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

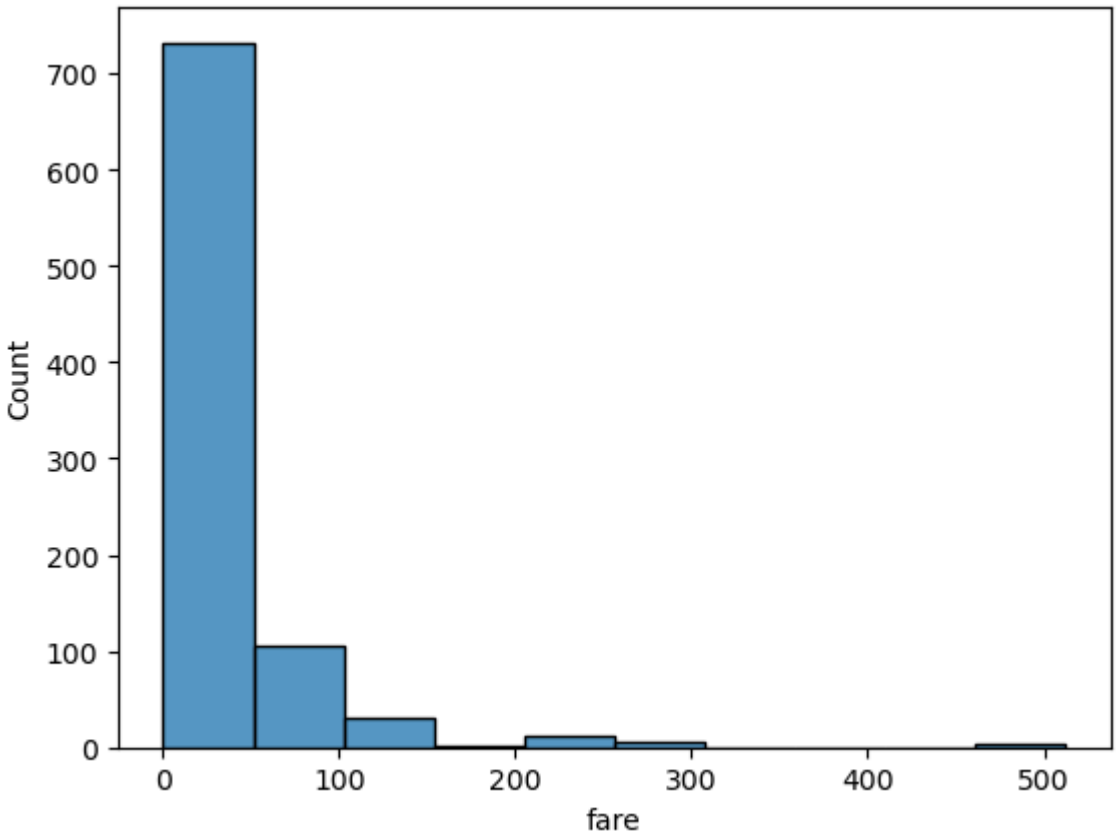
In [2]:
```
dataset=sns.load_dataset('titanic')
dataset.head()
```

Out[2]:

	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

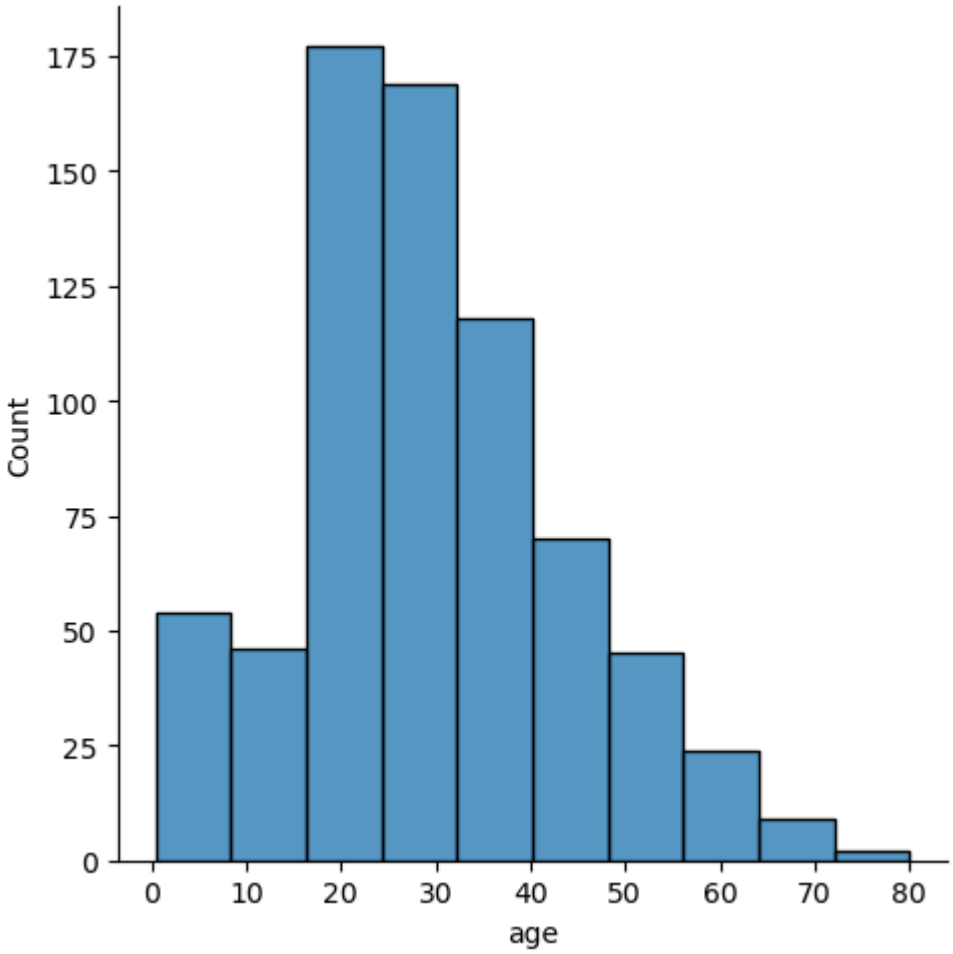
In [33]:
```
sns.histplot(dataset['fare'],kde=False,bins=10)
```

