

```
In [17]: import pandas as pd
import seaborn as sns
import numpy as np
```

```
In [18]: df=pd.read_csv('tested.csv')
```

```
In [19]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 418 entries, 0 to 417
Data columns (total 12 columns):
#   Column          Non-Null Count  Dtype
---  -
0   PassengerId      418 non-null    int64
1   Survived         418 non-null    int64
2   Pclass          418 non-null    int64
3   Name             418 non-null    object
4   Sex              418 non-null    object
5   Age              332 non-null    float64
6   SibSp            418 non-null    int64
7   Parch           418 non-null    int64
8   Ticket           418 non-null    object
9   Fare             417 non-null    float64
10  Cabin            91 non-null     object
11  Embarked         418 non-null    object
dtypes: float64(2), int64(5), object(5)
memory usage: 39.3+ KB
```

```
In [20]: df.isnull()
```

```
Out[20]:
```

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare
0	False	False	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False	False	False
3	False	False	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False	False	False
...	...	...	...	...	...	...	...	...	...	...
413	False	False	False	False	False	True	False	False	False	False
414	False	False	False	False	False	False	False	False	False	False
415	False	False	False	False	False	False	False	False	False	False
416	False	False	False	False	False	True	False	False	False	False
417	False	False	False	False	False	True	False	False	False	False

418 rows x 12 columns

```
In [21]: df.isnull().sum()
```

```
Out[21]: PassengerId      0
Survived      0
Pclass        0
Name          0
Sex           0
Age          86
SibSp         0
Parch         0
Ticket        0
Fare          1
Cabin        327
Embarked      0
dtype: int64
```

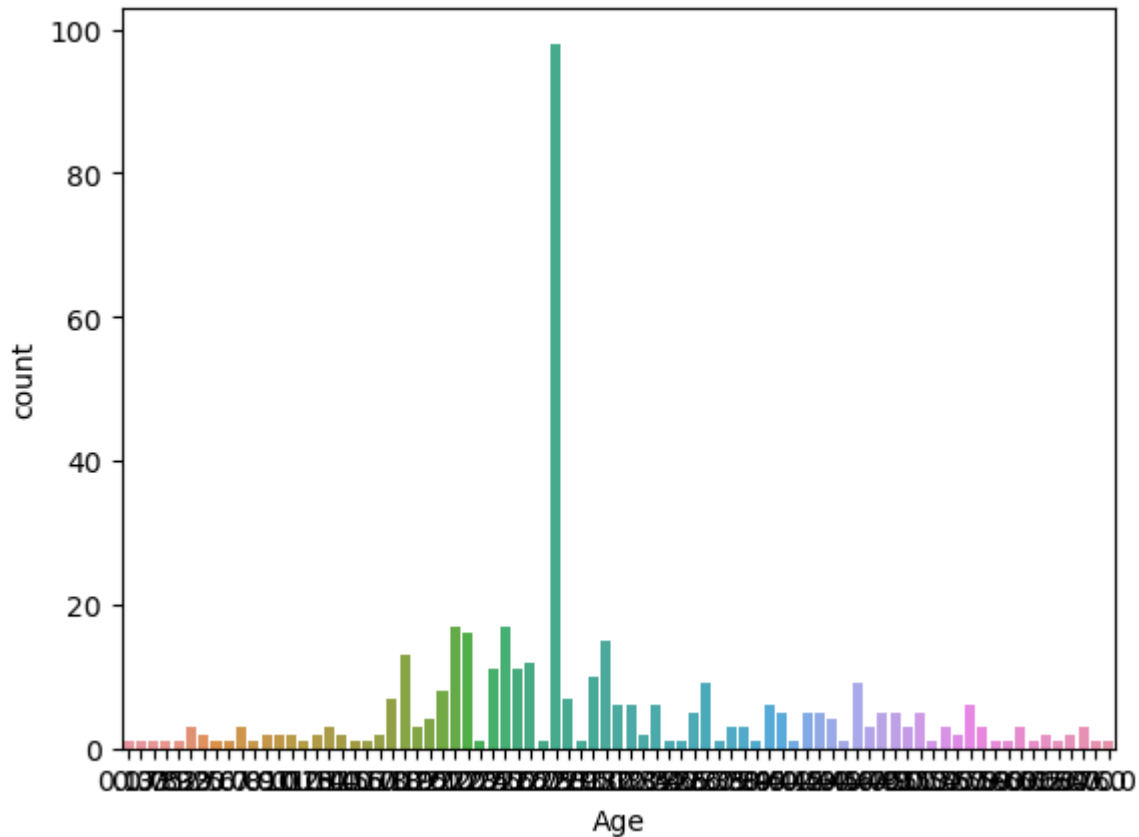
```
In [22]: df['Age']=df['Age'].fillna(df['Age'].median())
```

```
In [23]: df.isnull().sum()
```

```
Out[23]: PassengerId      0
Survived      0
Pclass        0
Name          0
Sex           0
Age           0
SibSp         0
Parch         0
Ticket        0
Fare          1
Cabin        327
Embarked      0
dtype: int64
```

```
In [29]: sns.countplot(x='Age', data=df)
```

```
Out[29]: <Axes: xlabel='Age', ylabel='count'>
```



