

```
In [1]: import pandas as pd
```

```
In [2]: import numpy as nm
```

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


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

```
In [5]: df=sns.load_dataset('titanic')
```

```
In [6]: df.head()
```

```
Out[6]:
```

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



```
In [7]: df.isnull().sum()
```

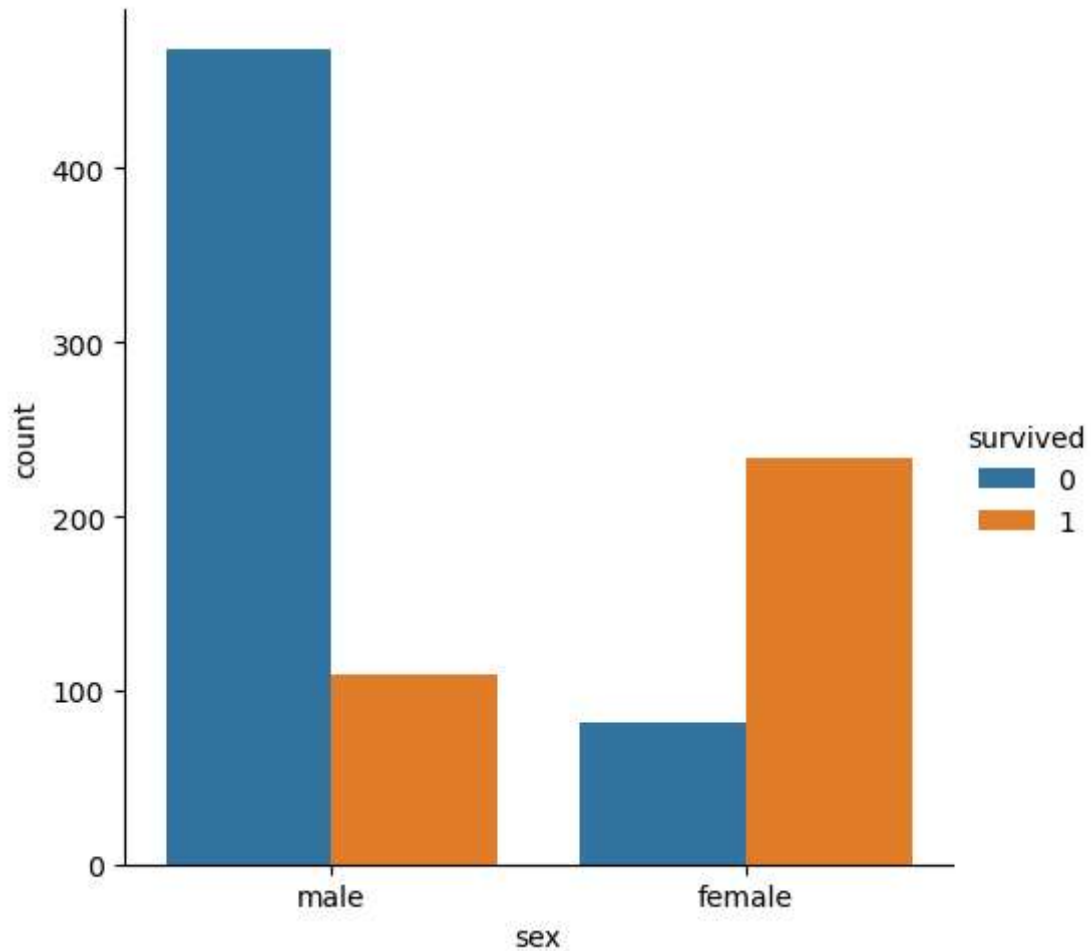
```
