female  35.0
1
4                           Allen, Mr. William Henry    male  35.0
0

   Parch            Ticket     Fare Cabin Embarked
0      0         A/5 21171   7.2500   NaN        S
1      0          PC 17599  71.2833   C85        C
2      0  STON/O2. 3101282   7.9250   NaN        S
3      0            113803  53.1000  C123        S
4      0            373450   8.0500   NaN        S
```

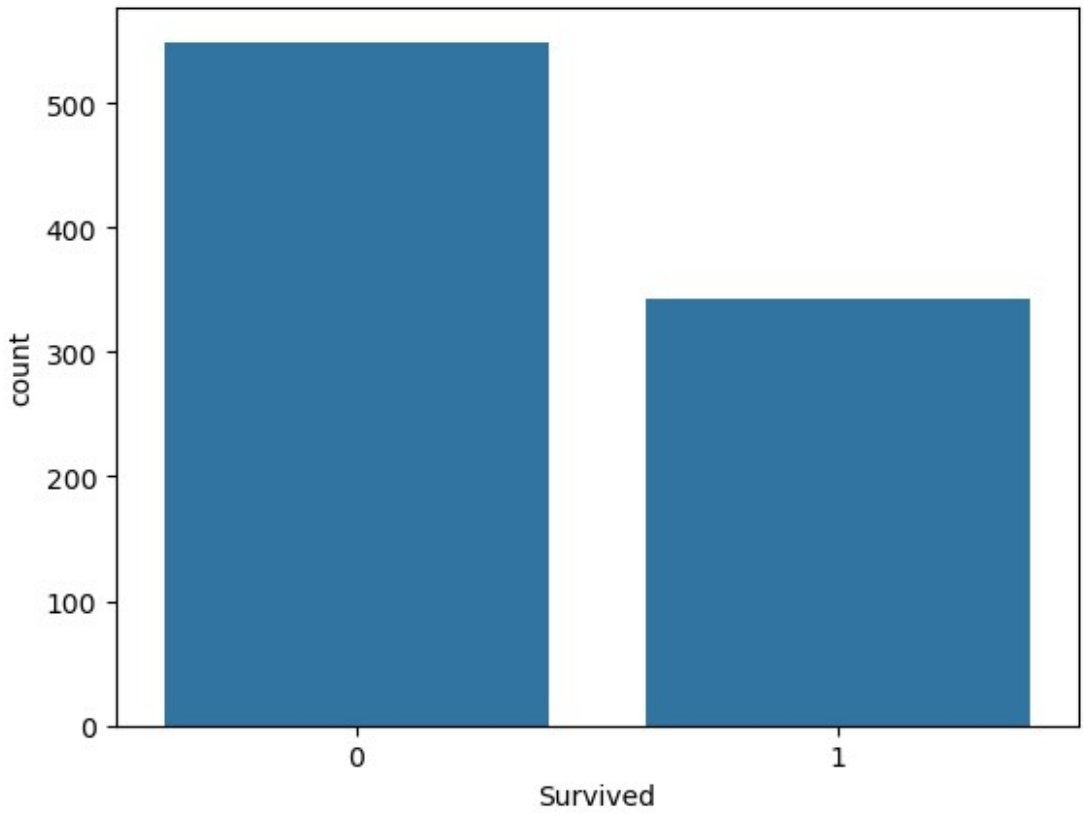
```python
print(df.isnull().sum())
```