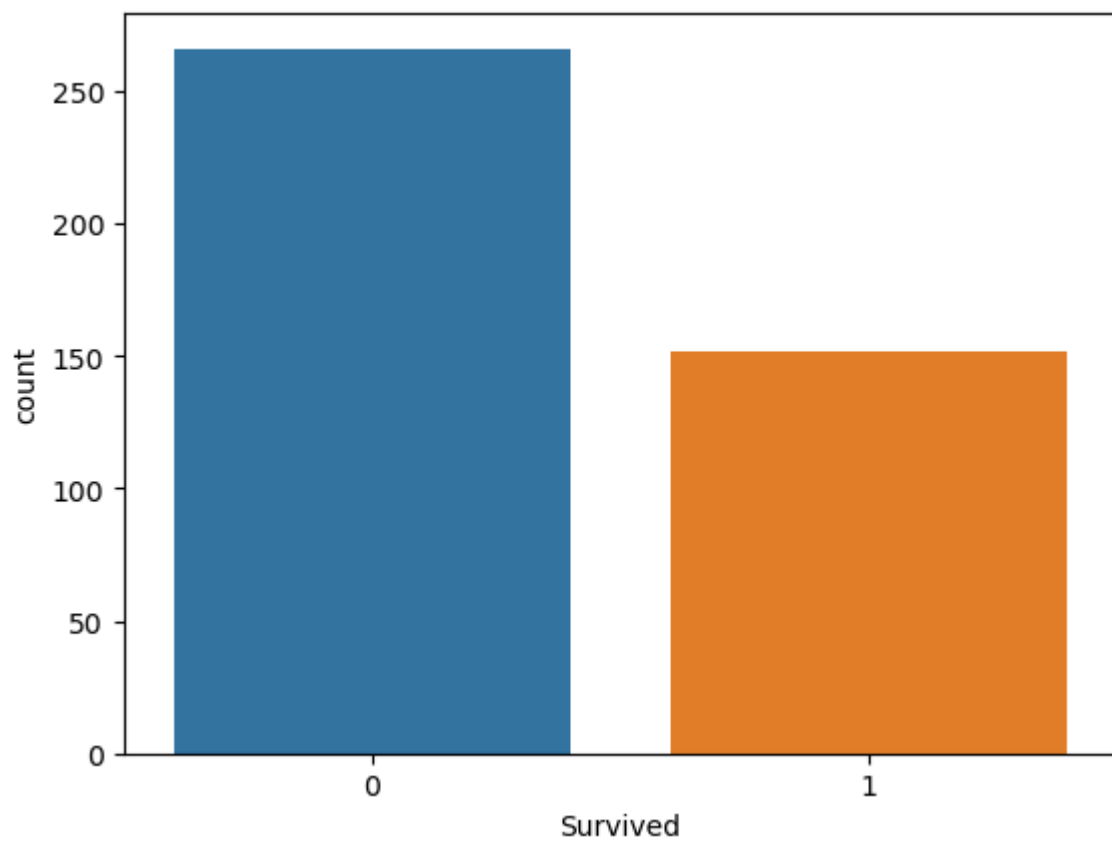
```
In [25]: df.head()
```

```
Out[25]:
```