Out[7]: survived      0
pclass      0
sex          0
age        177
sibsp       0
parch       0
fare        0
embarked     2
class        0
who          0
adult_male   0
deck       688
embark_town   2
alive        0
alone        0
dtype: int64
```

```
In [9]: df['age']=df['age'].replace(nm.nan,df['age'].mean())
```

```
In [10]: sns.catplot(x='sex',hue='survived',kind='count',data=df)
```

C:\Users\Vishw\anaconda3\Lib\site-packages\seaborn\axisgrid.py:118: UserWarning: The figure layout has changed to tight
self._figure.tight_layout(*args, **kwargs)

```
Out[10]: <seaborn.axisgrid.FacetGrid at 0x21153760150>
```

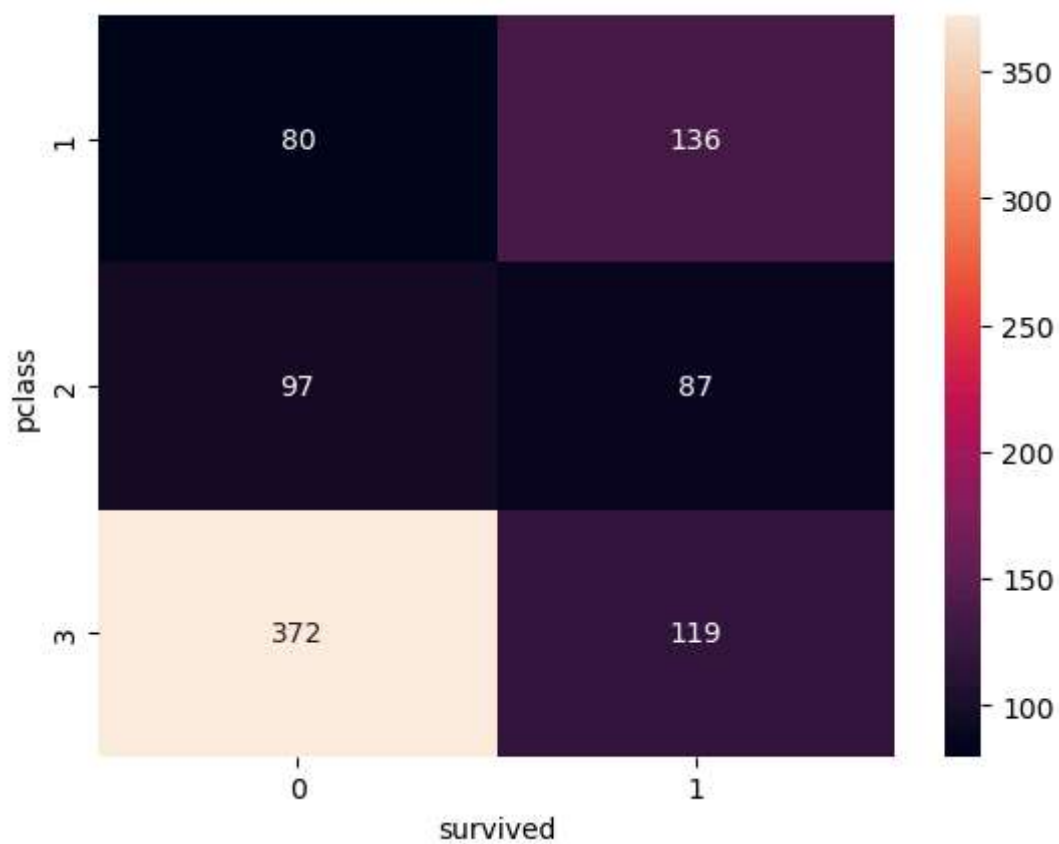


```
In [12]: group=df.groupby(['pclass','survived'])
```

```
In [13]: pclass_survived=group.size().unstack()
```

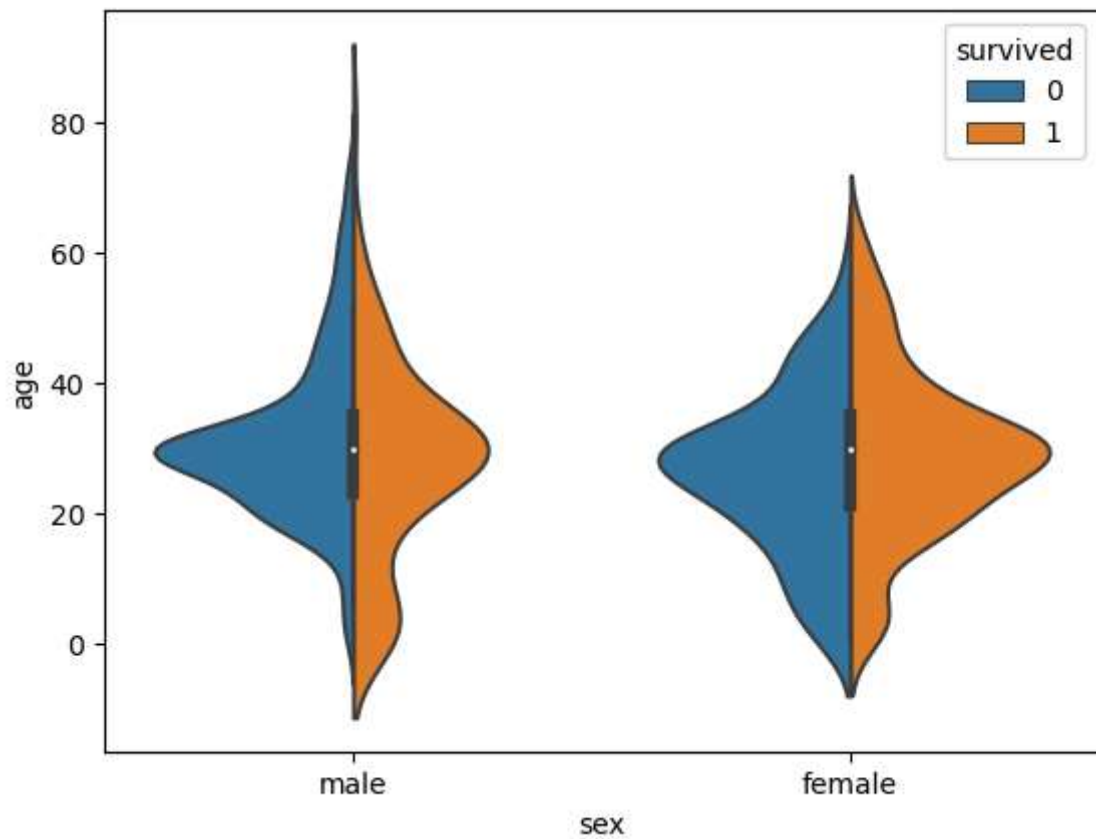
```
