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

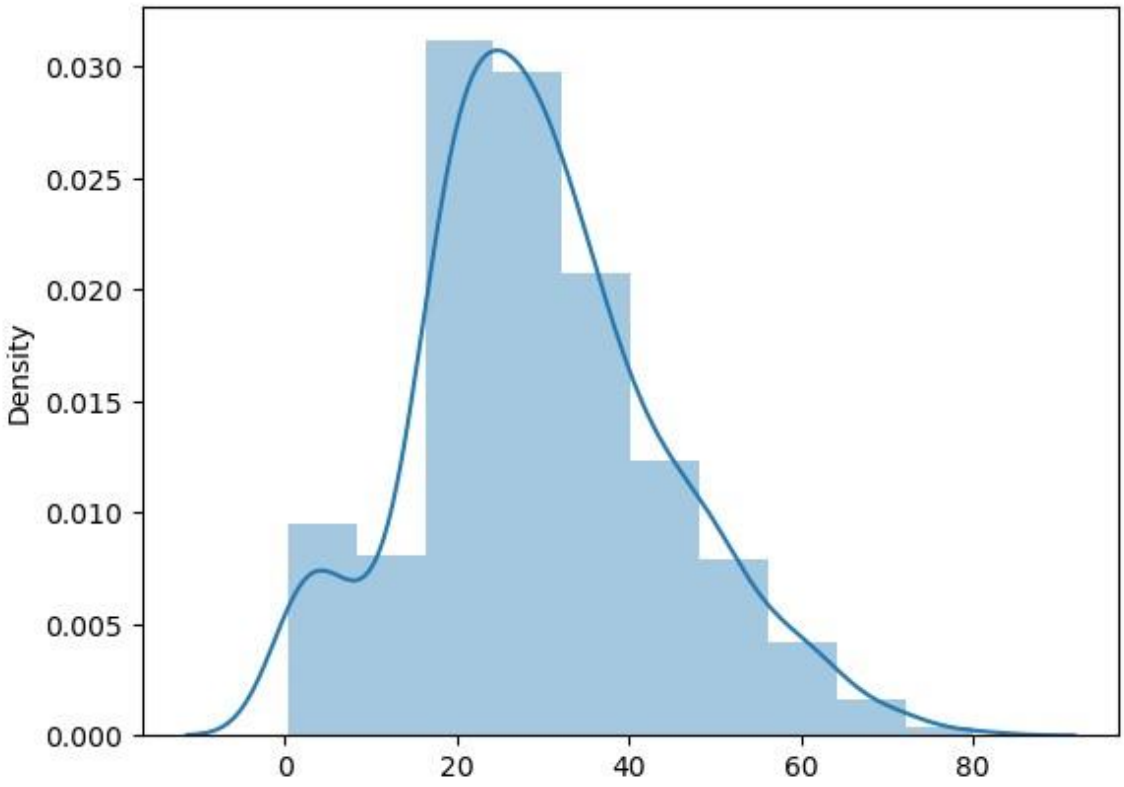
In [2]:
```
dataset = sns.load_dataset('titanic')
dataset.head()
```

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 [3]:
```
import seaborn as sns
sns.distplot(x = dataset['age'], bins = 10)
```

```
C:\Users\Ayush\AppData\Local\Temp\ipykernel_11720\3447981930.py:2: UserWar
ning:

`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 wi
th
similar flexibility) or `histplot` (an axes-level function for histogram
s).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751 (https://
gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751)  sns.distplot(x
= dataset['age'], bins = 10)
```



In

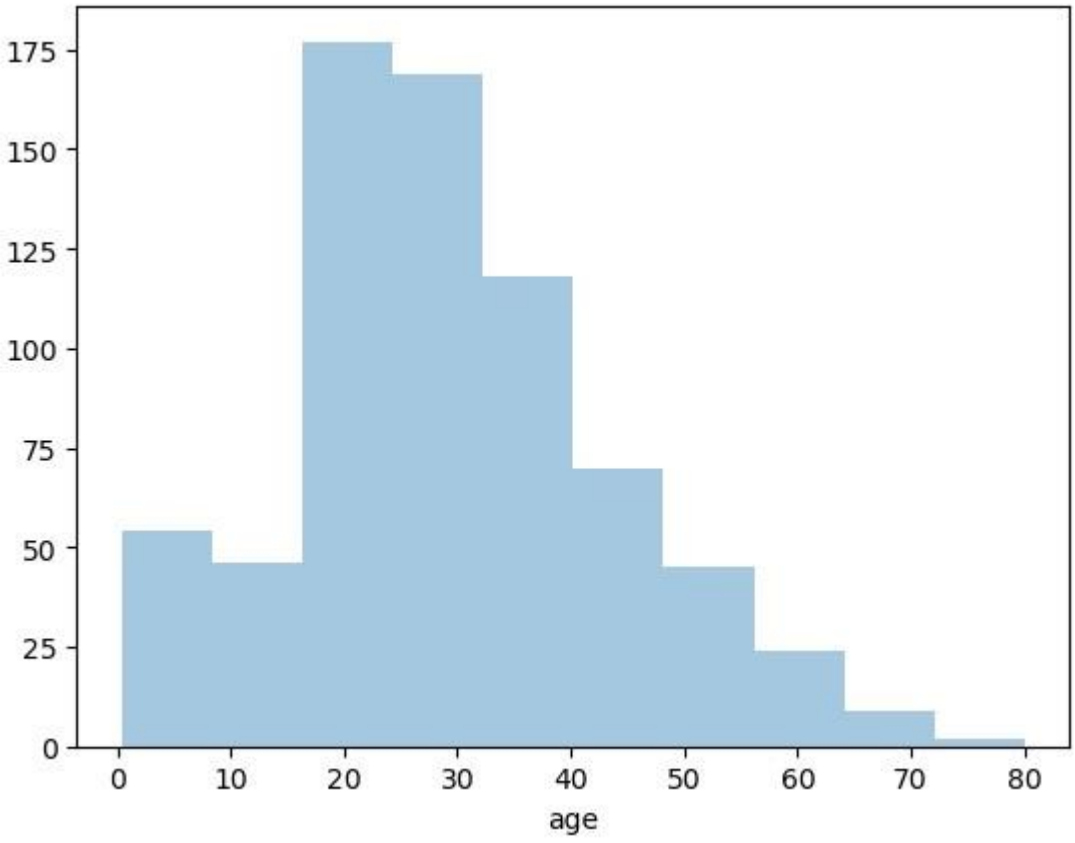
Out[3]: <Axes: ylabel='Density'>

In [4]:
```
sns.distplot(dataset['age'], bins = 10,kde=False)
```

```
C:\Users\Ayush\AppData\Local\Temp\ipykernel_11720\2845277532.py:1: UserWar
ning:

`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 wi
th
similar flexibility) or `histplot` (an axes-level function for histogram
s).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751 (https://
gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751)
sns.distplot(dataset['age'], bins = 10,kde=False)
```