```
PassengerId      0
Survived         0
Pclass           0
Name             0
Sex              0
Age            177
SibSp            0
Parch            0
Ticket           0
Fare             0
Cabin          687
Embarked         2
dtype: int64
```

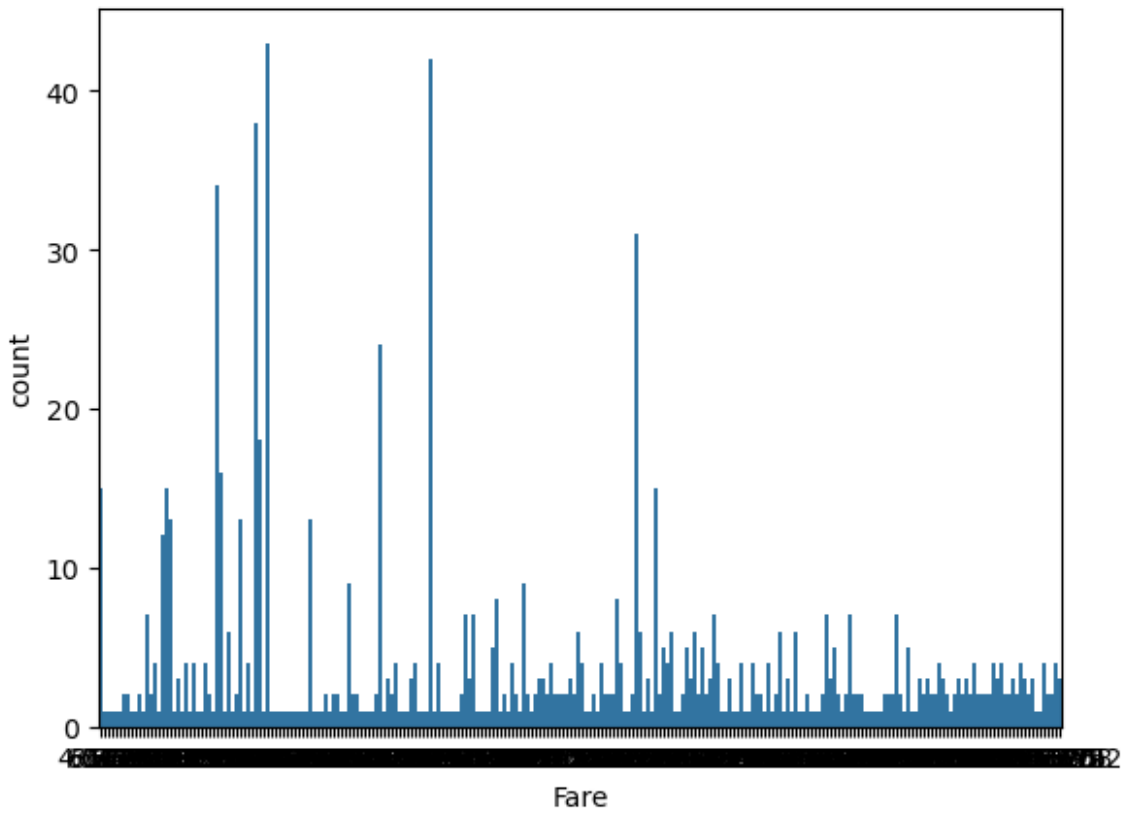
```
print("Number of peoples survived:-> ", df['Survived'].value_counts()
[1])
print("Number of peoples Not survived:-> ",
df['Survived'].value_counts()[0])
```