In [14]: sns.heatmap(pclass_survived,annot=True,fmt="d")
```

```
Out[14]: <Axes: xlabel='survived', ylabel='pclass'>
```



```
In [16]: sns.violinplot(x='sex',y='age',hue='survived',data=df,split=True)
```

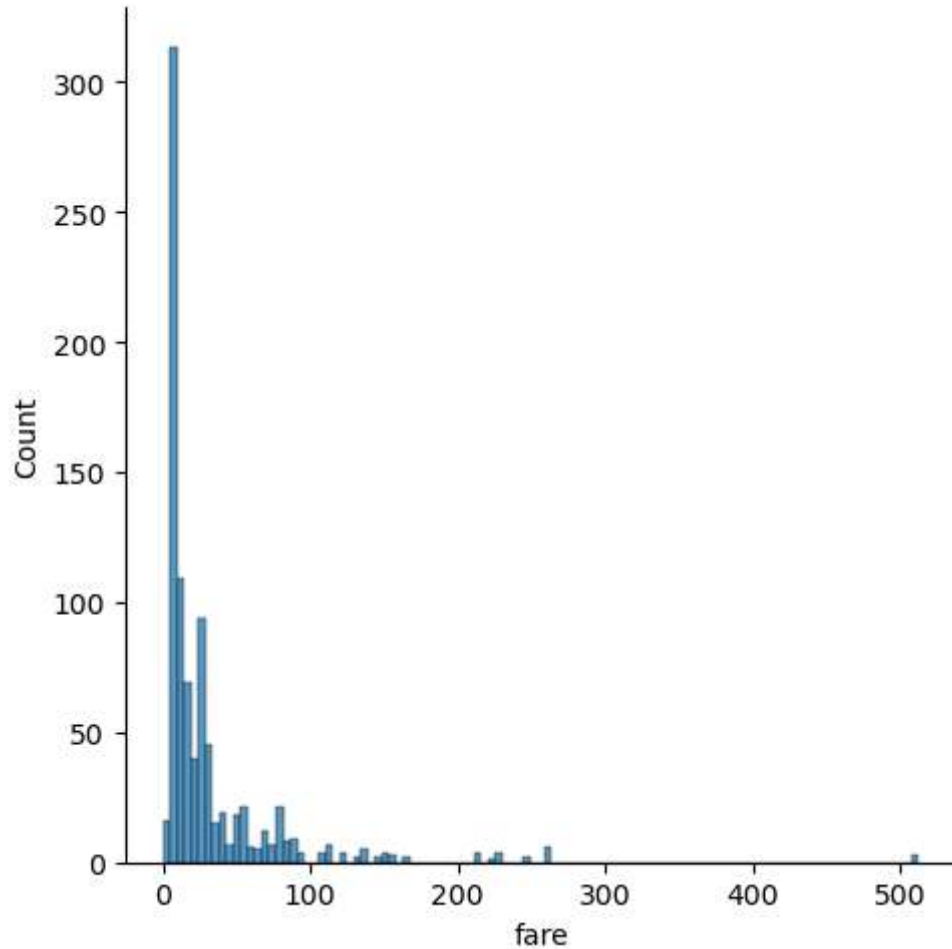
```
Out[16]: <Axes: xlabel='sex', ylabel='age'>
```



```
In [17]: sns.displot(df['fare'])
```

```
C:\Users\Vishw\anaconda3\Lib\site-packages\seaborn\axisgrid.py:118: UserWarning: The figure layout has changed to tight  