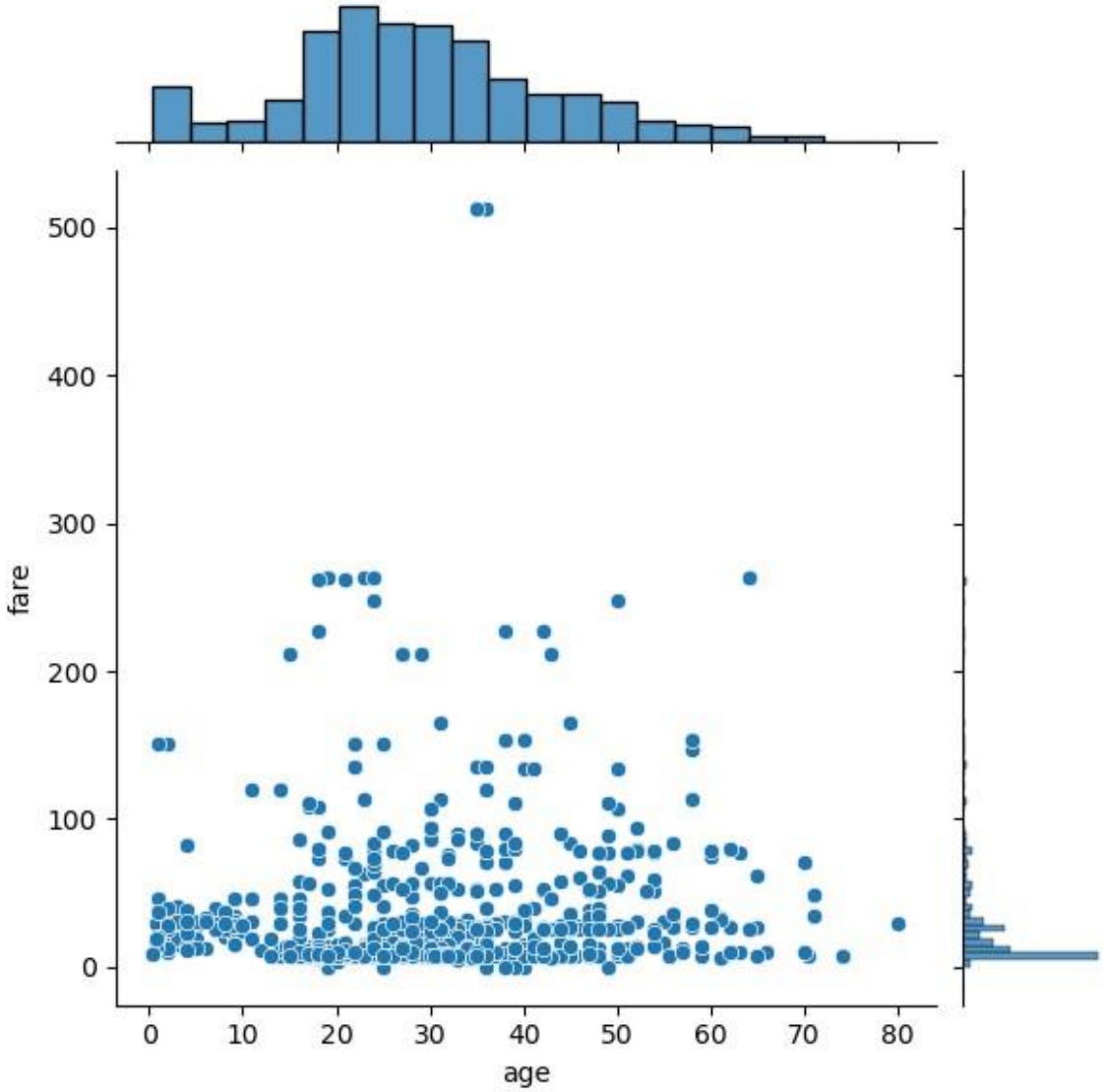
Out[4]: <Axes: xlabel='age'>

In



In [5]:
```
sns.jointplot(x = dataset['age'], y = dataset['fare'], kind ='scatter')
```

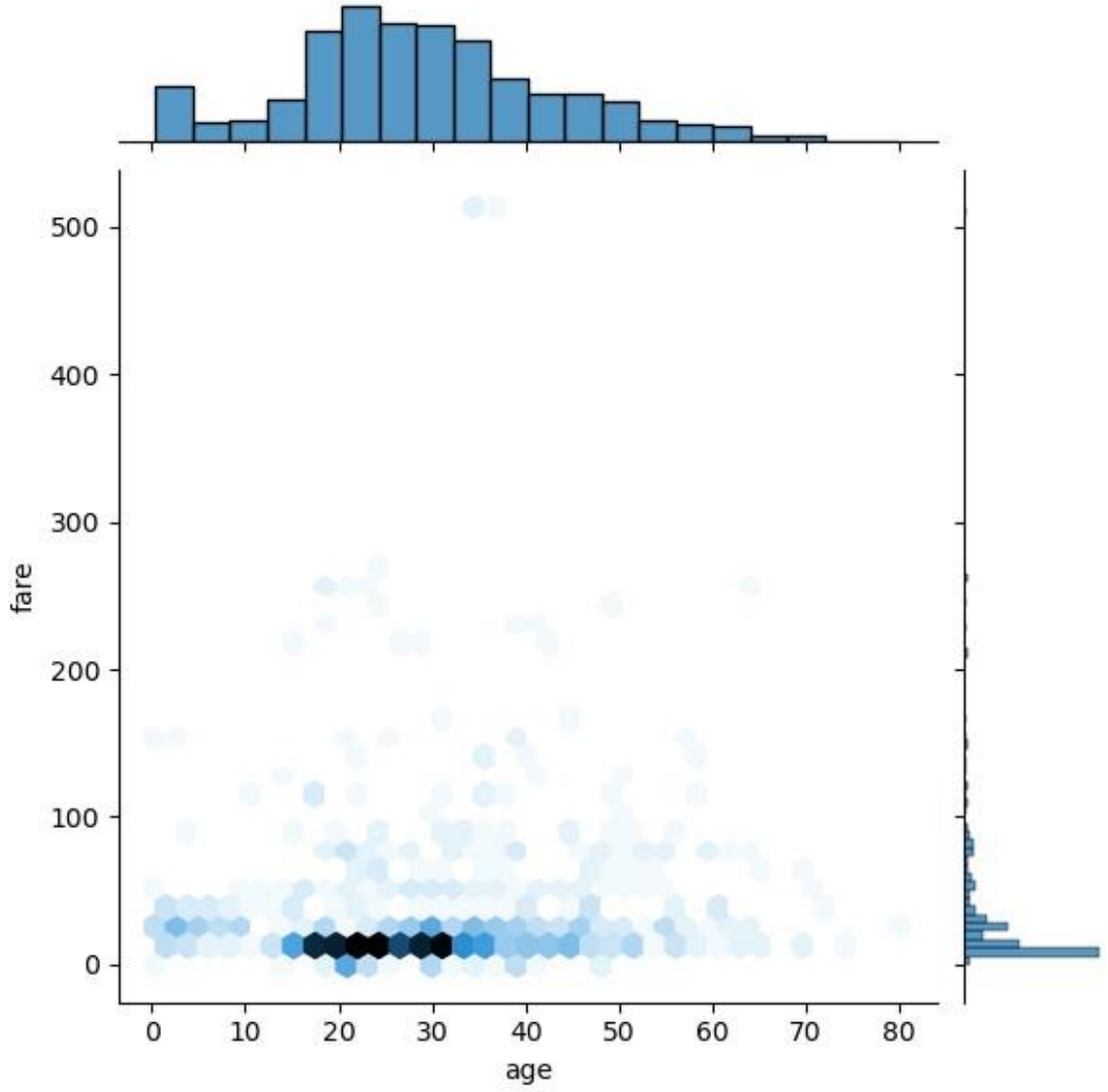
Out[5]: <seaborn.axisgrid.JointGrid at 0x1bc3b13f010>



In [6]:
```
sns.jointplot(x = dataset['age'], y = dataset['fare'], kind = 'hex')
```

Out[6]: <seaborn.axisgrid.JointGrid at 0x1bc3be4bb10>

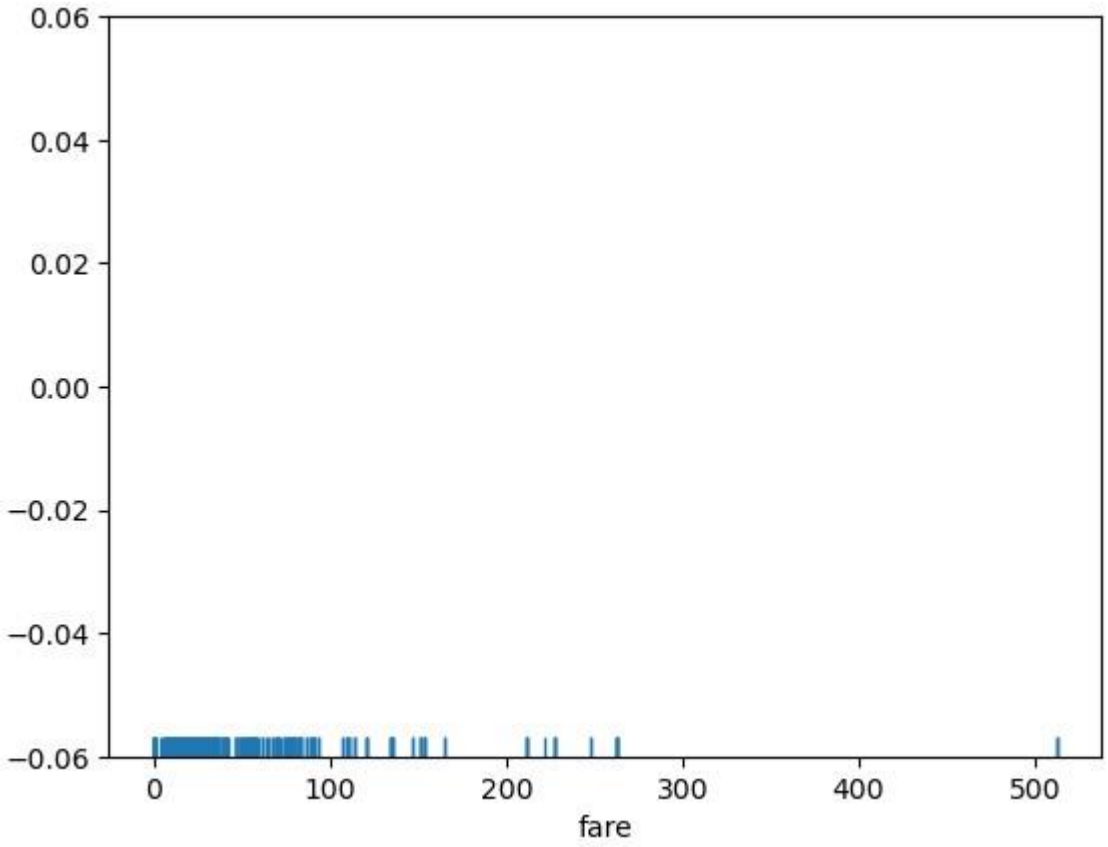
In



[7]: sns.rugplot(dataset['fare'])