Out[33]:
```
<Axes: xlabel='fare', ylabel='Count'>
```



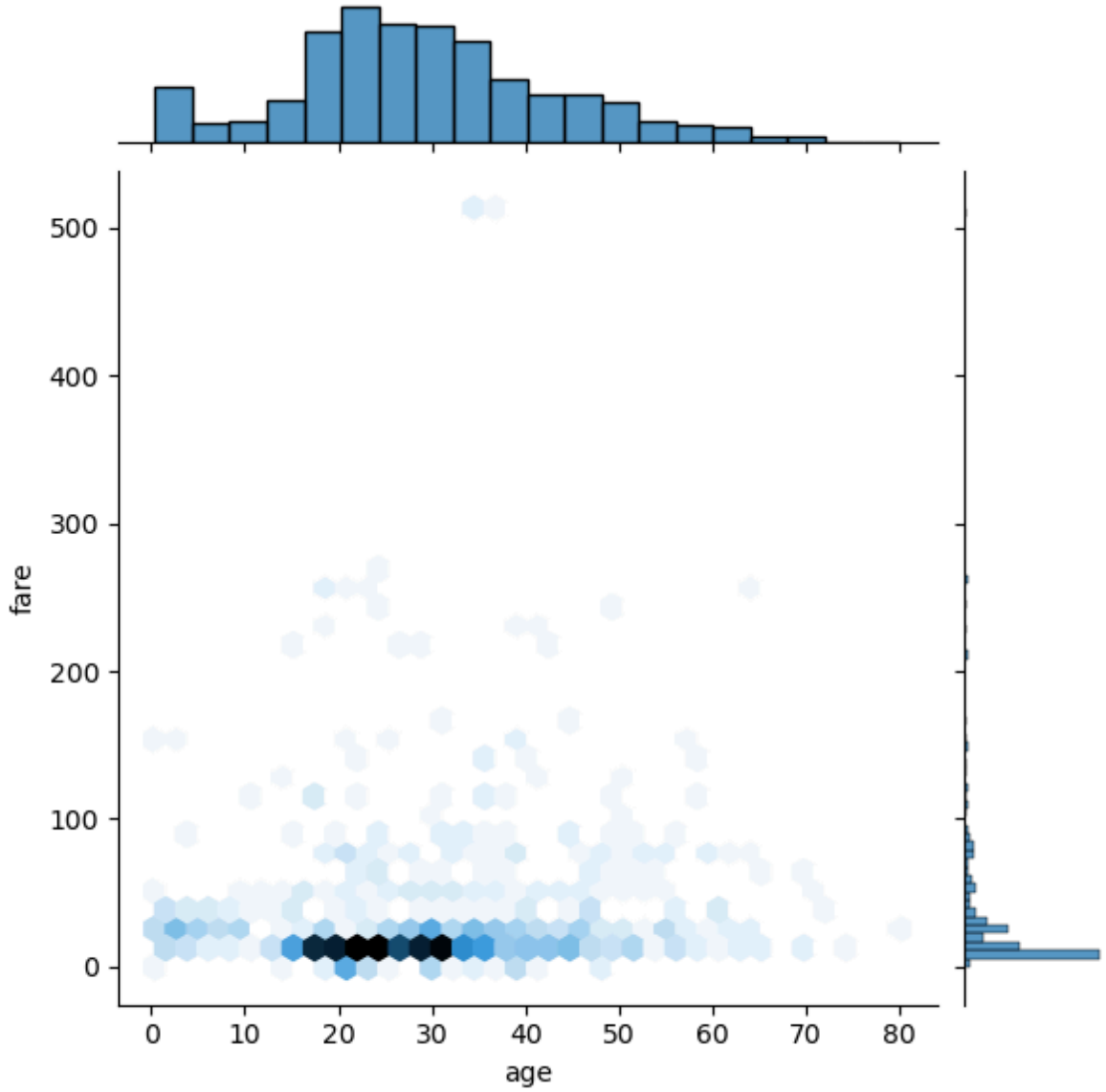
In [6]:
```
sns.displot(x = dataset['age'],bins=10)
```

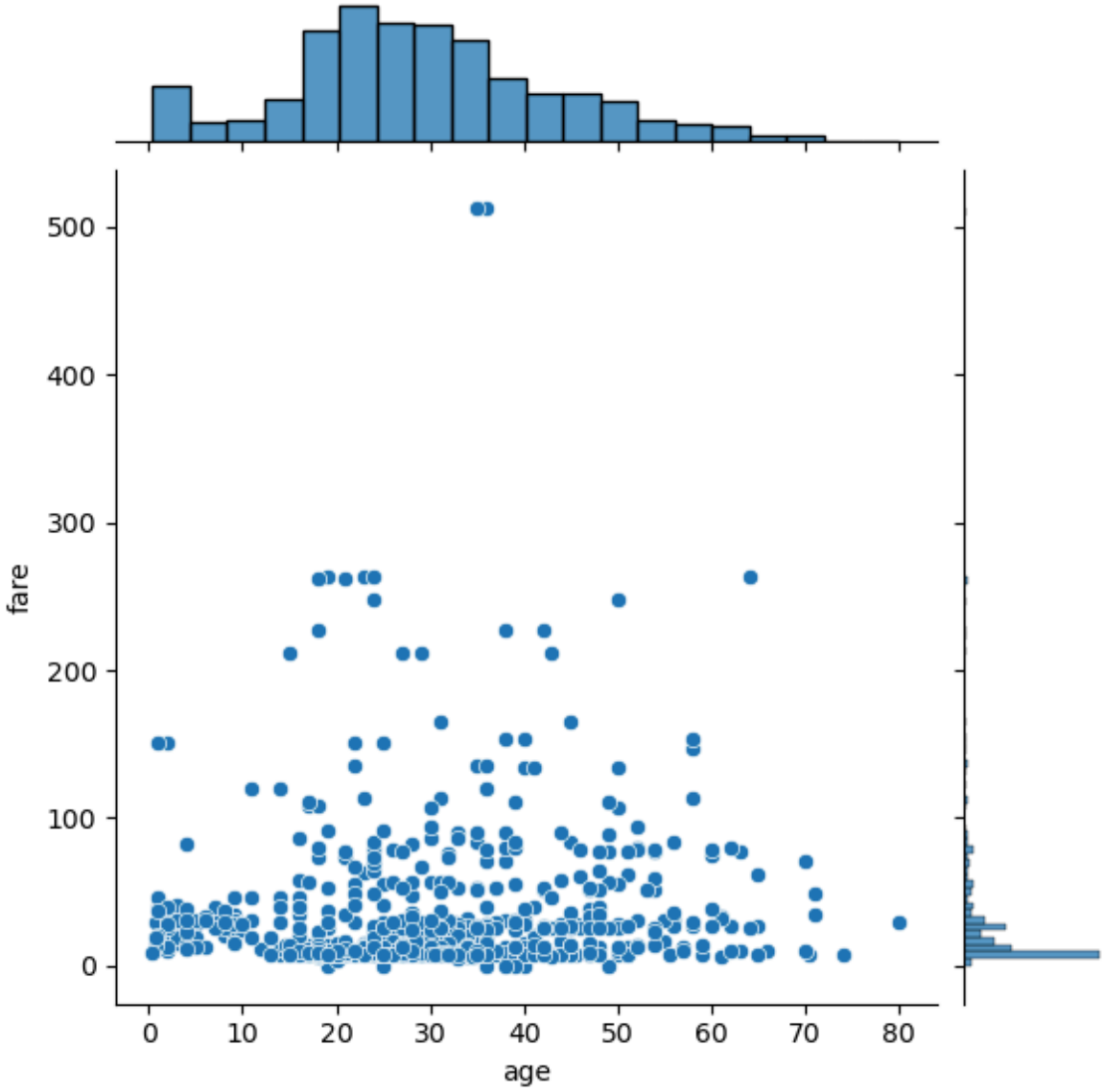
Out[6]:
```
<seaborn.axisgrid.FacetGrid at 0x238b3e93eb0>
```



In [9]:
```
sns.jointplot(x = dataset['age'], y=dataset['fare'], kind = 'hex')
sns.jointplot(x=dataset['age'],y=dataset['fare'],kind='scatter')
```

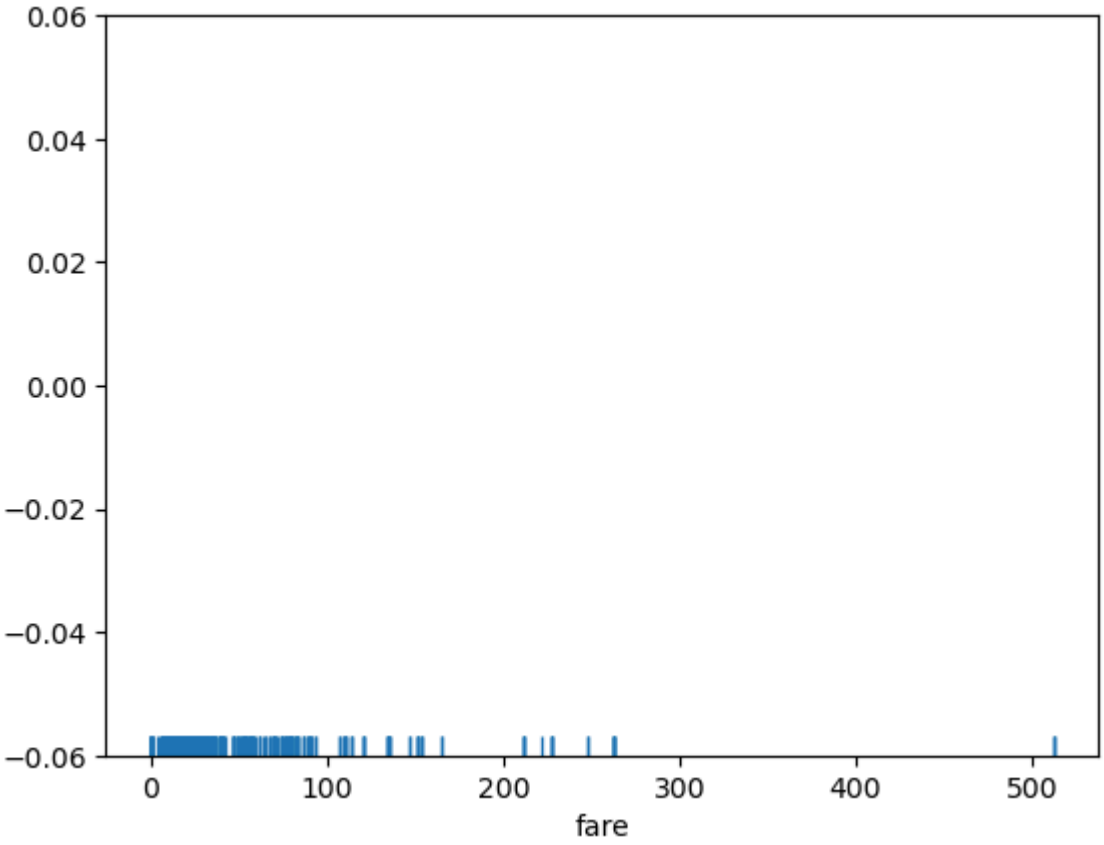
Out[9]: <seaborn.axisgrid.JointGrid at 0x238b6f37790>