  self._figure.tight_layout(*args, **kwargs)
```

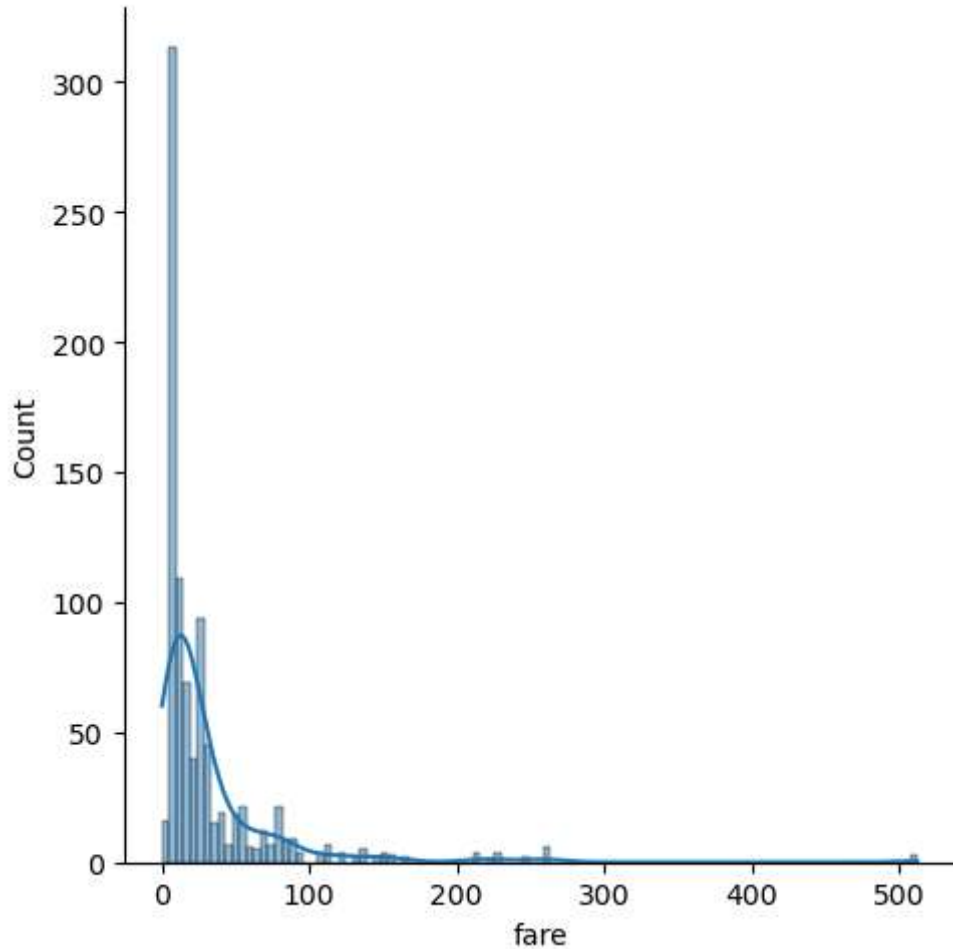
```
Out[17]: <seaborn.axisgrid.FacetGrid at 0x211589acc50>
```



```
In [19]: sns.displot(df['fare'],kde=True)
```

```
C:\Users\Vishw\anaconda3\Lib\site-packages\seaborn\axisgrid.py:118: UserWarning: The figure layout has changed to tight
  self._figure.tight_layout(*args, **kwargs)