Out[7]: <Axes: xlabel='fare'>

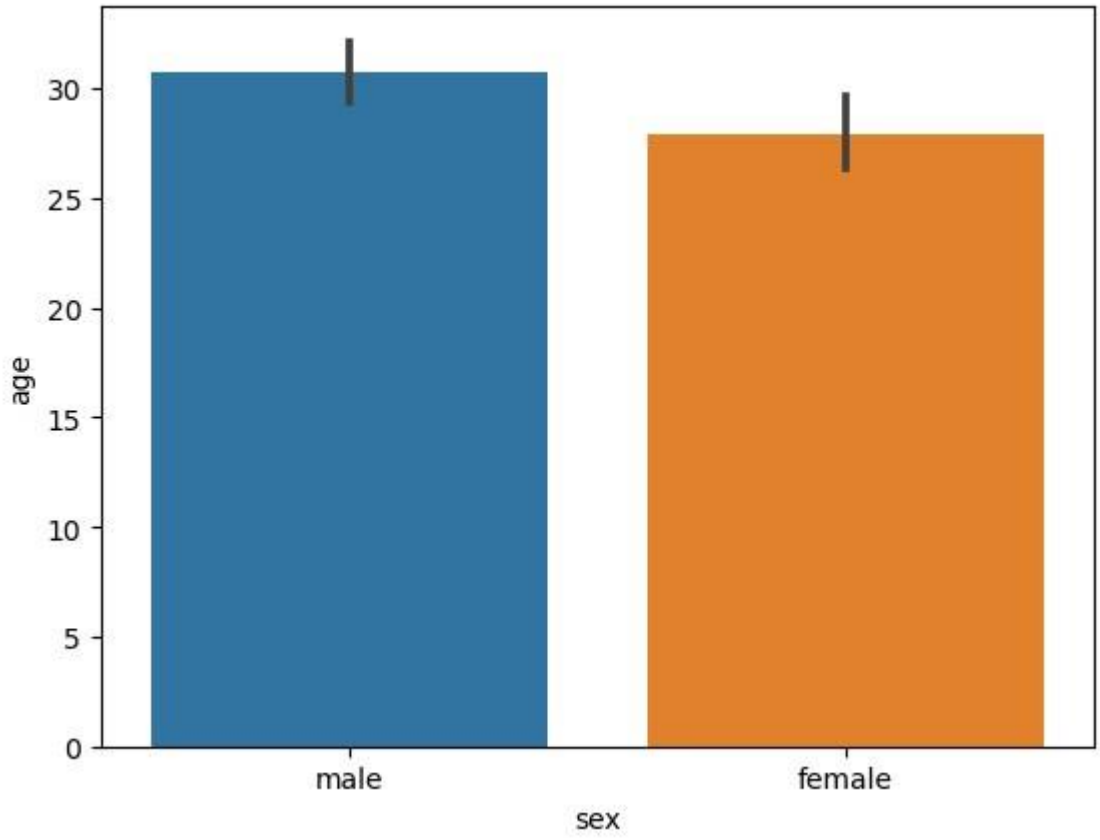
In



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

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

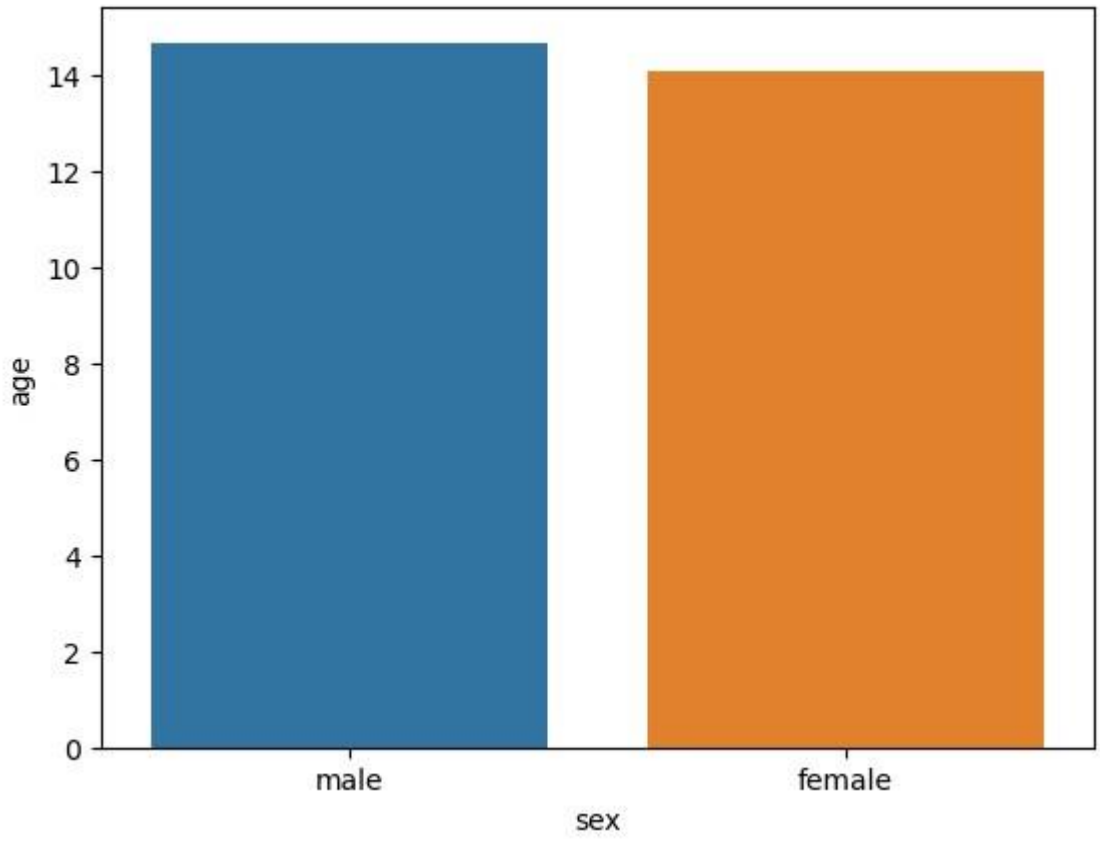
In



In [9]:
```
sns.barplot(x='sex', y='age', data=dataset, estimator=np.std)
```

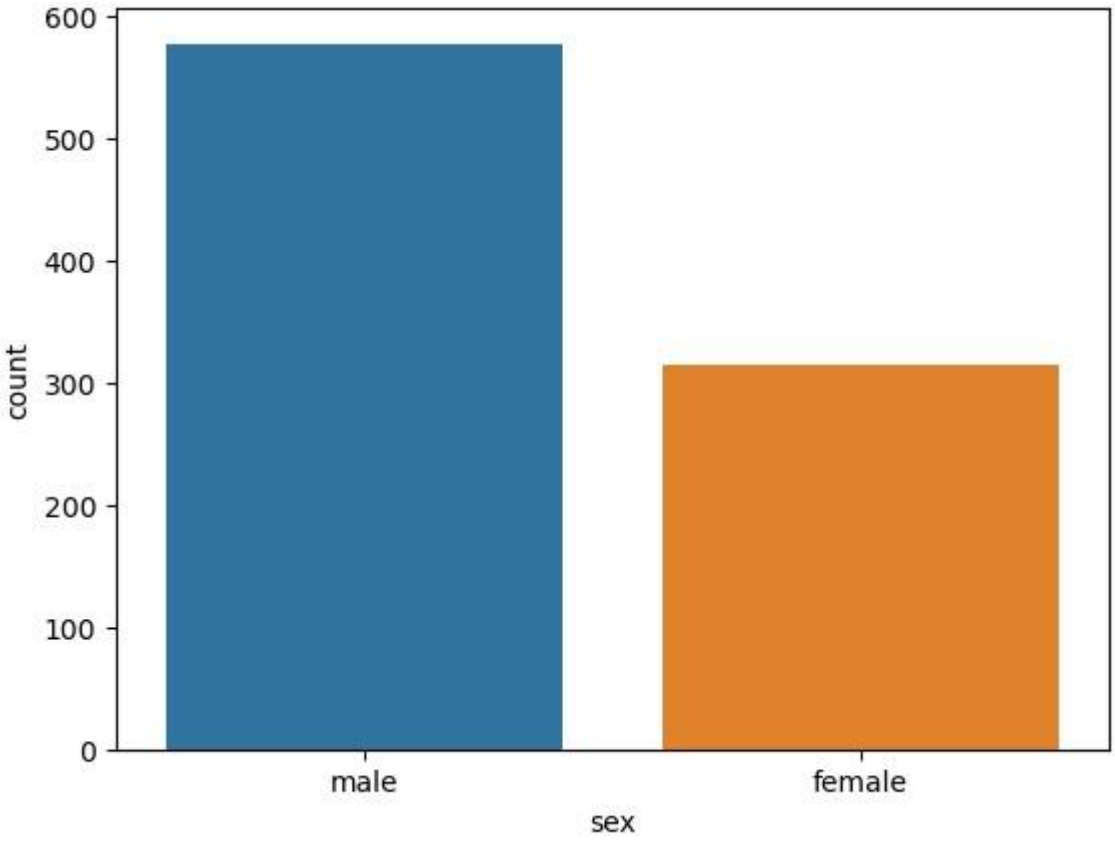
```
C:\ProgramData\anaconda3\Lib\site-packages\numpy\lib\nanfunctions.py:1556:
RuntimeWarning: All-NaN slice encountered
 return function_base._ureduce(a,
```