```
Number of peoples survived:->  342
Number of peoples Not survived:->  549
```

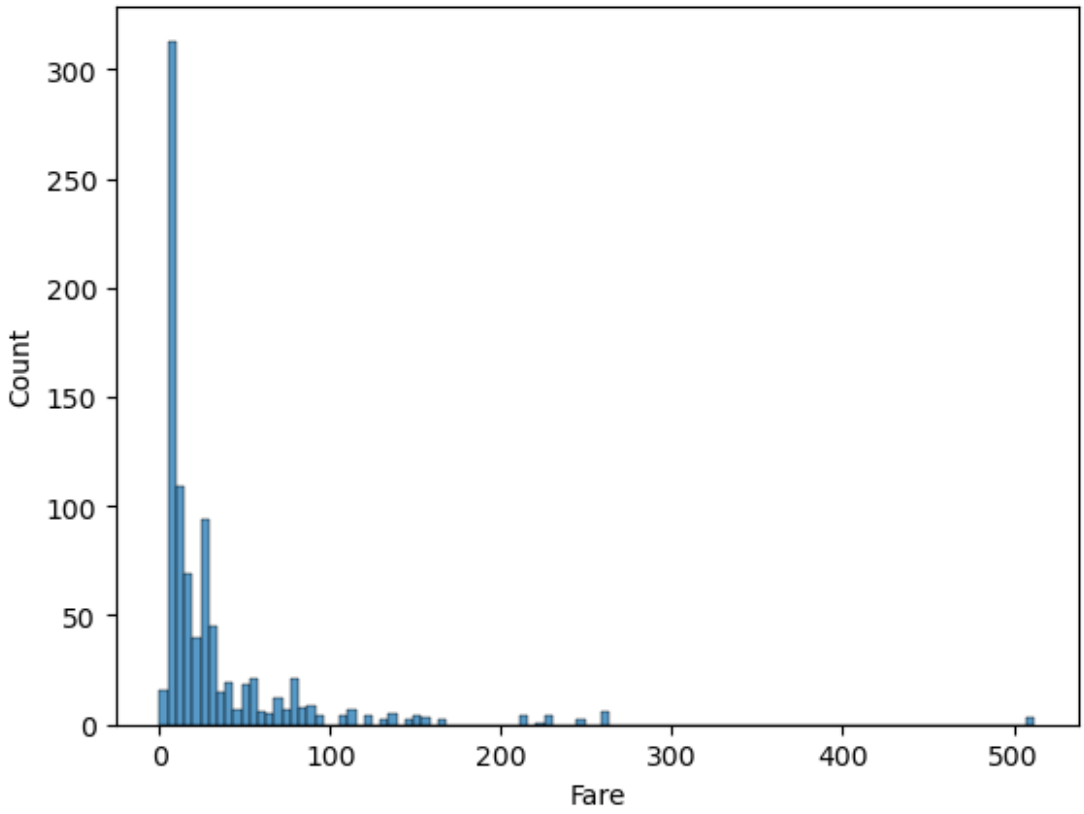
```
sns.countplot(data = df, x='Survived')
plt.show()
```



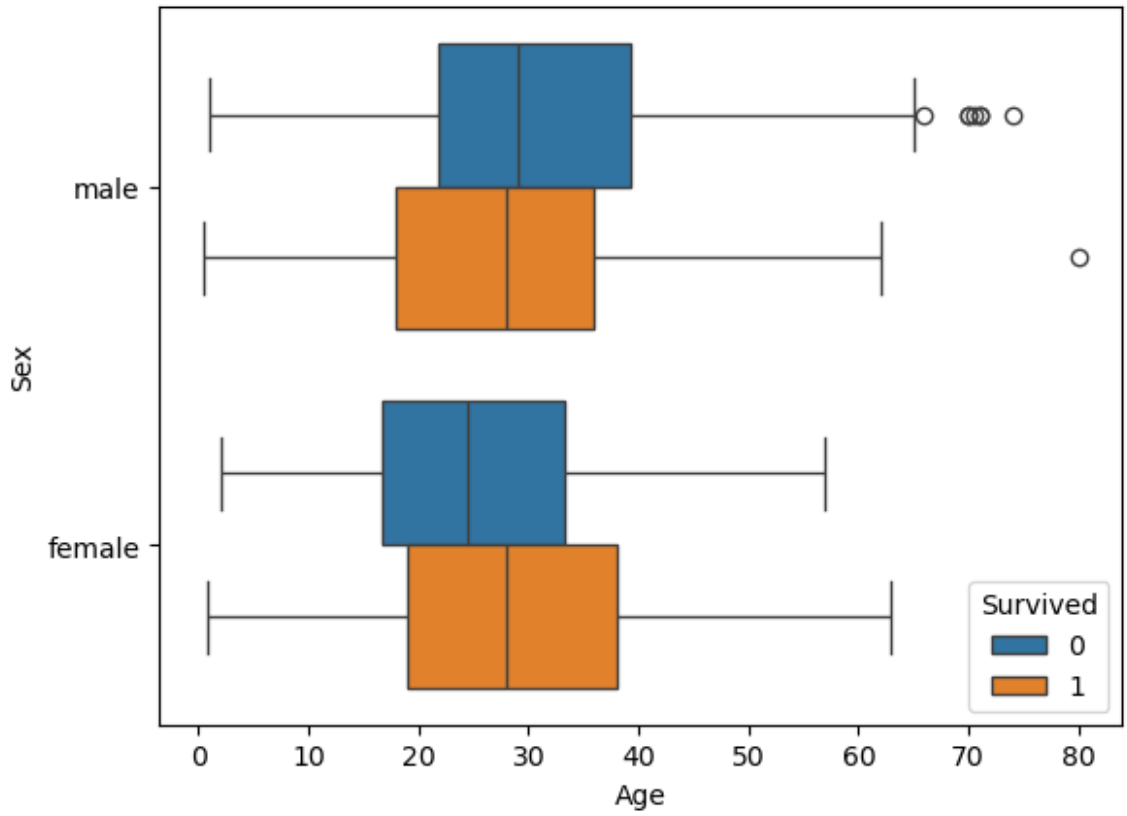