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare
0	892	0	3	Kelly, Mr. James	male	34.5	0	0	330911	7.25
1	893	1	3	Wilkes, Mrs. James (Ellen Needs)	female	47.0	1	0	363272	7.00
2	894	0	2	Myles, Mr. Thomas Francis	male	62.0	0	0	240276	9.00
3	895	0	3	Wirz, Mr. Albert	male	27.0	0	0	315154	8.51
4	896	1	3	Hirvonen, Mrs. Alexander (Helga E Lindqvist)	female	22.0	1	1	3101298	12.36

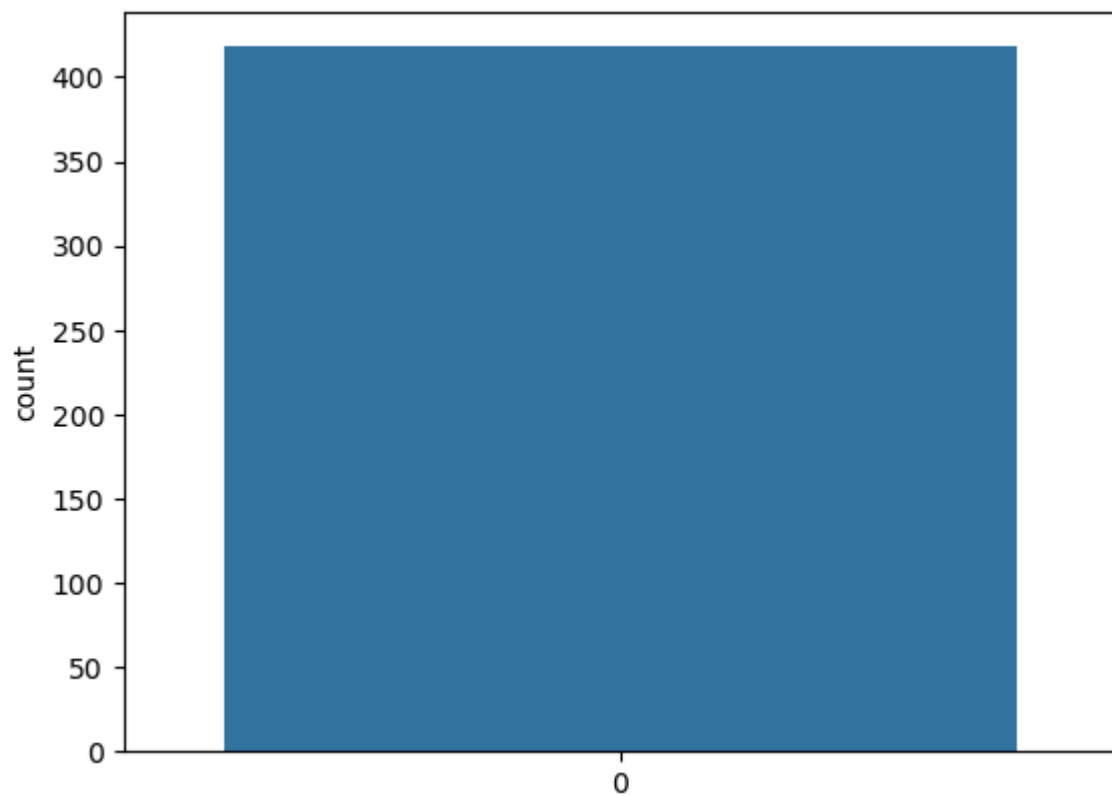
```
In [38]: sns.countplot(x='Survived',data=df)
```

```
Out[38]: <Axes: xlabel='Survived', ylabel='count'>
```