fare
age
0
100
200
300
400
500
0
10
20
30
40
50
60
70
80

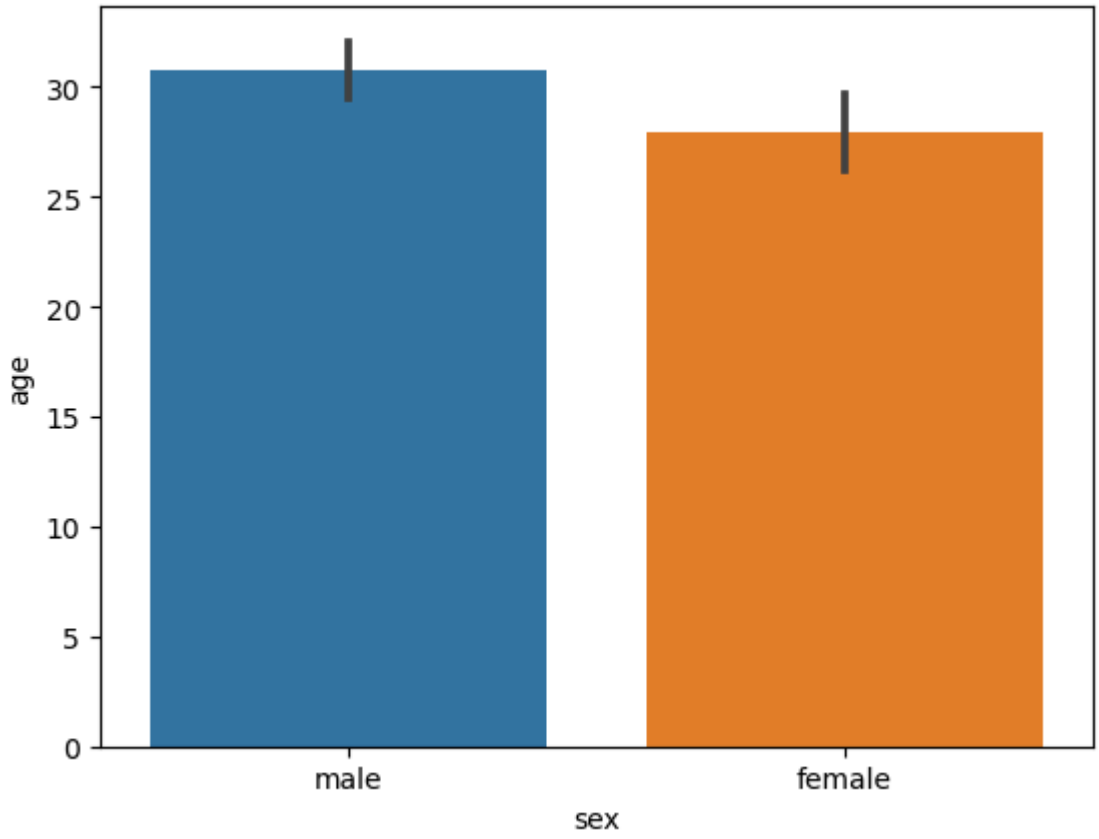
In [11]:
```
sns.rugplot(dataset['fare'])
```

Out[11]: <Axes: xlabel='fare'>



In [12]:
```
sns.barplot(x='sex',y='age',data=dataset)
```

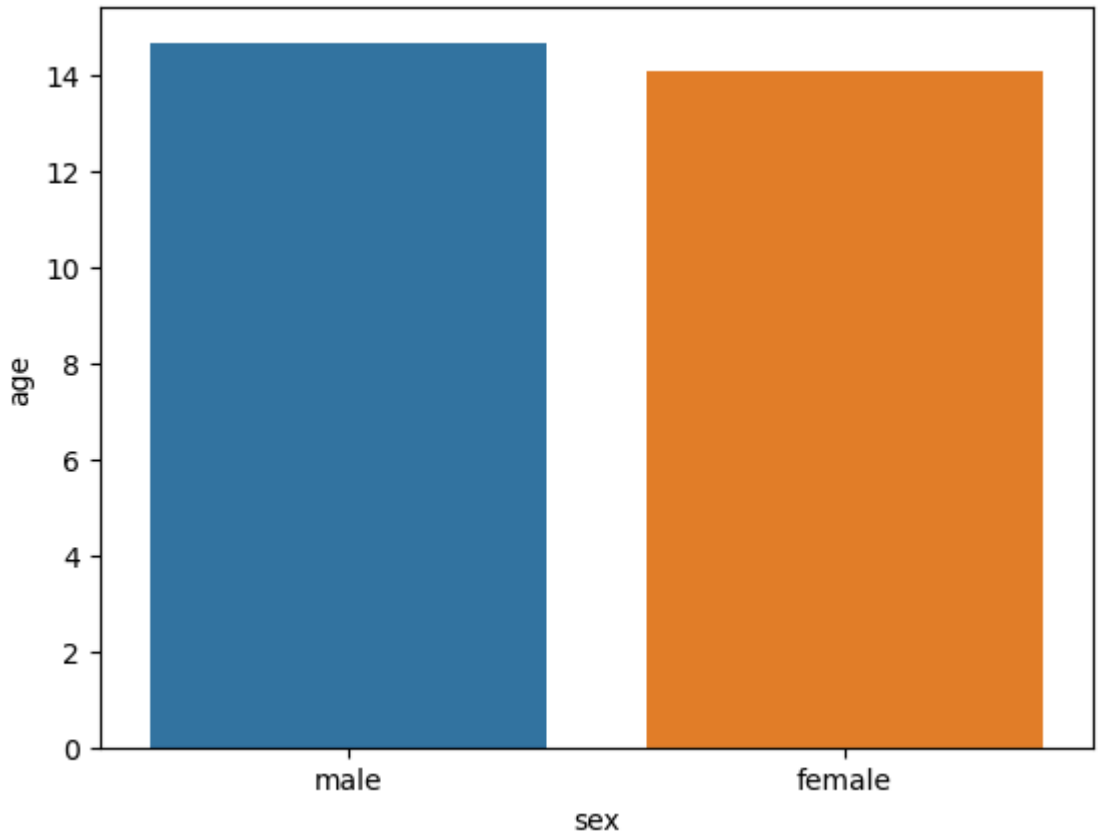
Out[12]:
```
<Axes: xlabel='sex', ylabel='age'>
```