```
sns.countplot(data = df, x='Fare')
plt.show()
```



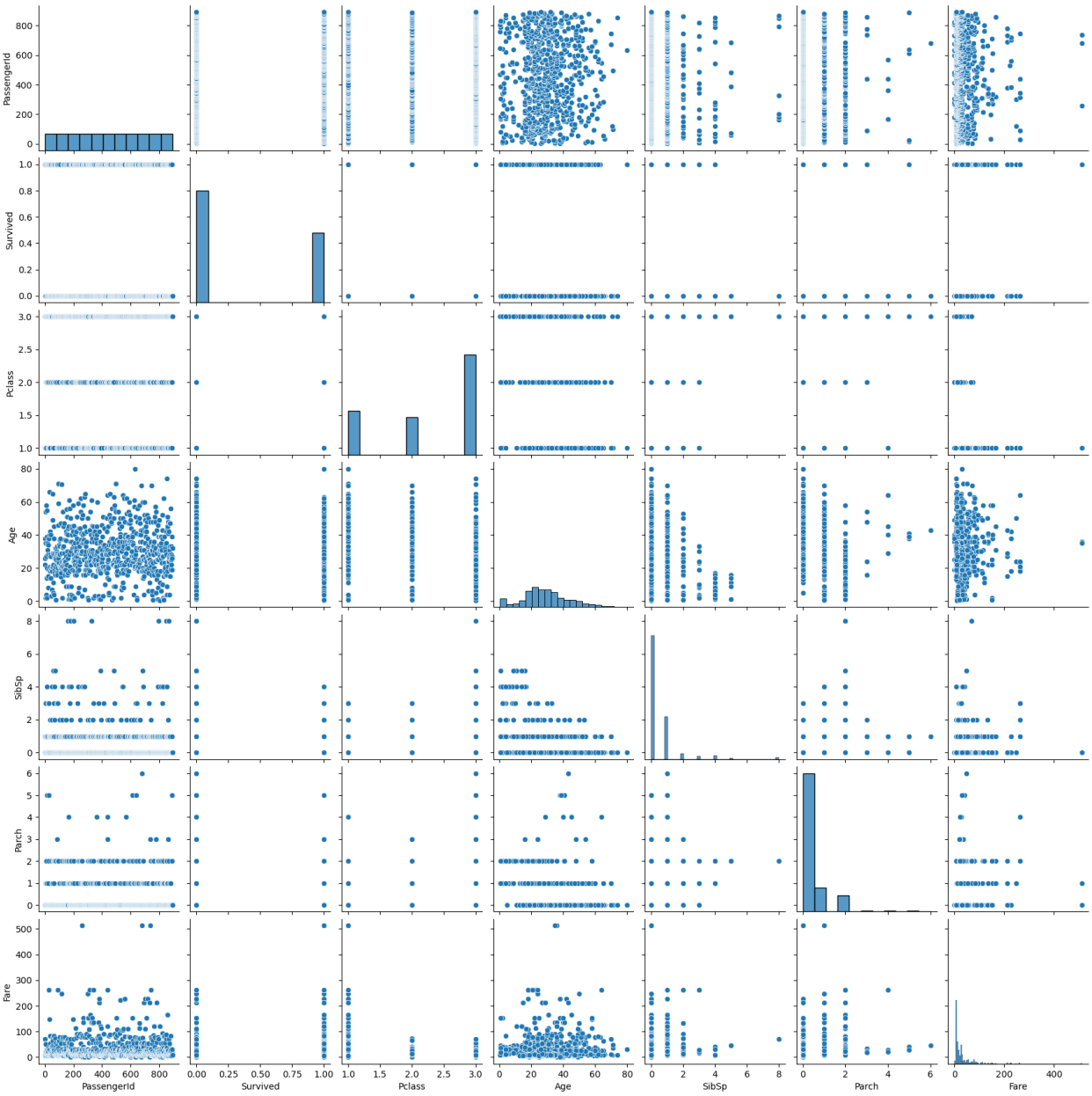