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



In [10]:
```
sns.countplot(x='sex', data=dataset)
```

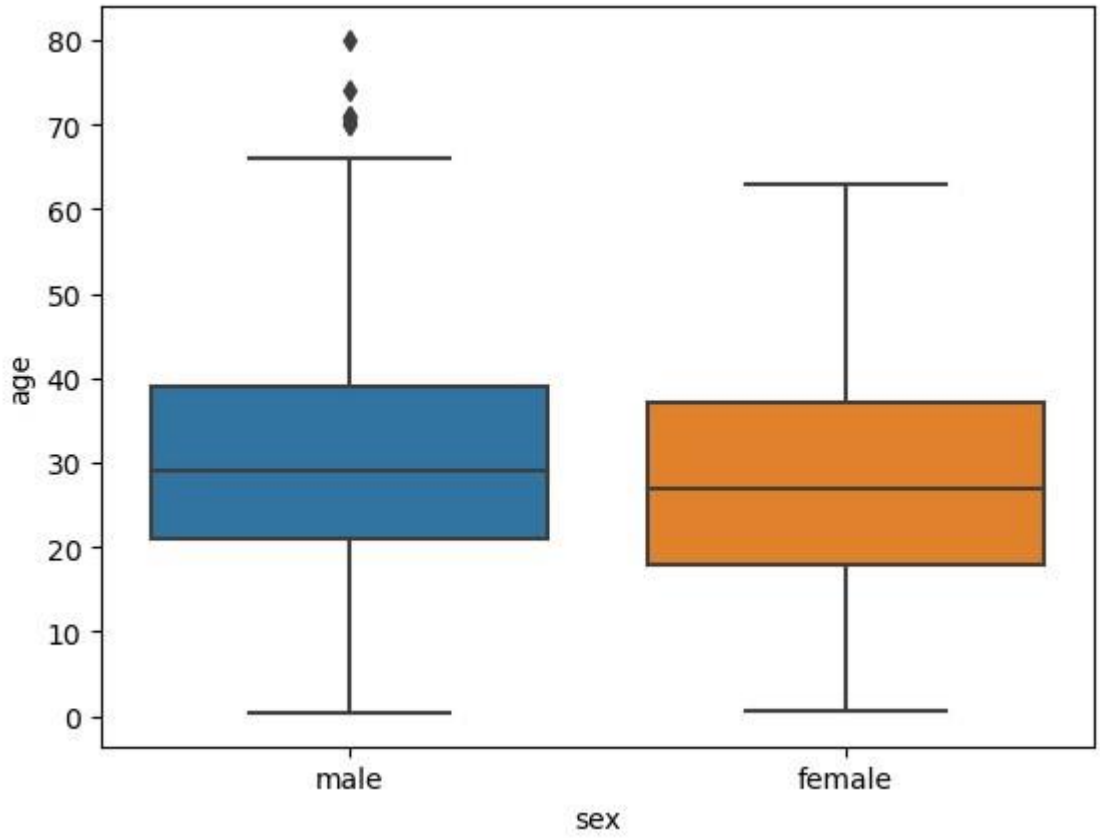
Out[10]: <Axes: xlabel='sex', ylabel='count'>



In [11]:
```
sns.boxplot(x='sex', y='age', data=dataset)
```

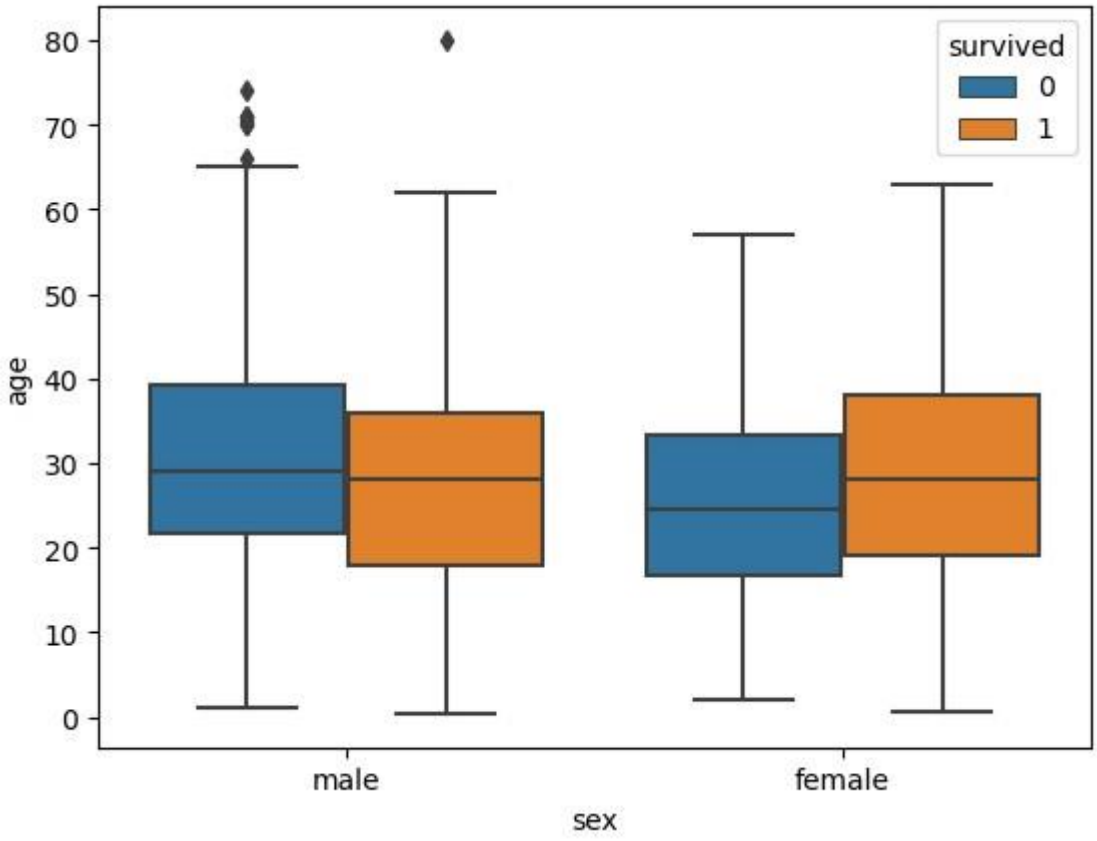
Out[11]: <Axes: xlabel='sex', ylabel='age'>