In [13]:
```
sns.barplot(x='sex',y='age',data=dataset, estimator=np.std)
```

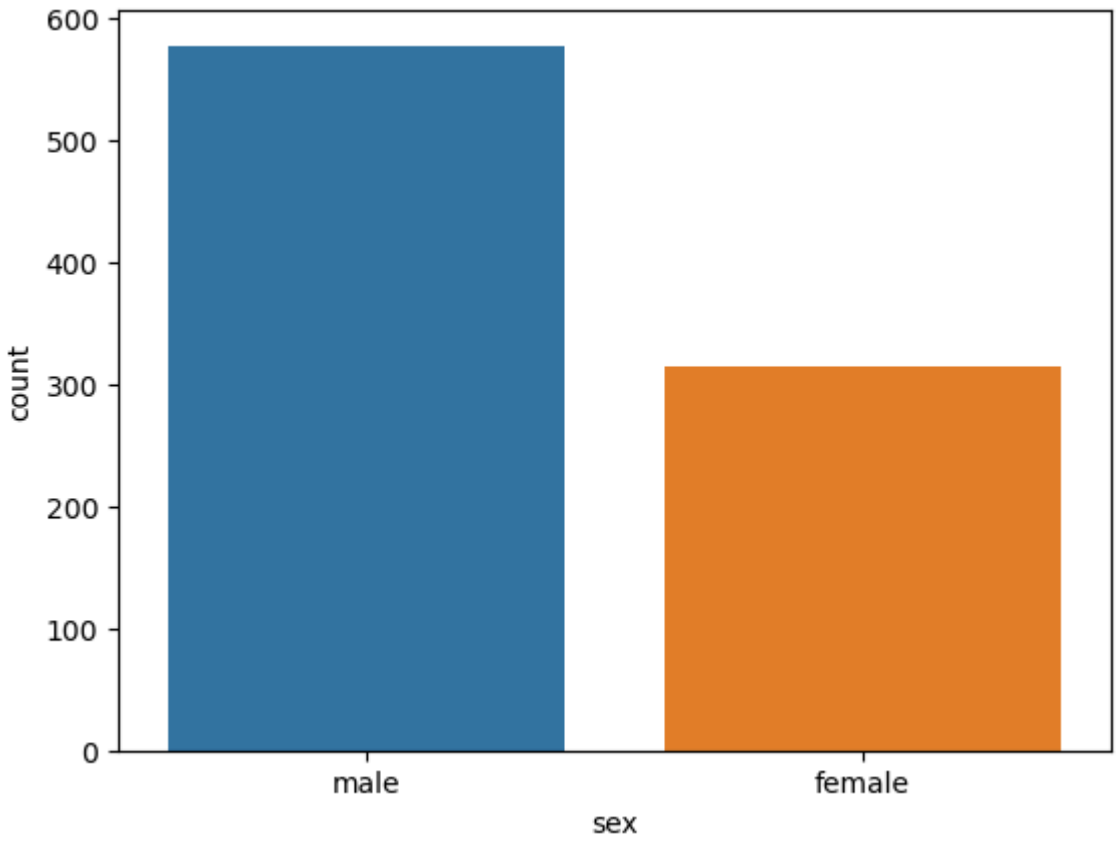
```
C:\ProgramData\anaconda3\lib\site-packages\numpy\lib\nanfunctions.py:1559: R
untimeWarning: All-NaN slice encountered
  r, k = function_base._ureduce(a,
C:\ProgramData\anaconda3\lib\site-packages\numpy\lib\nanfunctions.py:1559: R
untimeWarning: All-NaN slice encountered
  r, k = function_base._ureduce(a,
```

Out[13]:
```
<Axes: xlabel='sex', ylabel='age'>
```



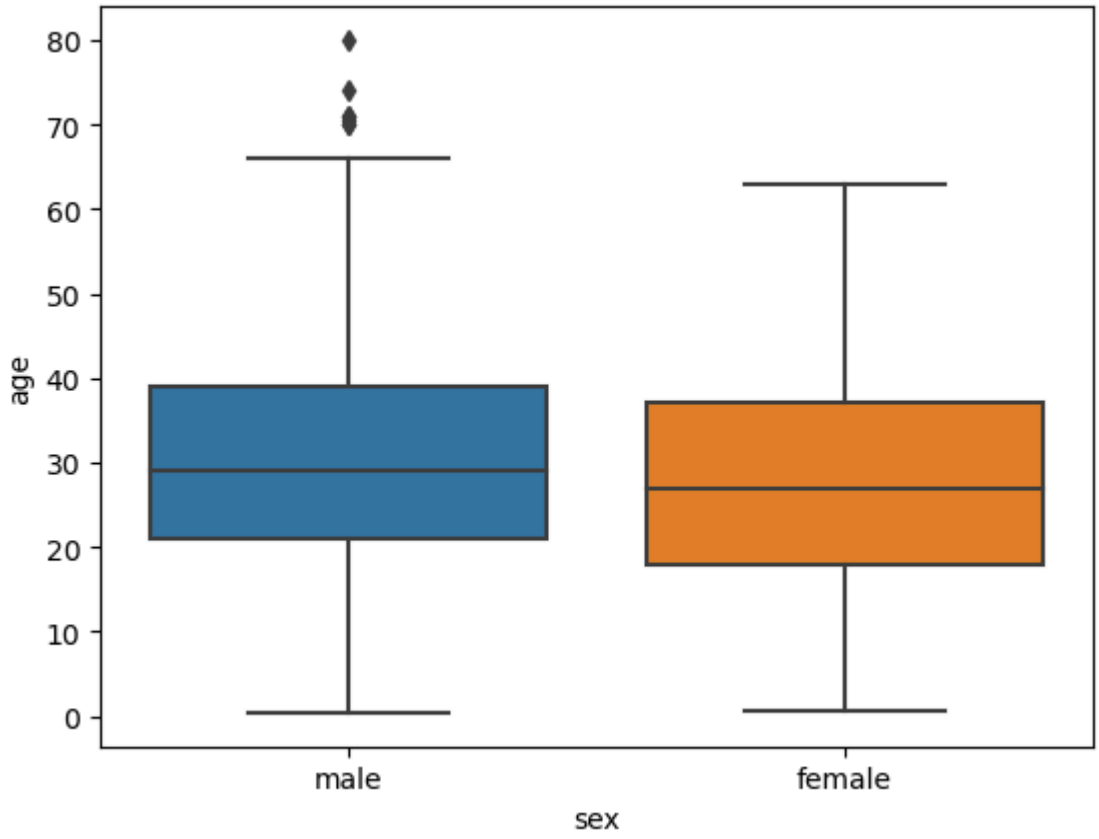
In [15]:
```
sns.countplot(x='sex',data=dataset)
```

Out[15]:
```
<Axes: xlabel='sex', ylabel='count'>
```



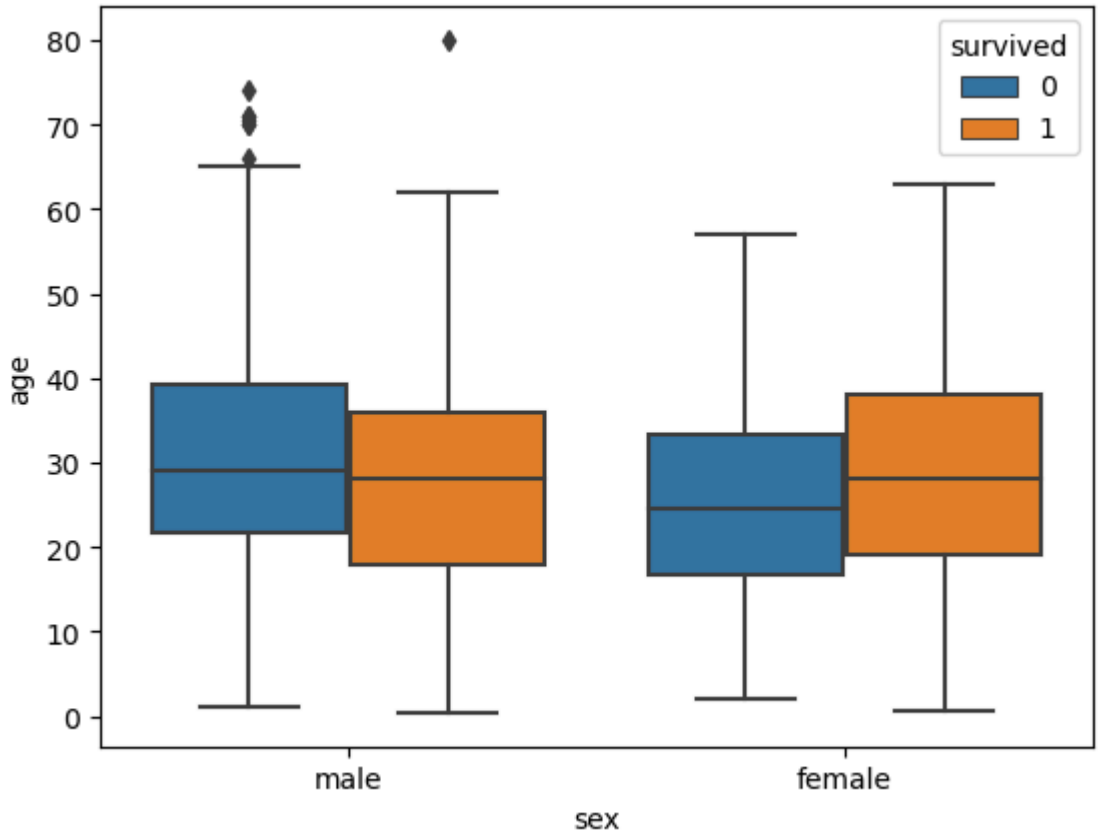
In [16]:
```
sns.boxplot(x='sex',y='age',data=dataset)
```