```
sns.histplot(df['Fare'])
plt.show()
```




```
sns.boxplot(data=df, x='Age', y='Sex', hue='Survived')
plt.show()
```

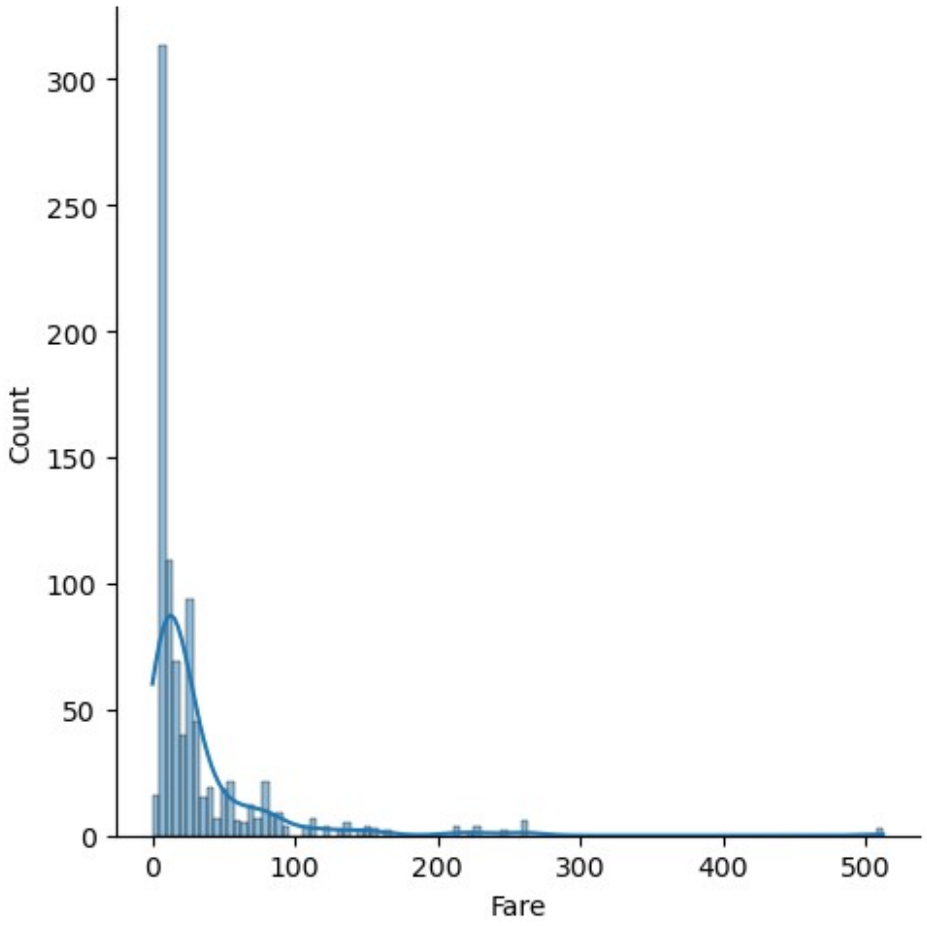