In



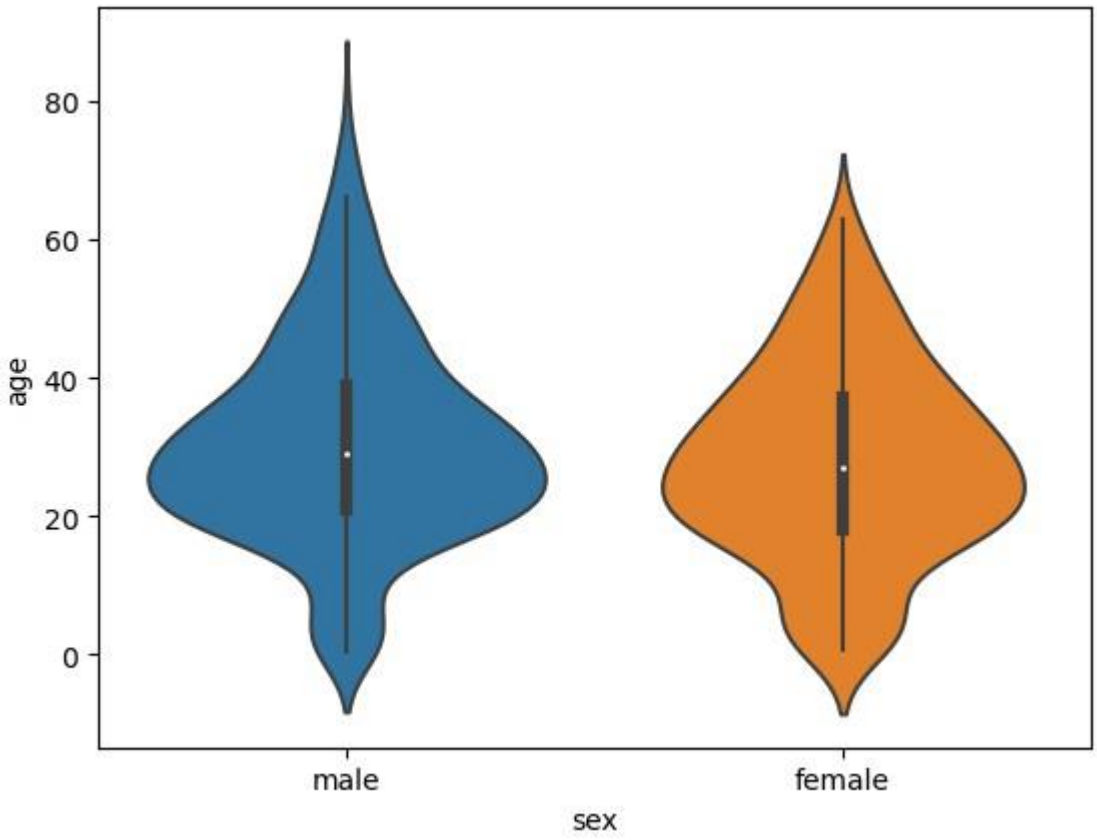
In [12]:
```
sns.boxplot(x='sex', y='age', data=dataset, hue="survived")
```

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



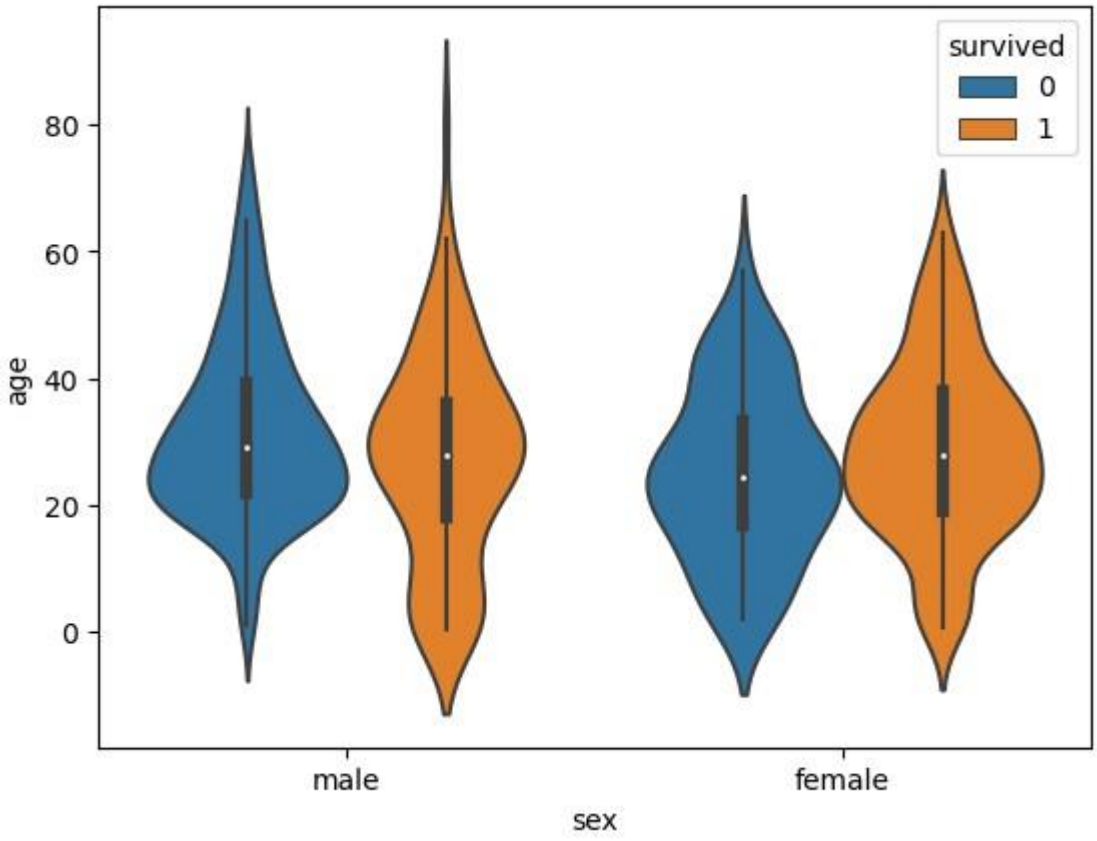
In [13]:
```
sns.violinplot(x='sex', y='age', data=dataset)
```

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



In [14]:
```
sns.violinplot(x='sex', y='age', data=dataset, hue="survived")
```

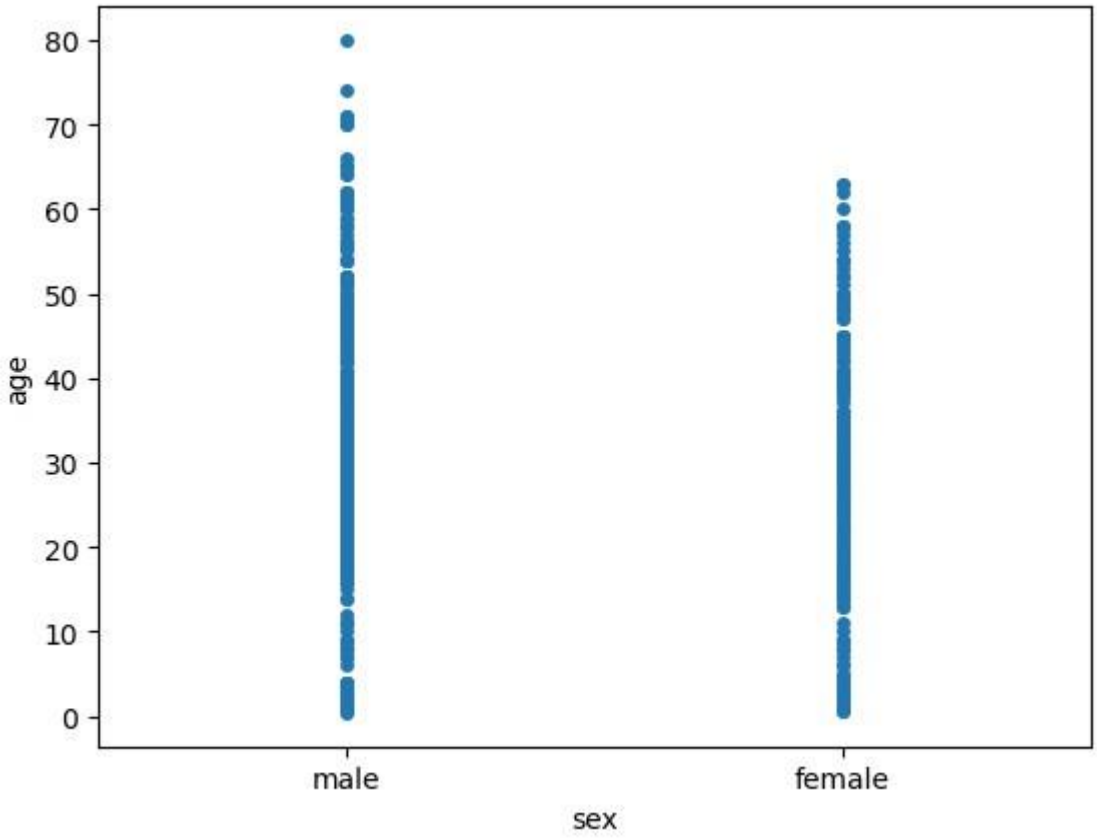
Out[14]: <Axes: xlabel='sex', ylabel='age'>



In [15]:
```
sns.stripplot(x='sex', y='age', data=dataset,
              jitter=False)
```

```
<Axes: xlabel='sex', ylabel='age'>
```