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



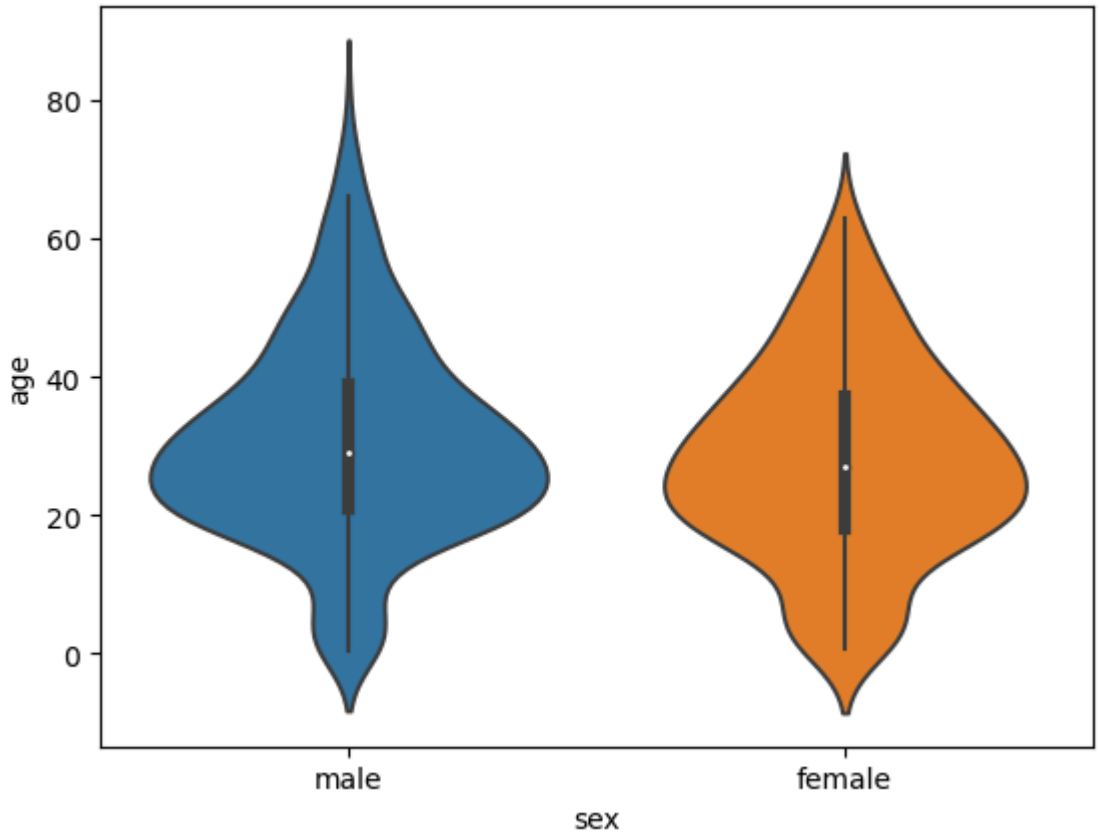
In [19]:
```
sns.boxplot(x='sex',y='age',data=dataset,hue="survived")
```

Out[19]:
```
<Axes: xlabel='sex', ylabel='age'>
```



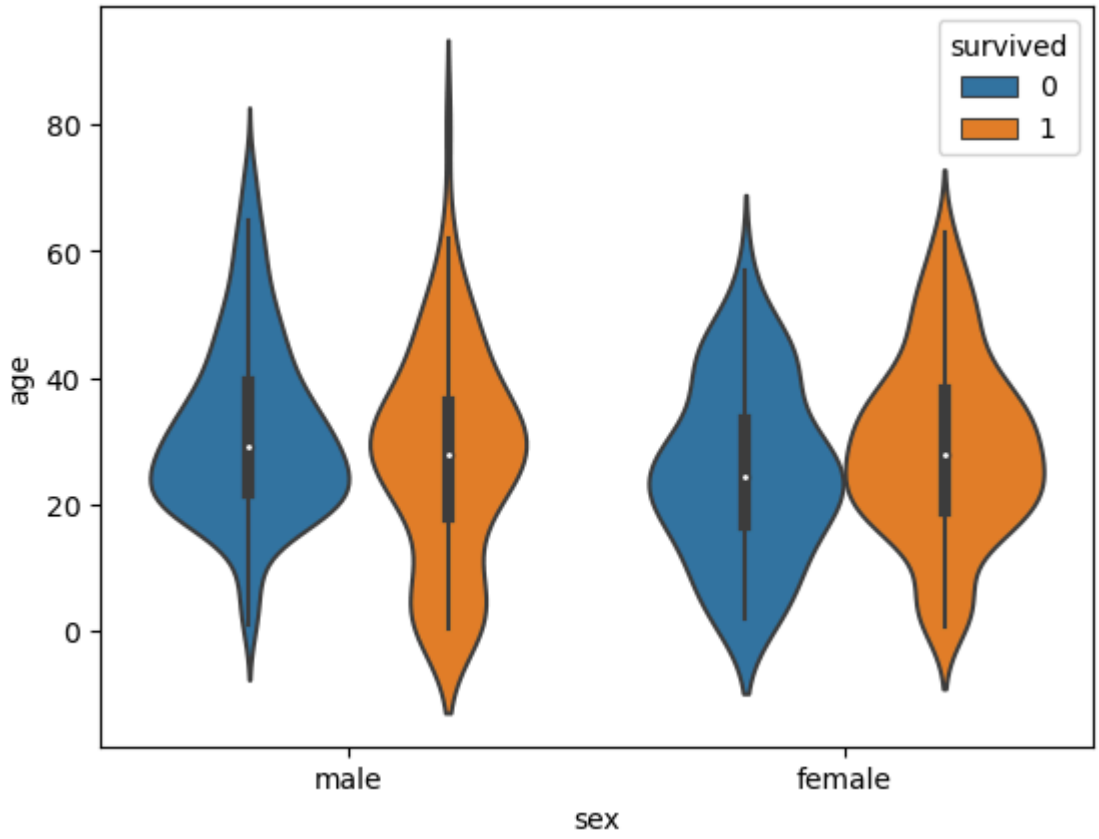
In [20]:
```
sns.violinplot(x='sex',y='age',data=dataset)
```