```

```
Out[19]: <seaborn.axisgrid.FacetGrid at 0x2115901ad90>
```



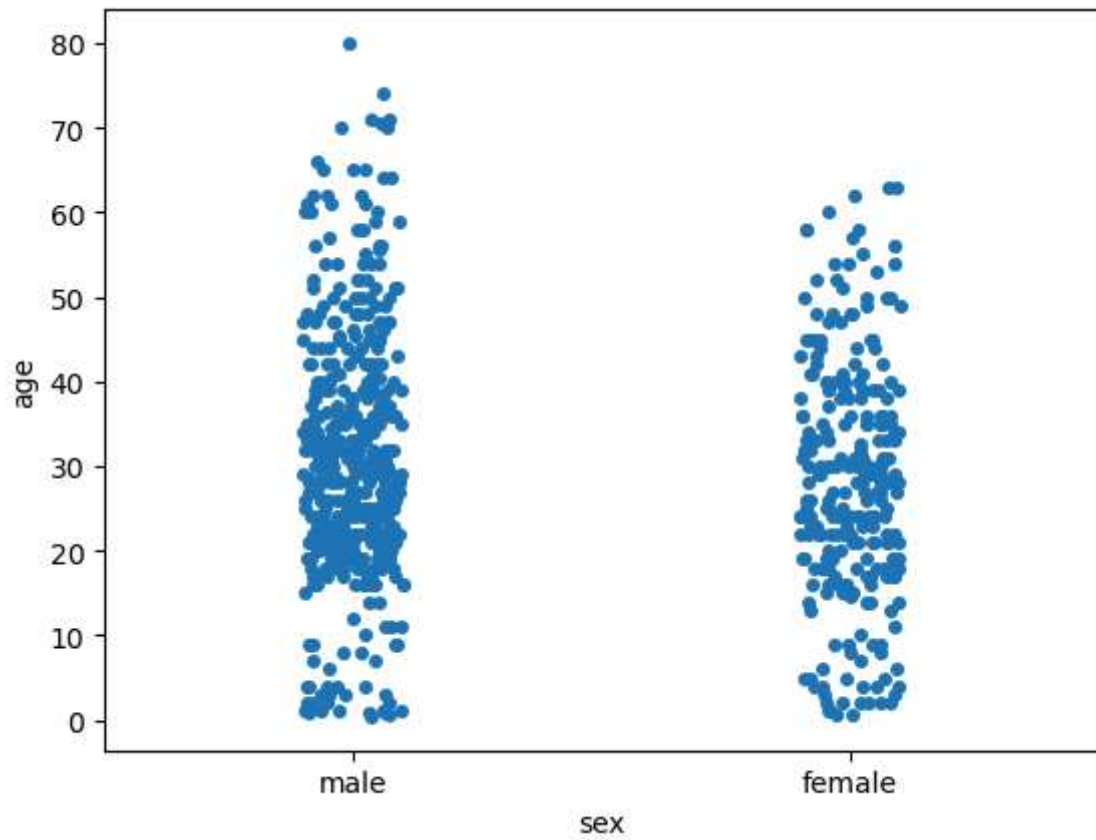
```
In [2]: import seaborn as sns
```

```
In [3]: import pandas as pd
import numpy as nm
import matplotlib.pyplot as plt
```

```
In [4]: df=sns.load_dataset('titanic')
```

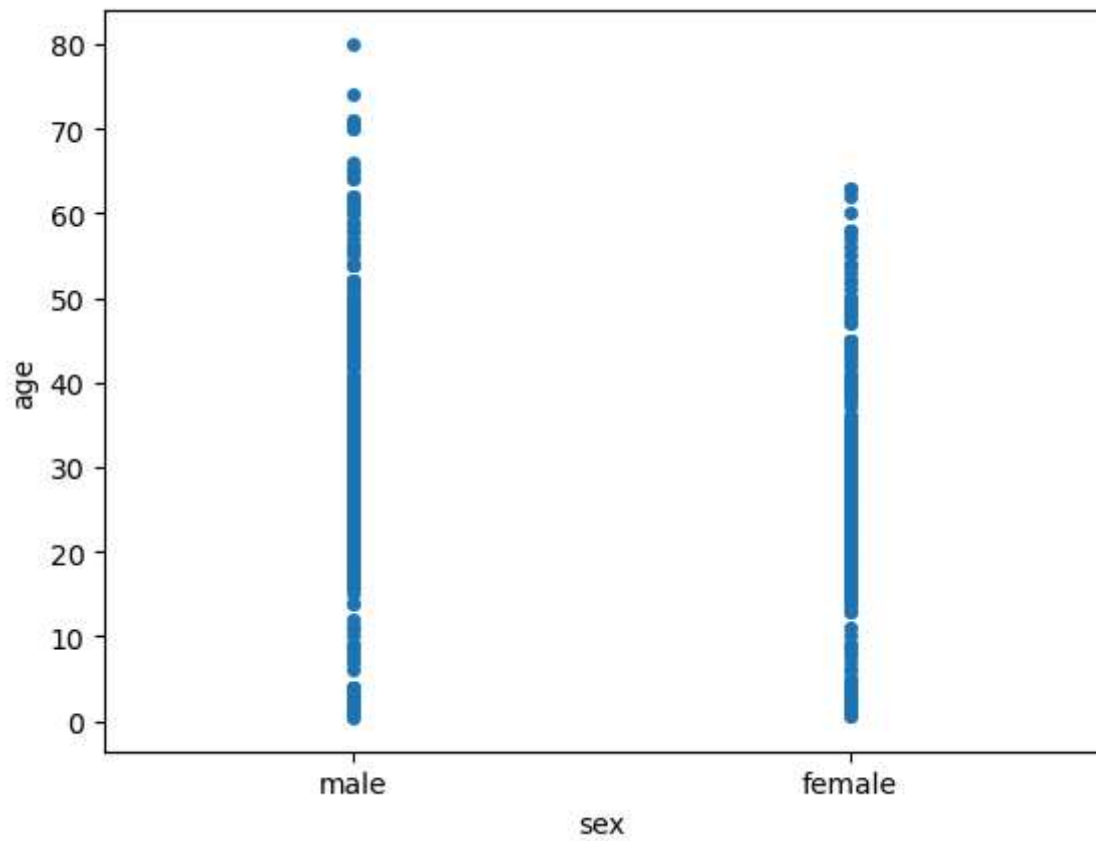
```
In [5]: sns.stripplot(x='sex', y='age', data=df, jitter=True)
```