```
sns.pairplot(df)
plt.show()
```



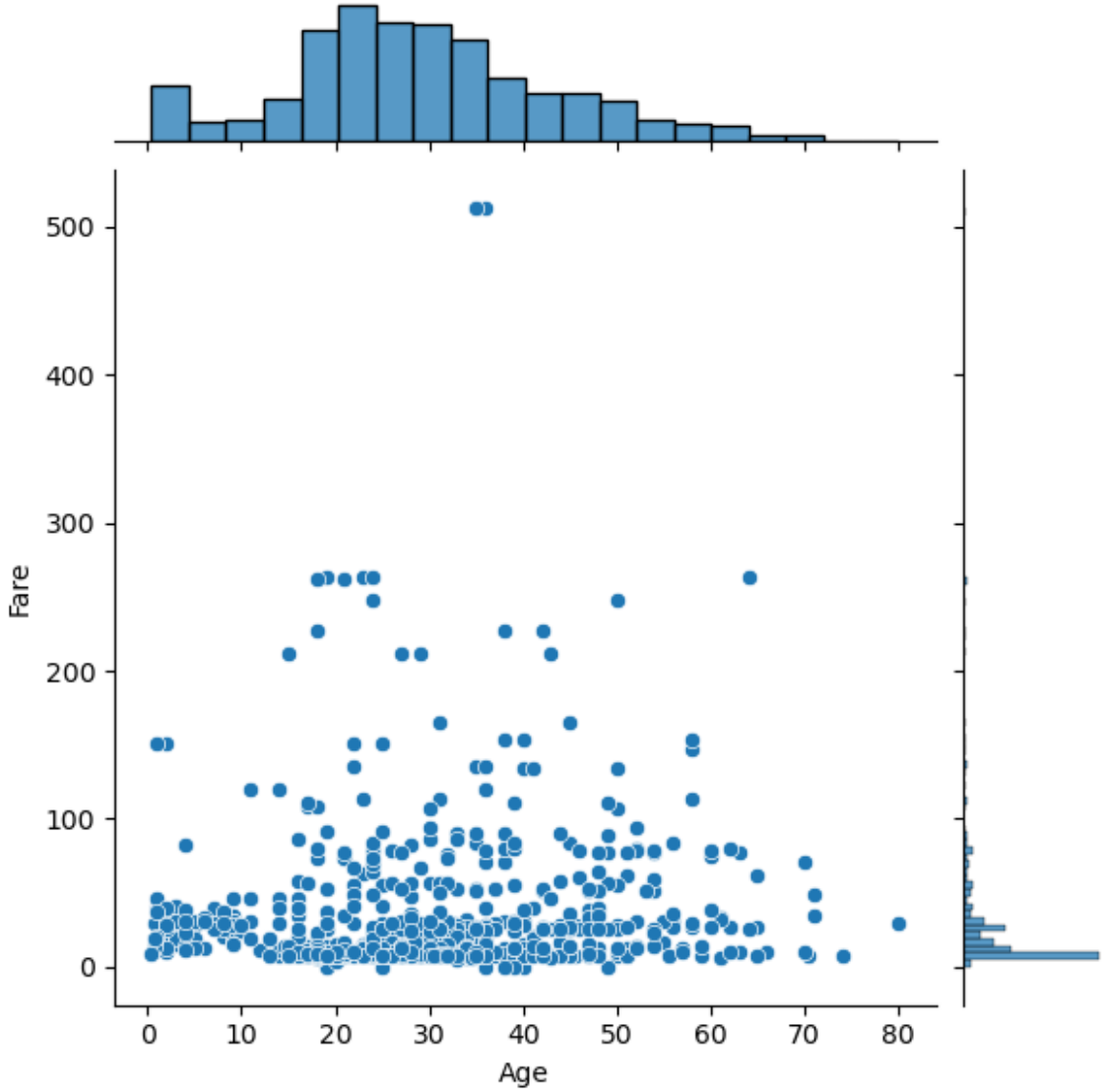

```
sns.displot(df['Fare'], kde=True)
```

```
<seaborn.axisgrid.FacetGrid at 0x2f480c2f9e0>
```



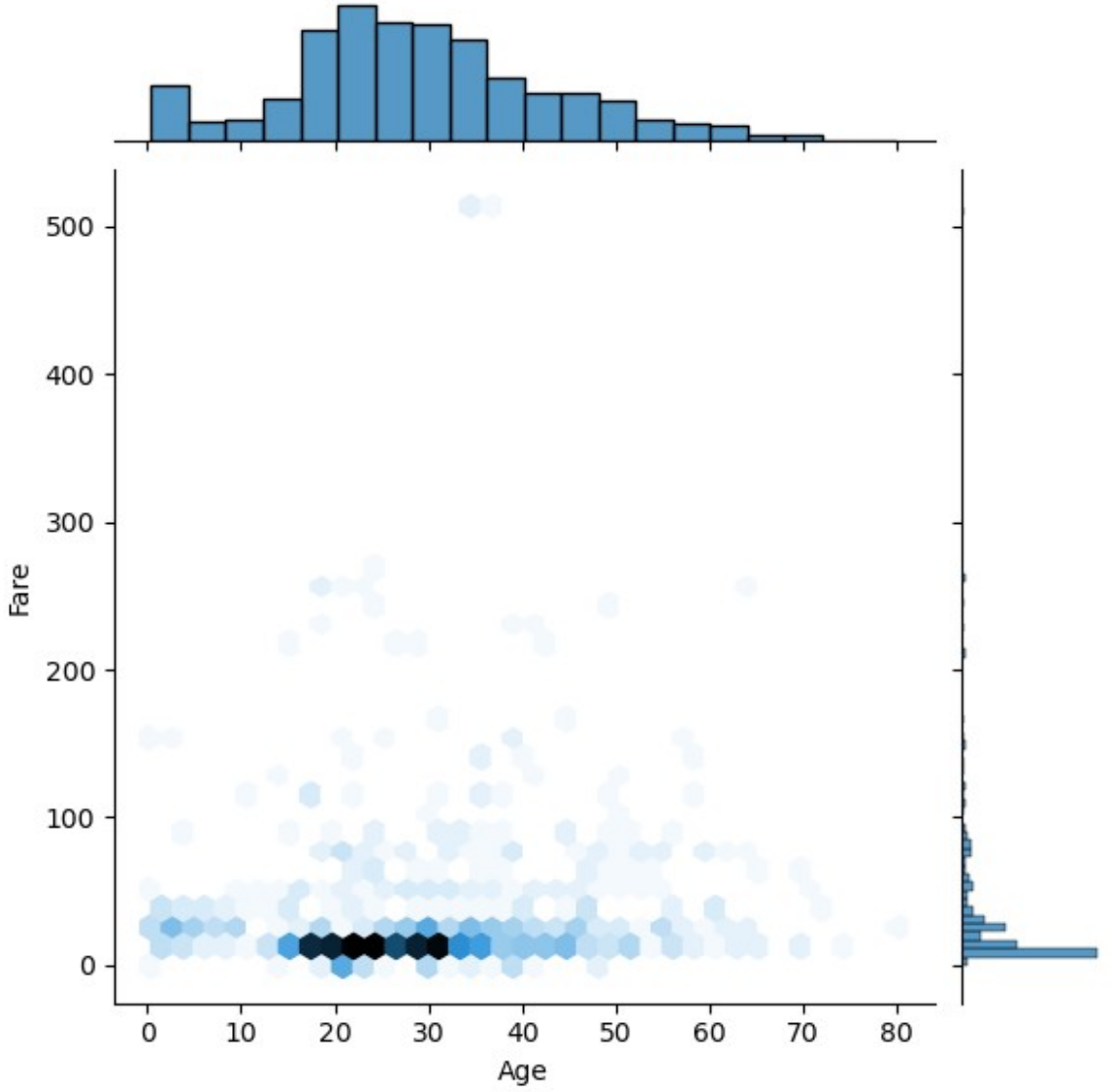