Out[20]:
```
<Axes: xlabel='sex', ylabel='age'>
```



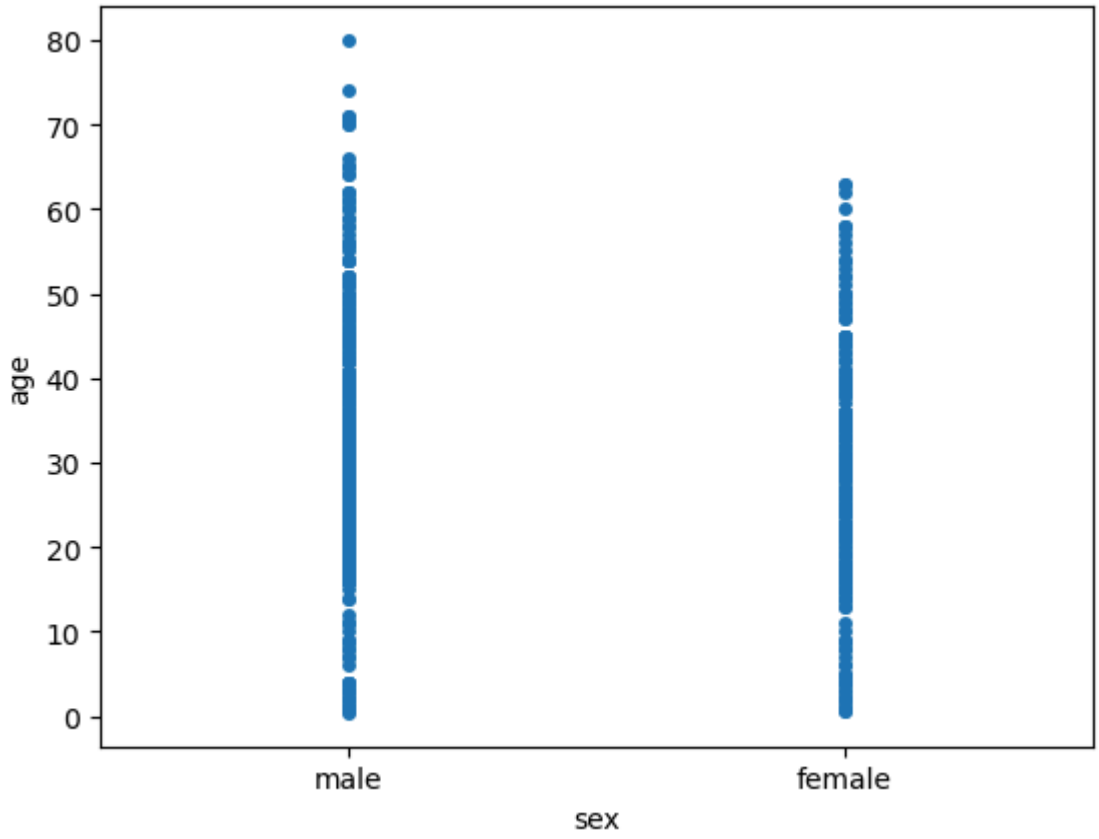
In [21]:
```
sns.violinplot(x='sex',y='age',data=dataset,hue="survived")
```

Out[21]:
```
<Axes: xlabel='sex', ylabel='age'>
```



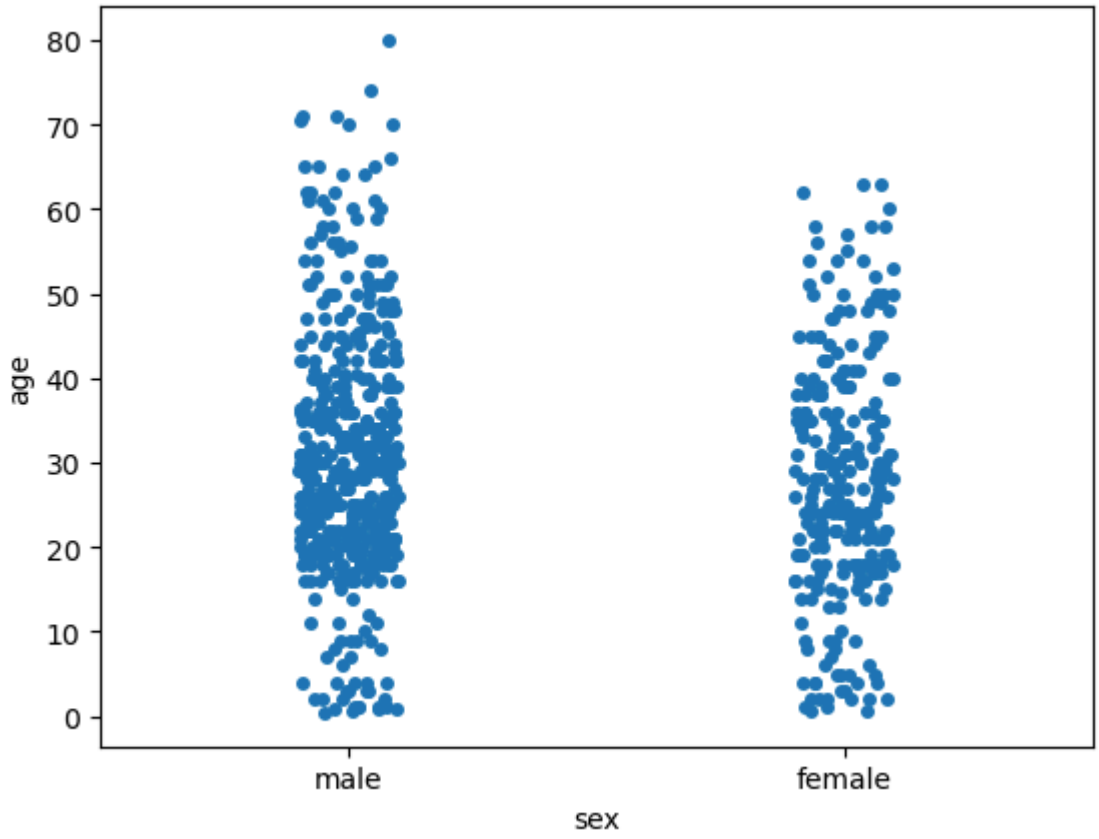
In [22]:
```
sns.stripplot(x='sex',y='age',data=dataset,jitter=False)
```

Out[22]:
```
<Axes: xlabel='sex', ylabel='age'>
```



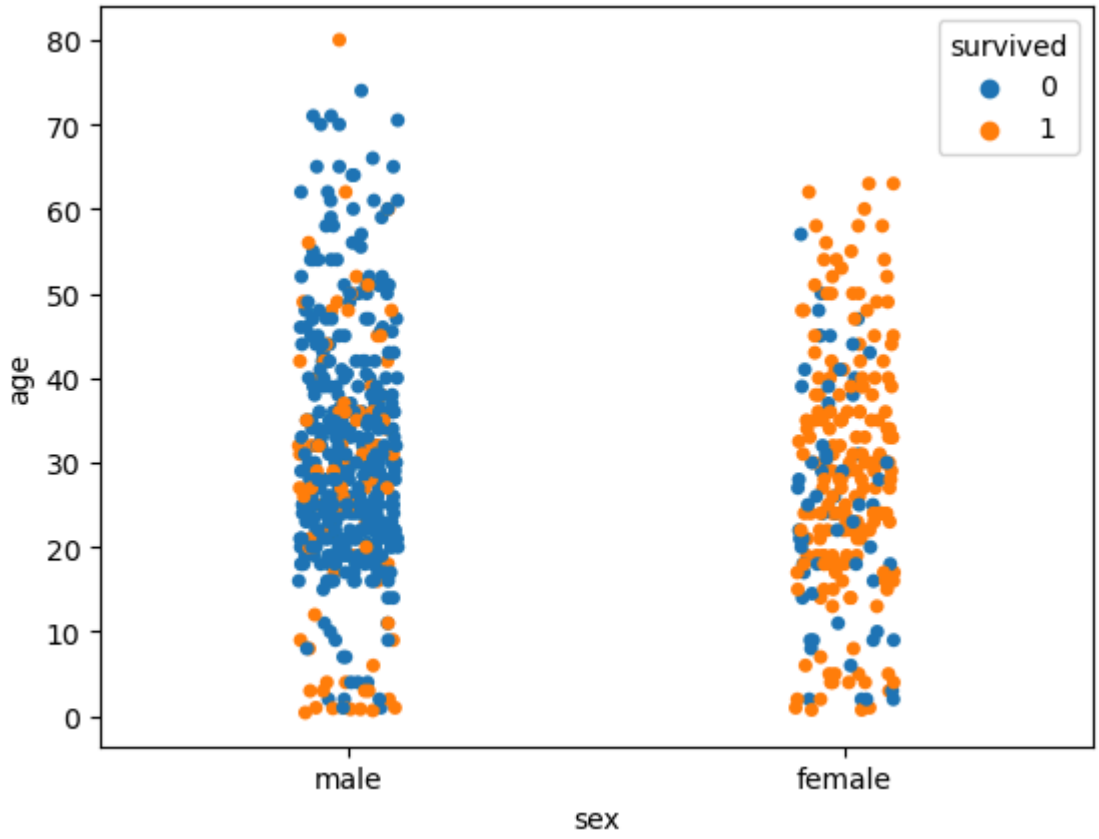
In [23]:
```
sns.stripplot(x='sex',y='age',data=dataset,jitter=True)
```