```
Out[5]: <Axes: xlabel='sex', ylabel='age'>
```



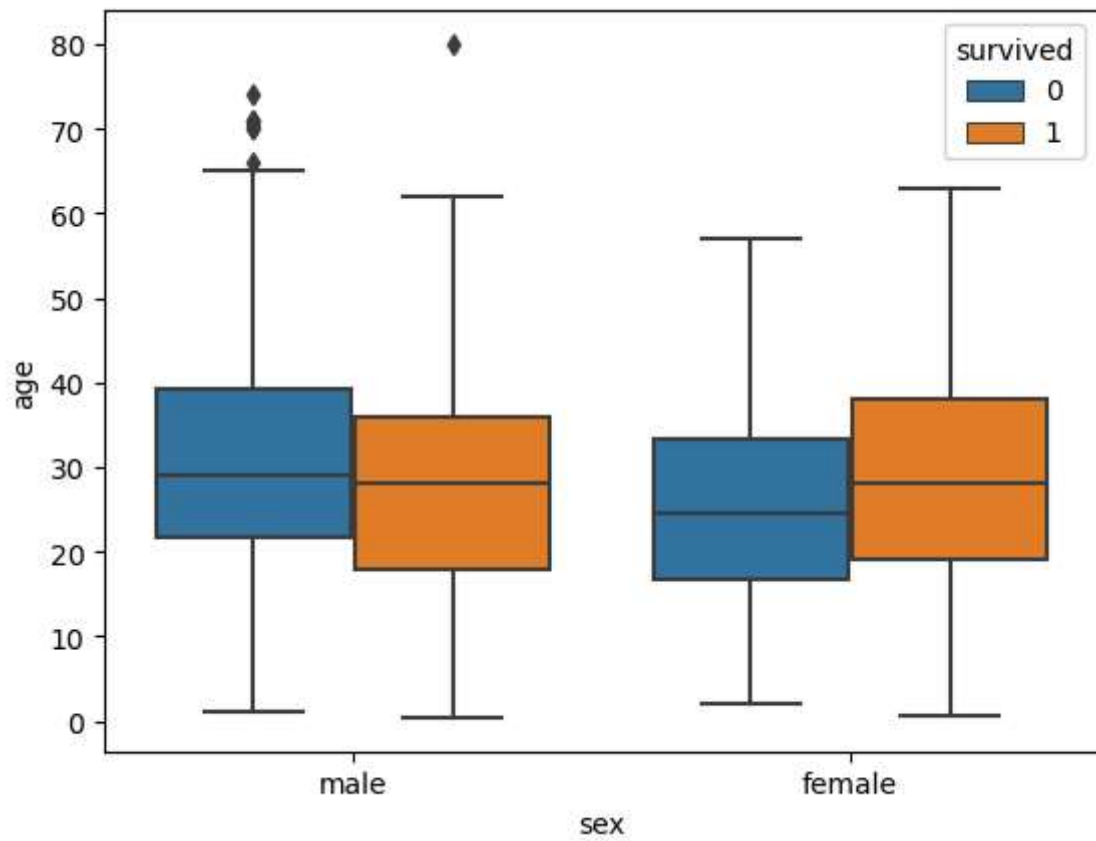
```
In [6]: sns.stripplot(x='sex', y='age', data=df, jitter=False)
```

```
Out[6]: <Axes: xlabel='sex', ylabel='age'>
```




```
In [7]: sns.boxplot(x='sex', y='age', data=df, hue="survived")
```

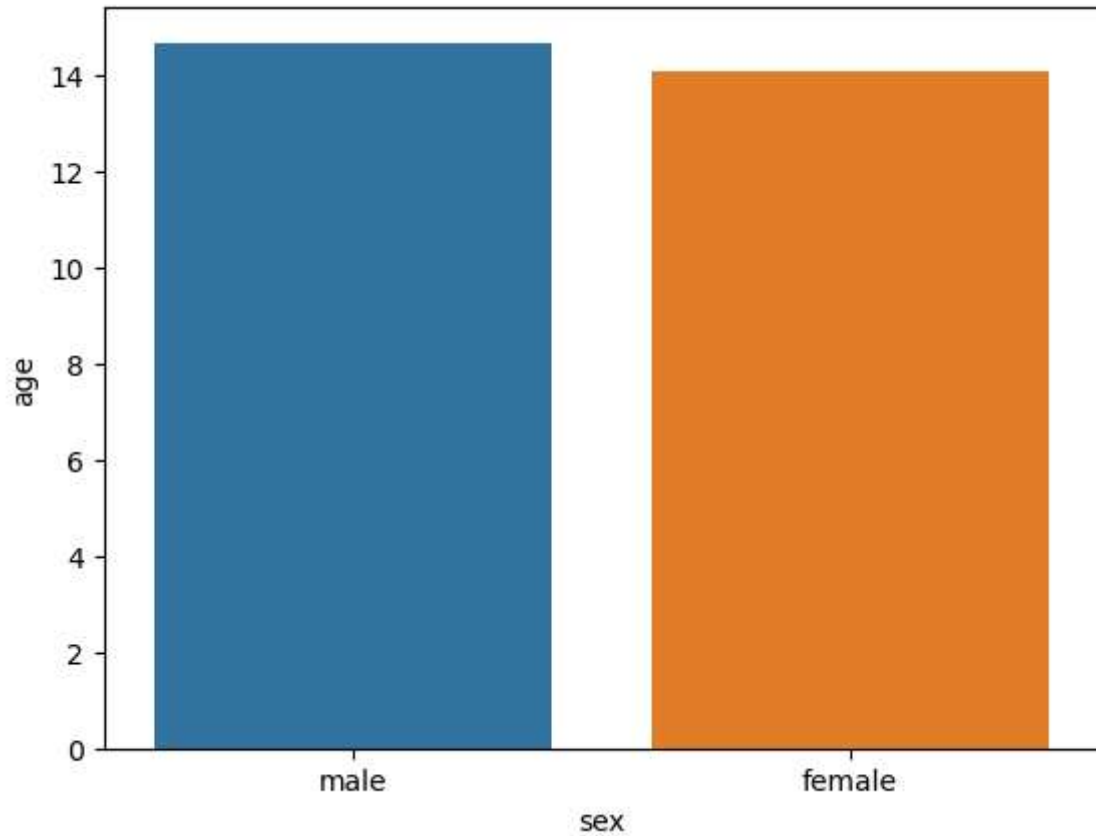
```
Out[7]: <Axes: xlabel='sex', ylabel='age'>
```



```