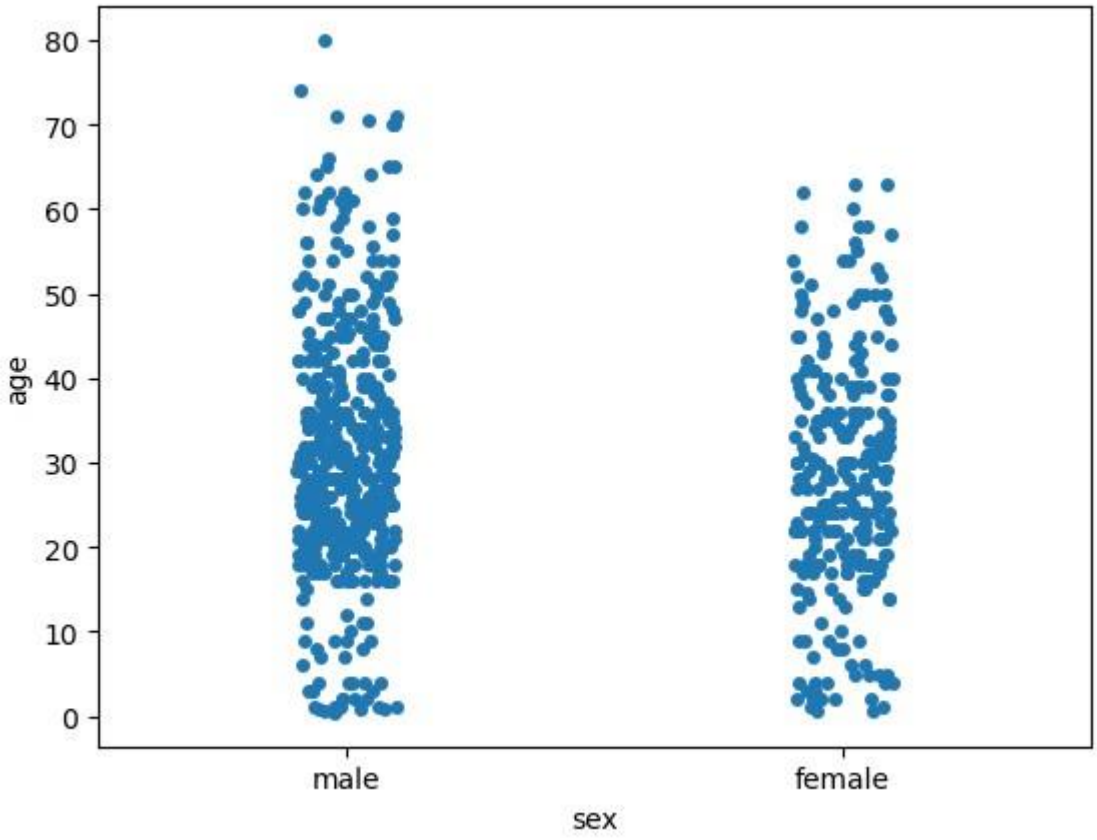
Out[15]:



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

```
<Axes: xlabel='sex', ylabel='age'>
```

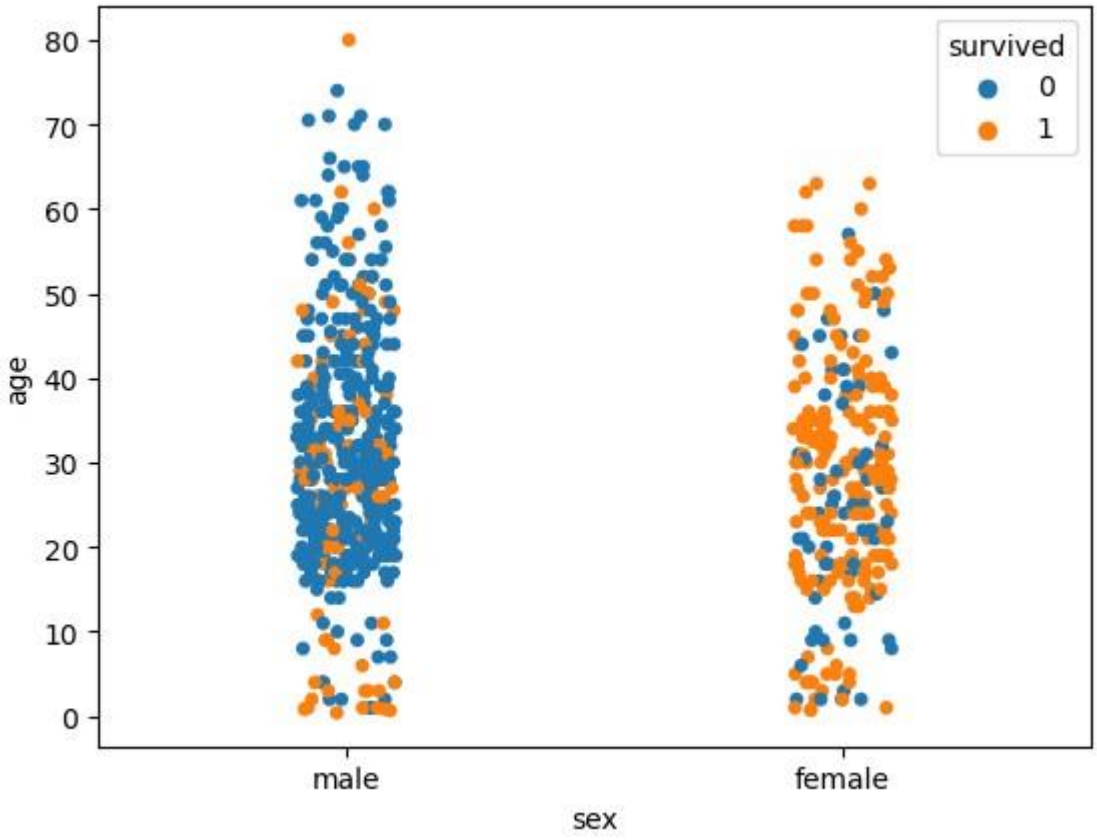
Out[16]:



In [17]:
```
sns.stripplot(x='sex', y='age', data=dataset,
              jitter=True, hue="survived")
```

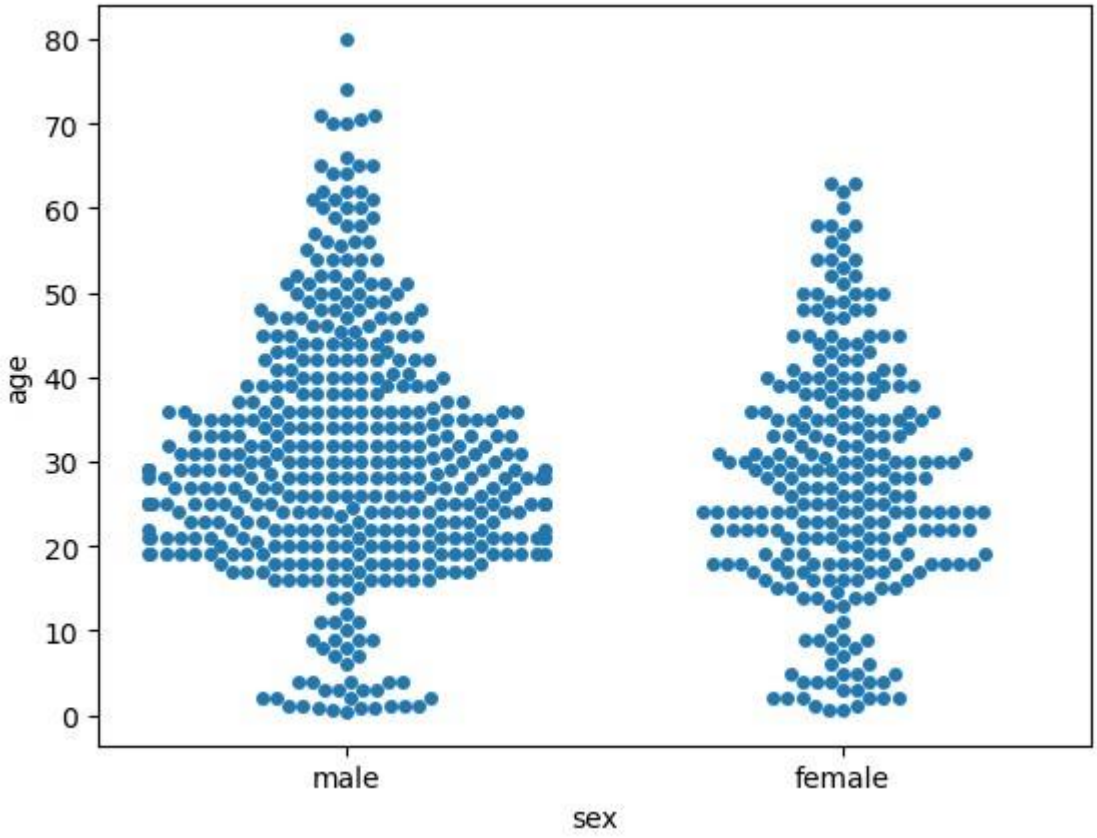
```
<Axes: xlabel='sex', ylabel='age'>
```

Out[17]:



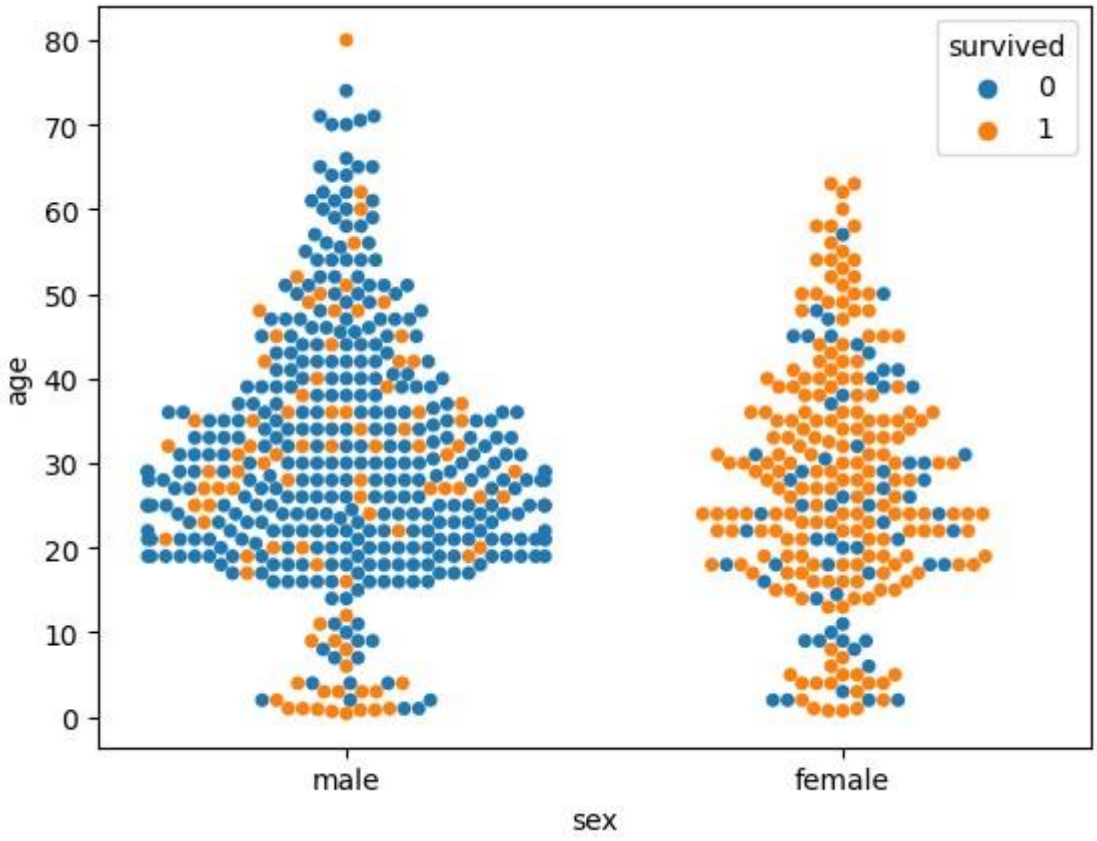
In [18]:
```
                        , y='age',
sns.swarmplot(x='sex'           data=dataset)
```

Out[18]: <Axes: xlabel='sex', ylabel='age'>



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

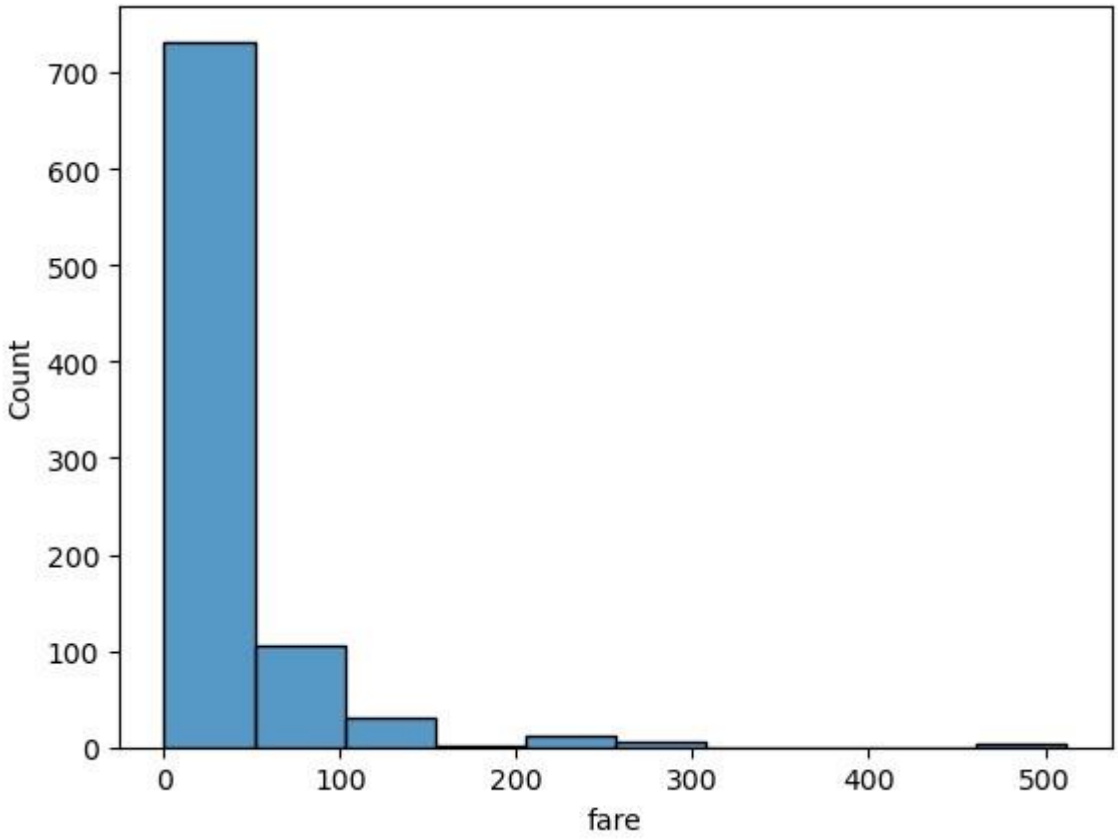
Out[19]: <Axes: xlabel='sex', ylabel='age'>



In

In [20]:
```
import seaborn as sns dataset =
sns.load_dataset('titanic')
sns.histplot(dataset["fare"], kde=False,
bins=10)
```

Out[20]: <Axes: xlabel='fare', ylabel='Count'>



In [21]:
```
dataset.corr(numeric_only = True)
```

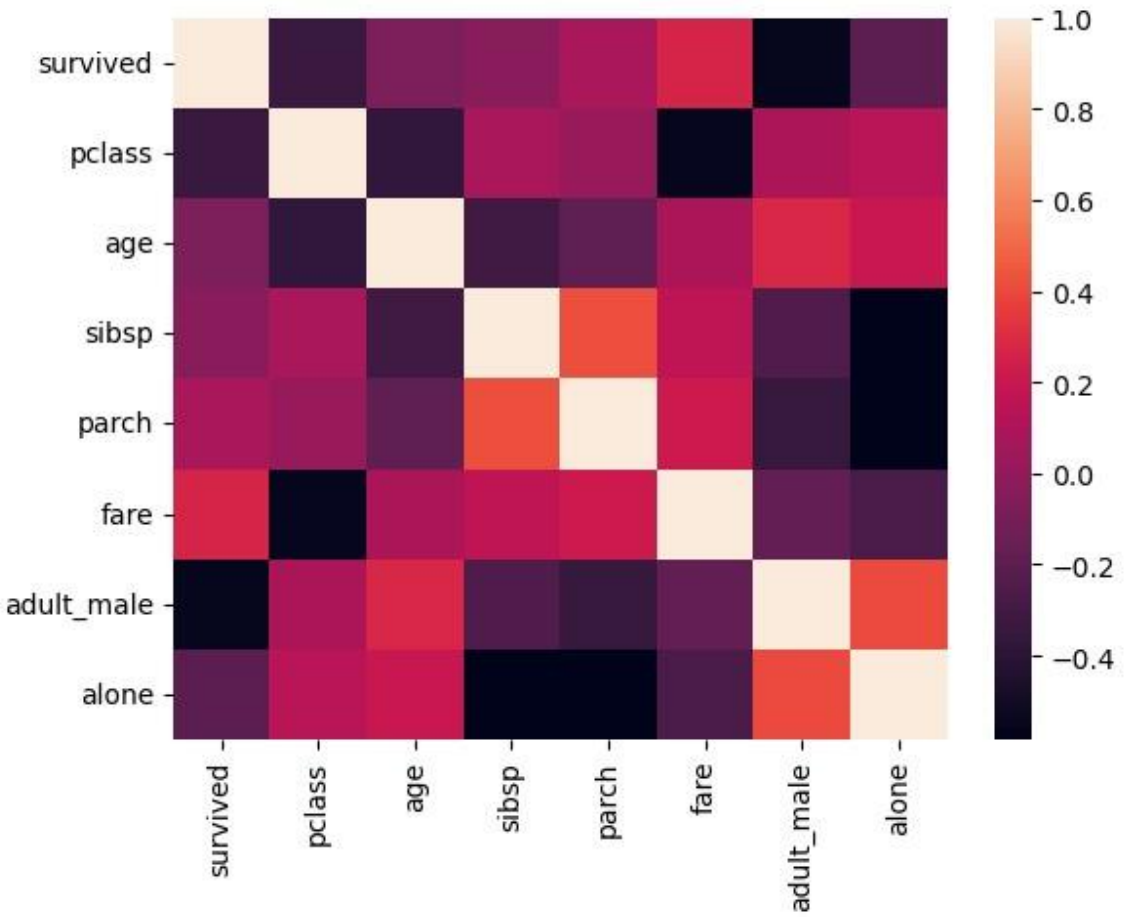
Out[21]:

	survived	pclass	age	sibsp	parch	fare	adult_male	a
survived	1.000000	-0.338481	-0.077221	-0.035322	0.081629	0.257307	-0.557080	-0.203
pclass	-0.338481	1.000000	-0.369226	0.083081	0.018443	-0.549500	0.094035	0.135
age	-0.077221	-0.369226	1.000000	-0.308247	-0.189119	0.096067	0.280328	0.198
sibsp	-0.035322	0.083081	-0.308247	1.000000	0.414838	0.159651	-0.253586	-0.584
parch	0.081629	0.018443	-0.189119	0.414838	1.000000	0.216225	-0.349943	-0.583
fare	0.257307	-0.549500	0.096067	0.159651	0.216225	1.000000	-0.182024	-0.271
adult_male	-0.557080	0.094035	0.280328	-0.253586	-0.349943	-0.182024	1.000000	0.404
alone	-0.203367	0.135207	0.198270	-0.584471	-0.583398	-0.271832	0.404744	1.000

In

[22]:
```
corr= dataset.corr(numeric_only = True)
sns.heatmap(corr)
```

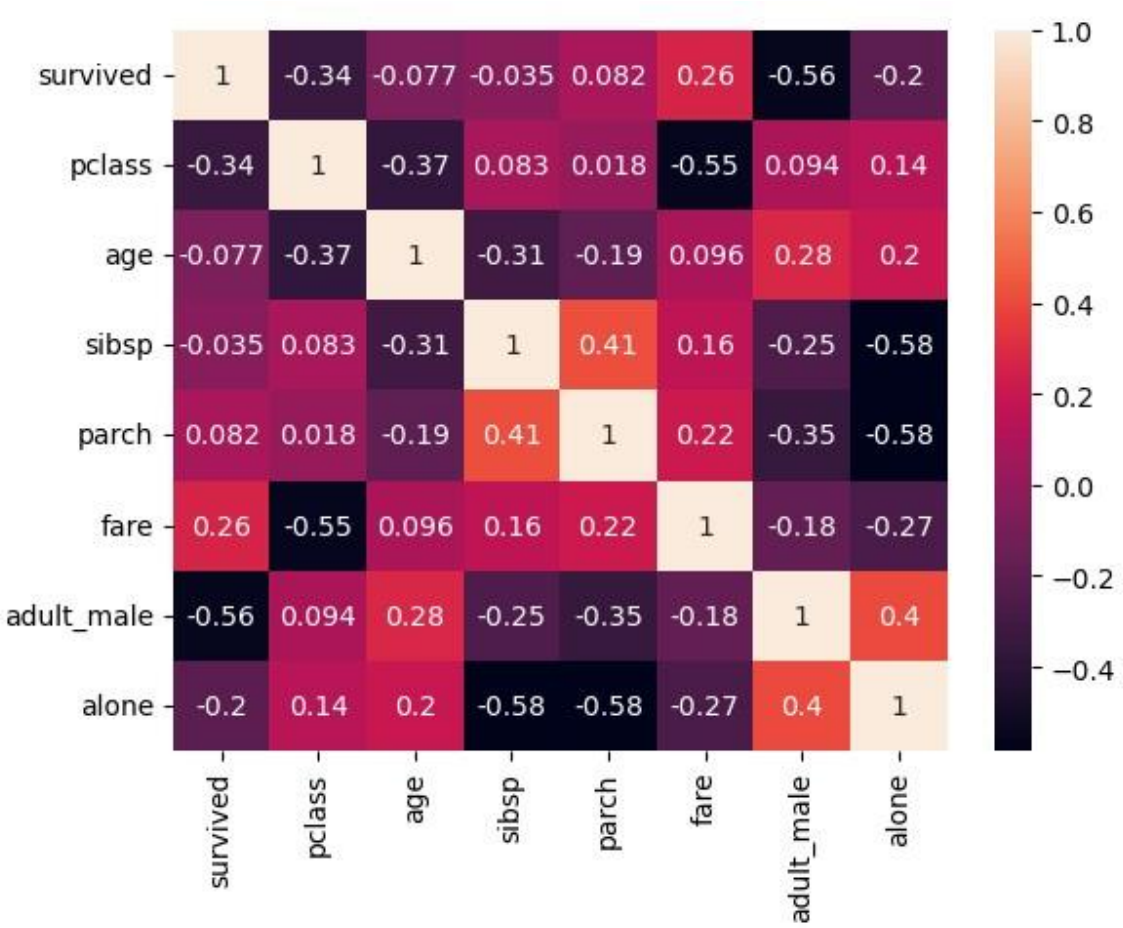
Out[22]: <Axes: >



[23]:
```
corr = dataset.corr(numeric_only = True)
sns.heatmap(corr, annot=True)
```

Out[23]: <Axes: >

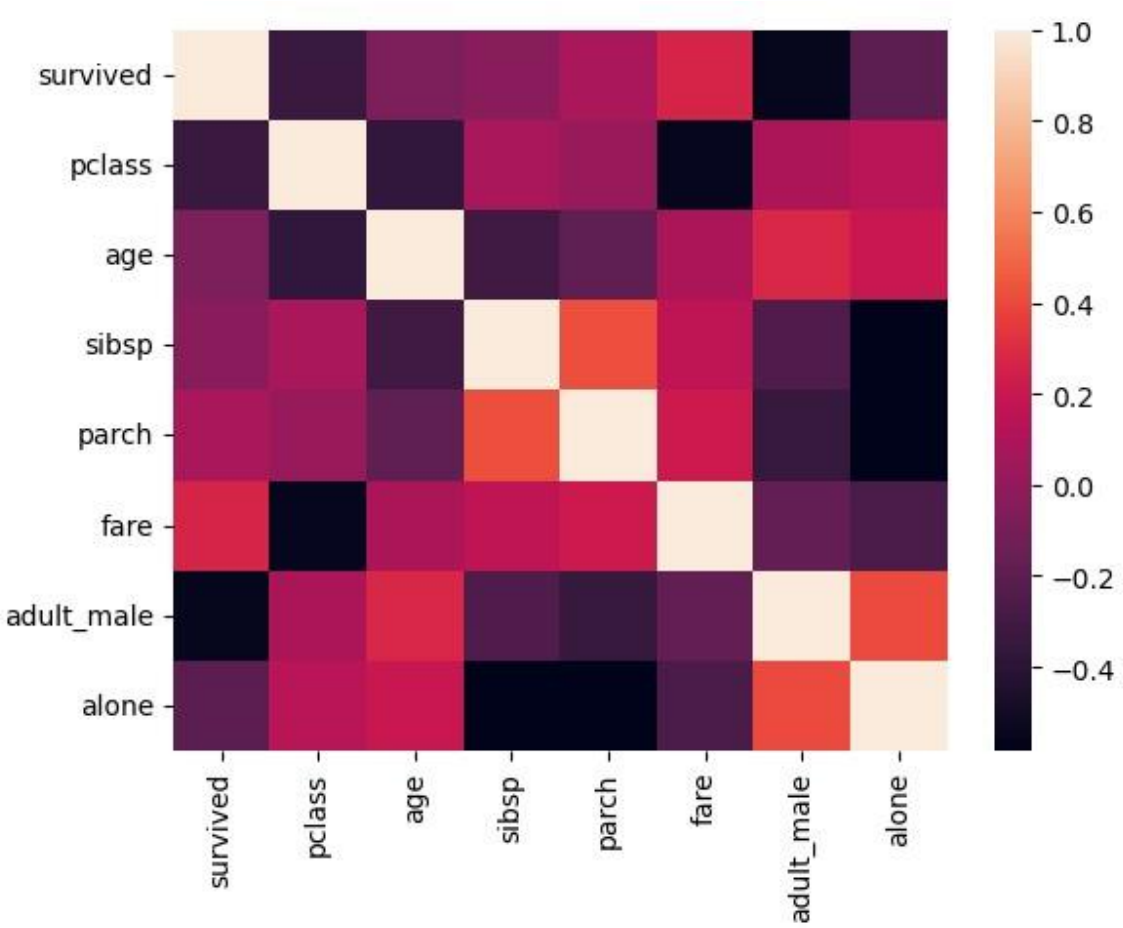
In



[24]:
```
corr = dataset.corr(numeric_only = True)
sns.heatmap(corr)
```

Out[24]: <Axes: >

In



Dixit Tanmay TE13143