Out[23]:
```
<Axes: xlabel='sex', ylabel='age'>
```



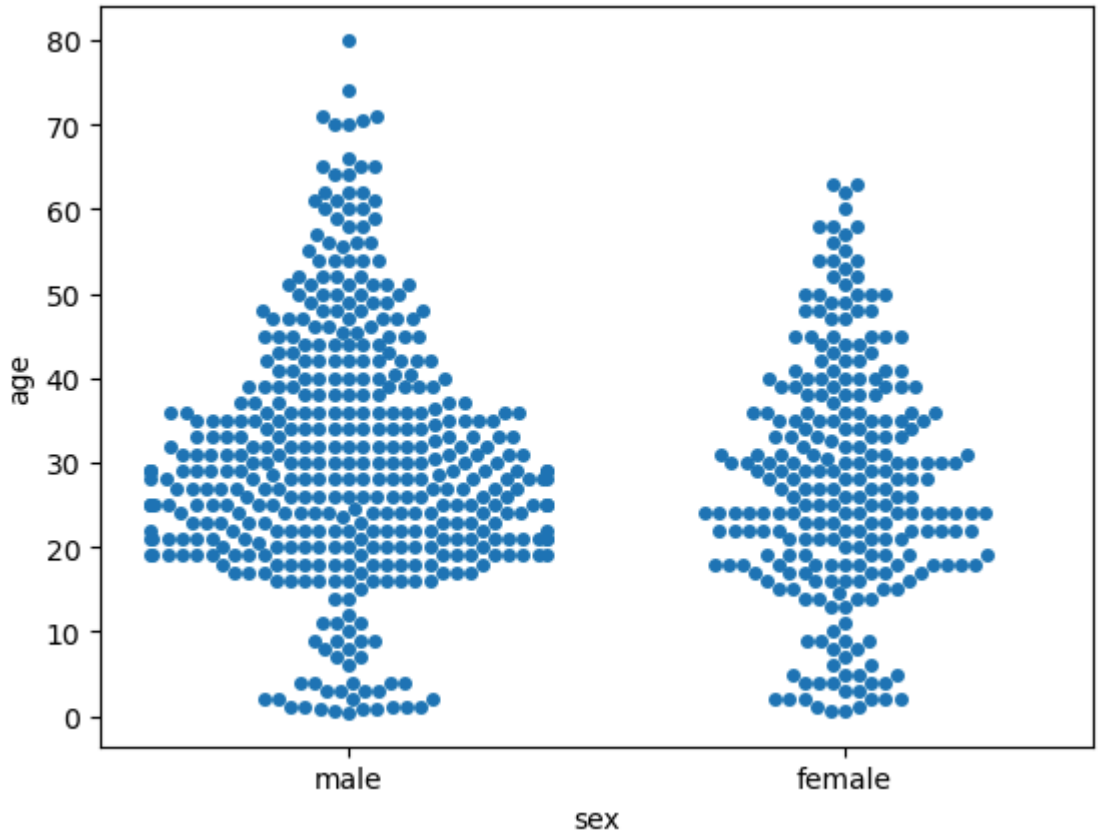
In [25]:
```
sns.stripplot(x='sex',y='age',data=dataset,jitter=True, hue='survived')
```

Out[25]:
```
<Axes: xlabel='sex', ylabel='age'>
```



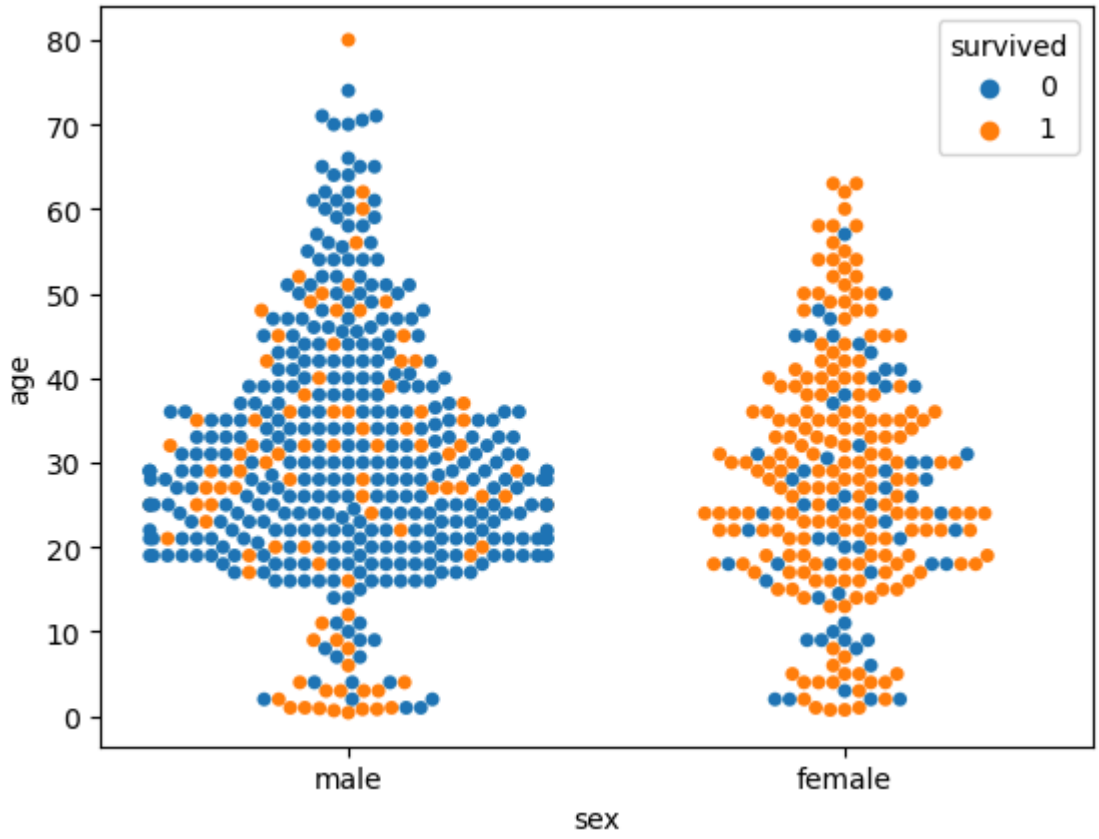
In [26]:
```
sns.swarmplot(x='sex',y='age',data=dataset)
```

Out[26]:
```
<Axes: xlabel='sex', ylabel='age'>
```



In [27]:
```
sns.swarmplot(x='sex',y='age',data=dataset,hue='survived')
```

Out[27]:
```
<Axes: xlabel='sex', ylabel='age'>
```



In [28]:
```
dataset.corr()
```

```
C:\Users\piyus\AppData\Local\Temp\ipykernel_13188\2191645083.py:1: FutureWar
ning: The default value of numeric_only in DataFrame.corr is deprecated. In
a future version, it will default to False. Select only valid columns or spe
cify the value of numeric_only to silence this warning.
  dataset.corr()
```