In [8]: sns.barplot(x='sex', y='age', data=df, estimator=nm.std)
```

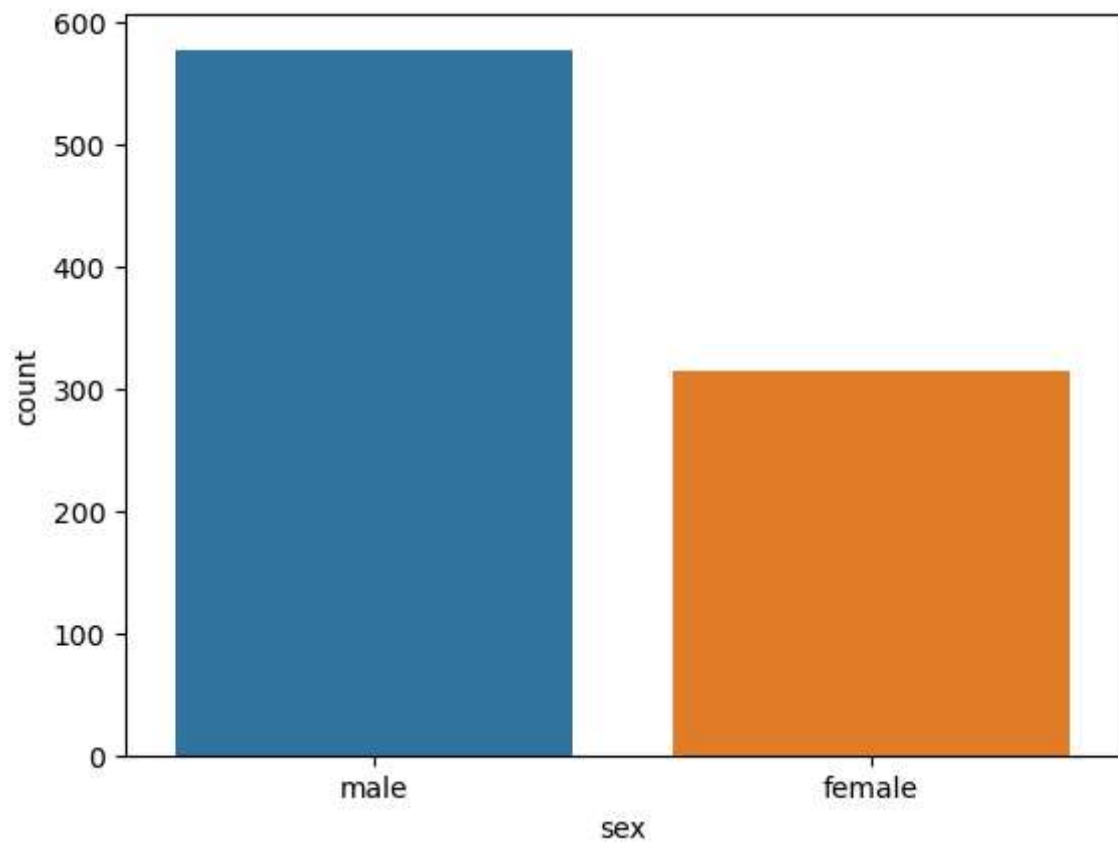
C:\Users\Vishw\anaconda3\Lib\site-packages\numpy\lib\nanfunctions.py:1556: RuntimeWarning: All-NaN slice encountered
return function_base._ureduce(a,

```
Out[8]: <Axes: xlabel='sex', ylabel='age'>
```



```
In [9]: sns.countplot(x='sex', data=df)
```

```
Out[9]: <Axes: xlabel='sex', ylabel='count'>
```



```
In [ ]:
```