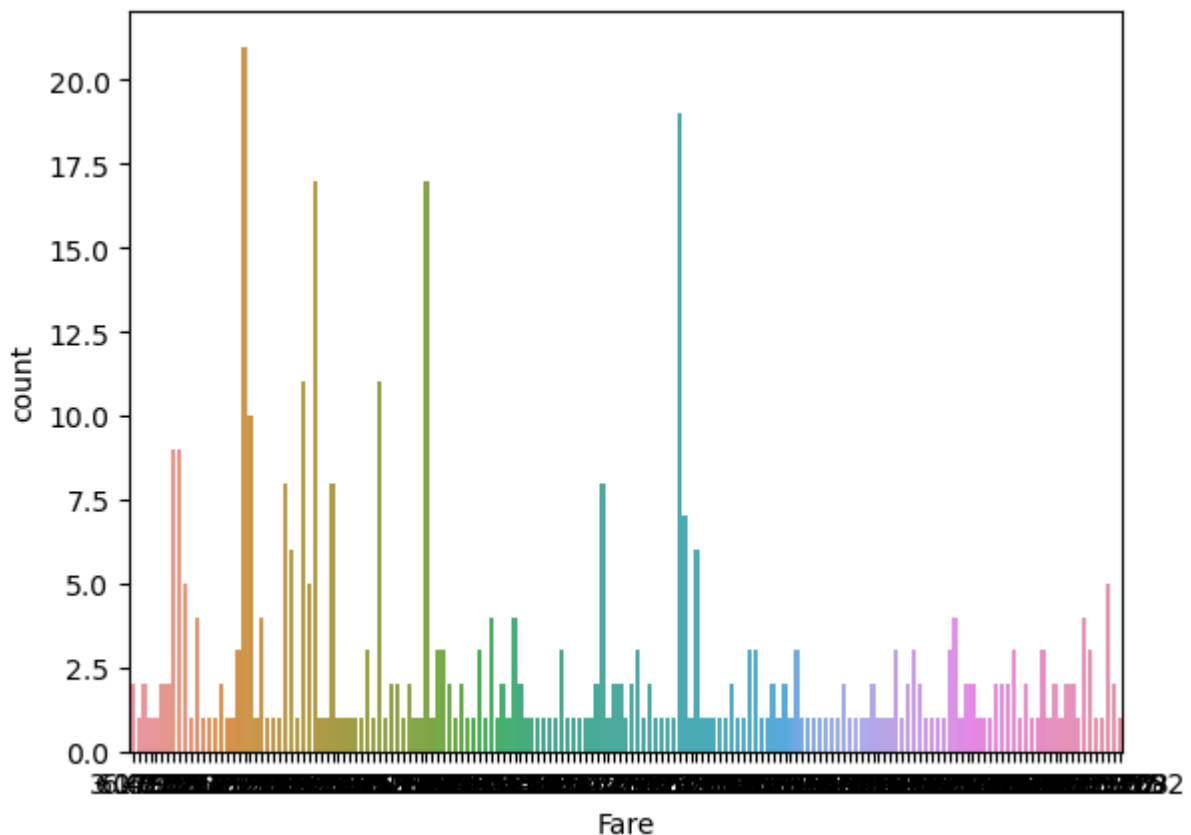
```
In [27]: sns.countplot(df['Survived'])
```

```
Out[27]: <Axes: ylabel='count'>
```



```
In [31]: sns.countplot(x='Fare', data=df)
```