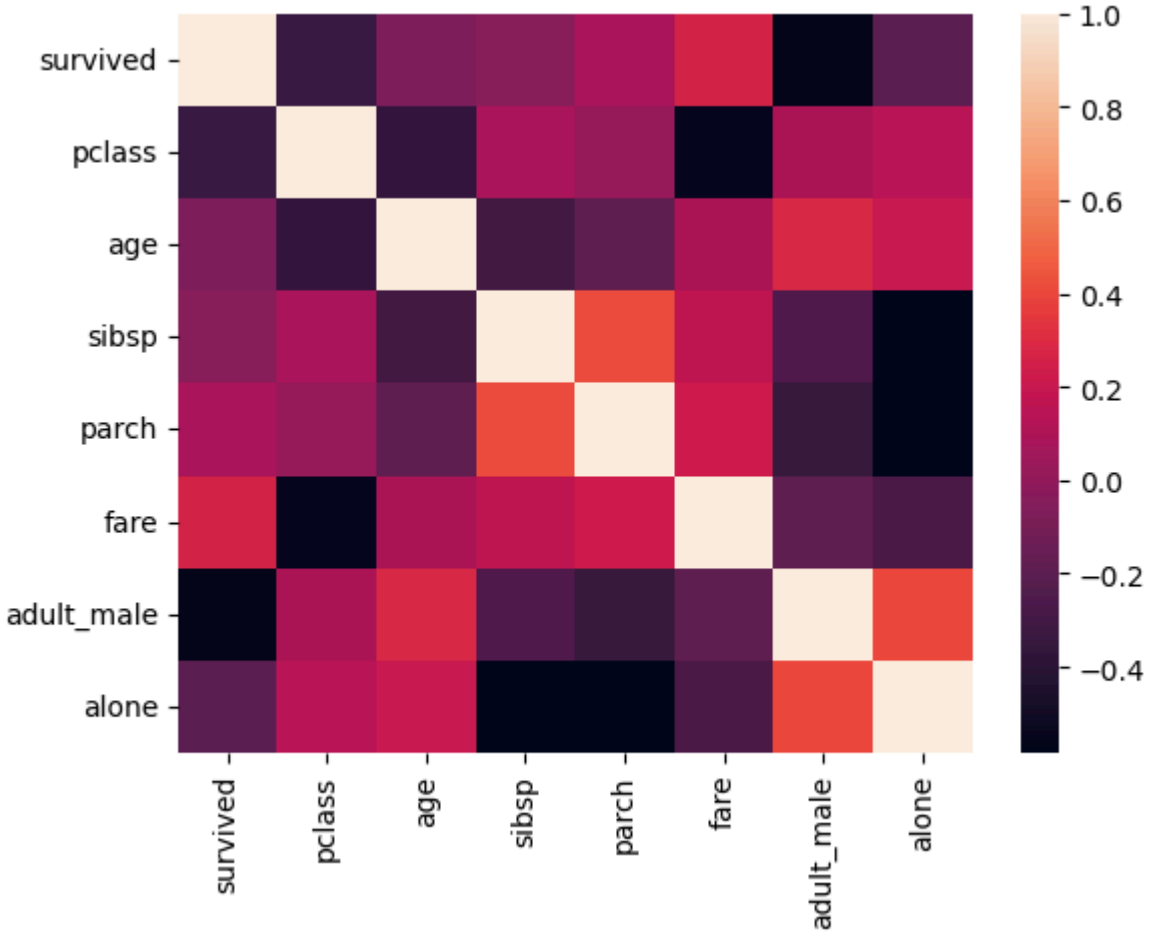
Out[28]:

	survived	pclass	age	sibsp	parch	fare	adult_male	alon
survived	1.000000	-0.338481	-0.077221	-0.035322	0.081629	0.257307	-0.557080	-0.20336
pclass	-0.338481	1.000000	-0.369226	0.083081	0.018443	-0.549500	0.094035	0.13520
age	-0.077221	-0.369226	1.000000	-0.308247	-0.189119	0.096067	0.280328	0.19827
sibsp	-0.035322	0.083081	-0.308247	1.000000	0.414838	0.159651	-0.253586	-0.58447
parch	0.081629	0.018443	-0.189119	0.414838	1.000000	0.216225	-0.349943	-0.58339
fare	0.257307	-0.549500	0.096067	0.159651	0.216225	1.000000	-0.182024	-0.27183
adult_male	-0.557080	0.094035	0.280328	-0.253586	-0.349943	-0.182024	1.000000	0.40474
alone	-0.203367	0.135207	0.198270	-0.584471	-0.583398	-0.271832	0.404744	1.00000

In [30]:
```
corr=dataset.corr()
sns.heatmap(corr)
```

```
C:\Users\piyus\AppData\Local\Temp\ipykernel_13188\1466192683.py:1: FutureWar
ning: The default value of numeric_only in DataFrame.corr is deprecated. In
a future version, it will default to False. Select only valid columns or spe
cify the value of numeric_only to silence this warning.
  corr=dataset.corr()
```

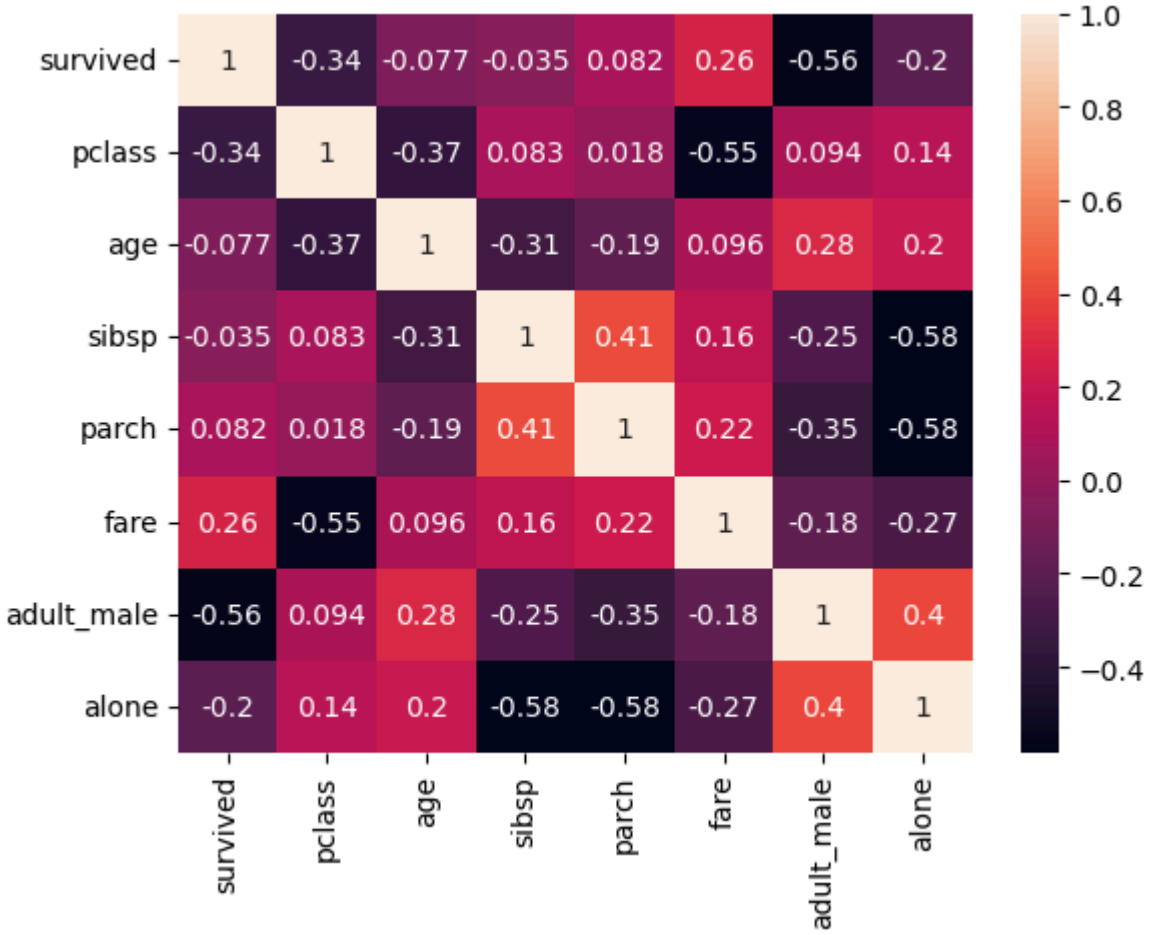
Out[30]: <Axes: >



In [31]:
```
corr=dataset.corr()
sns.heatmap(corr,annot=True)
```

```
C:\Users\piyus\AppData\Local\Temp\ipykernel_13188\1294076361.py:1: FutureWar
ning: The default value of numeric_only in DataFrame.corr is deprecated. In
a future version, it will default to False. Select only valid columns or spe
cify the value of numeric_only to silence this warning.
  corr=dataset.corr()
```

Out[31]: <Axes: >



In [ ]:
```
```