```
sns.jointplot(x='Age', y='Fare', data=df)
```

```
<seaborn.axisgrid.JointGrid at 0x2f480bed5b0>
```



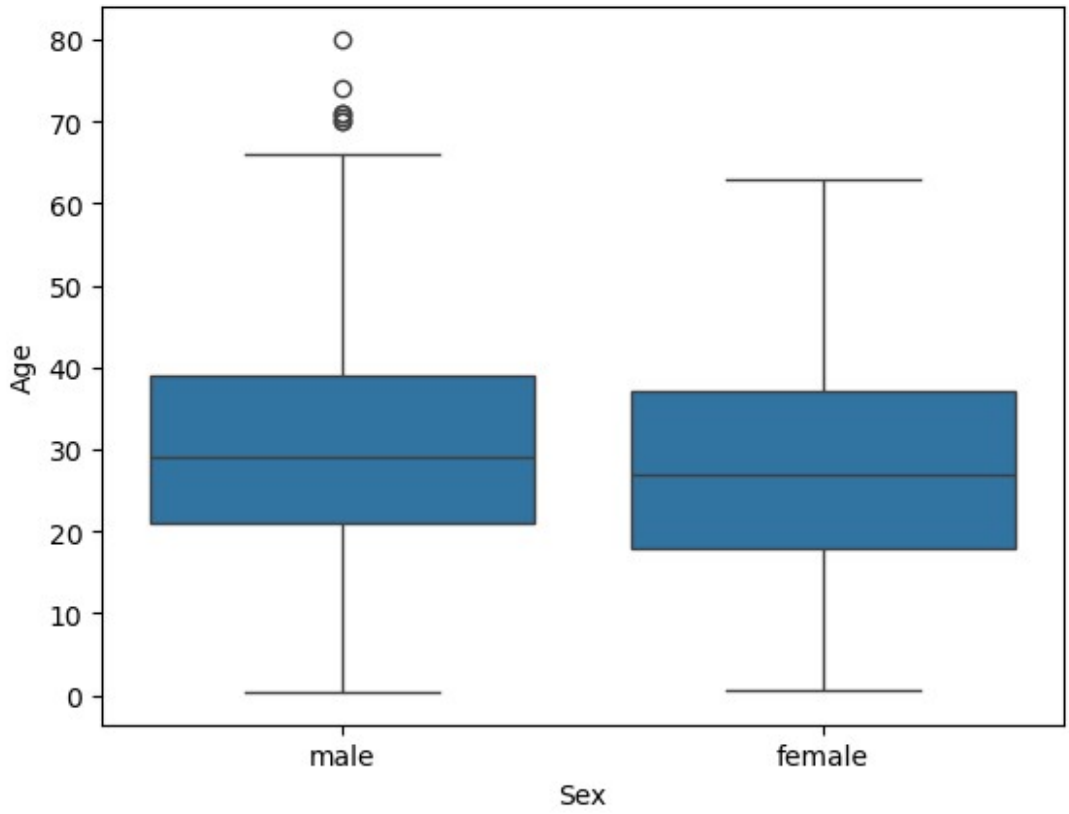

```
sns.jointplot(x='Age', y='Fare', data=df, kind='hex')
```

```
<seaborn.axisgrid.JointGrid at 0x2f480d0cb90>
```




```
sns.boxplot(x='Sex', y='Age', data=df)
```

```
<Axes: xlabel='Sex', ylabel='Age'>
```


80
70
60
50
40
30
20
10
0
Age
male
female
Sex