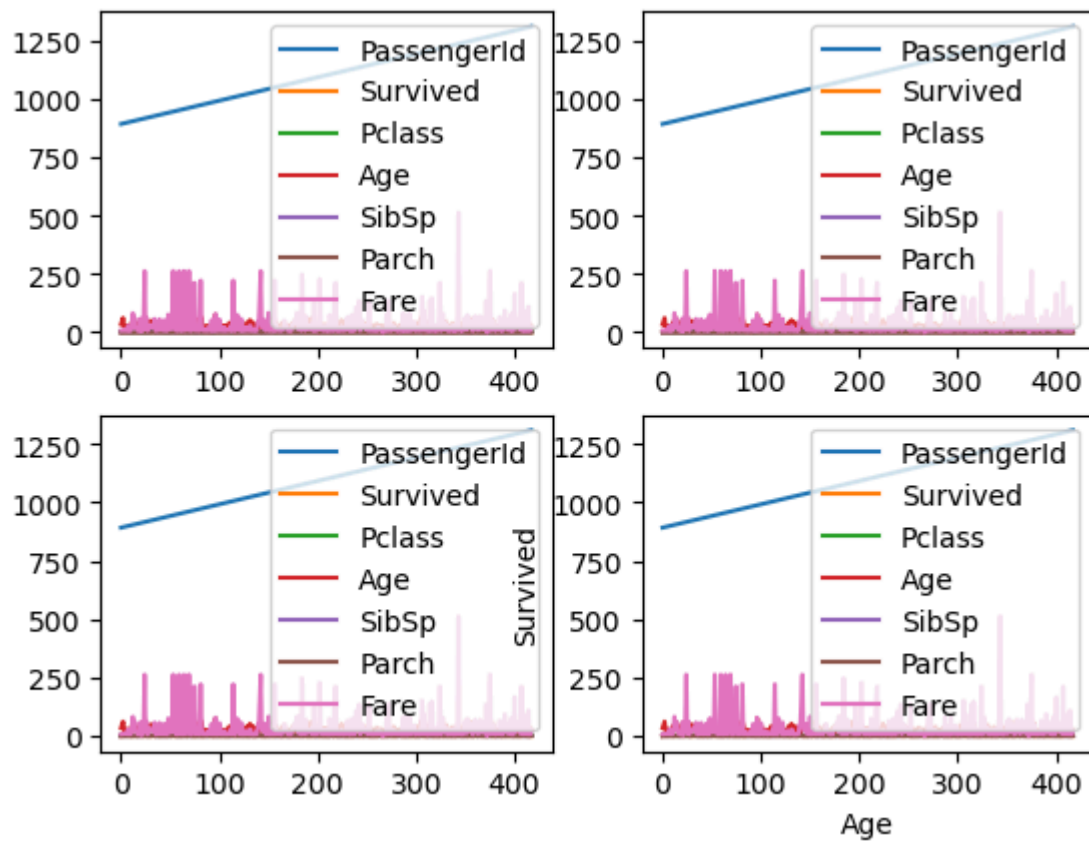
```
Out[31]: <Axes: xlabel='Fare', ylabel='count'>
```



```
In [37]: import matplotlib.pyplot as plt
fig, axes = plt.subplots(nrows=2, ncols=2)
df.plot(ax=axes[0,0])
df.plot(ax=axes[0,1])
df.plot(ax=axes[1,0])
df.plot(ax=axes[1,1])
sns.histplot(data=df, x='Age', y='Survived')
```

```
/Users/anvi/anaconda3/lib/python3.11/site-packages/seaborn/_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a future version. Convert inf values to NaN before operating instead.
  with pd.option_context('mode.use_inf_as_na', True):
/Users/anvi/anaconda3/lib/python3.11/site-packages/seaborn/_oldcore.py:1119:
FutureWarning: use_inf_as_na option is deprecated and will be removed in a future version. Convert inf values to NaN before operating instead.
  with pd.option_context('mode.use_inf_as_na', True):
```

```
Out[37]: <Axes: xlabel='Age', ylabel='Survived'>
```



In [ ]: