In [5]:
```
pip install seaborn
```

```
Collecting seaborn
  Using cached seaborn-0.13.2-py3-none-any.whl.metadata (5.4 kB)
Requirement already satisfied: numpy!=1.24.0,>=1.20 in c:\users\rohan\appdata\local
\programs\python\python310\lib\site-packages (from seaborn) (1.26.4)
Requirement already satisfied: pandas>=1.2 in c:\users\rohan\appdata\local\programs
\python\python310\lib\site-packages (from seaborn) (2.2.0)
Requirement already satisfied: matplotlib!=3.6.1,>=3.4 in c:\users\rohan\appdata\loc
al\programs\python\python310\lib\site-packages (from seaborn) (3.8.3)
Requirement already satisfied: contourpy>=1.0.1 in c:\users\rohan\appdata\local\prog
rams\python\python310\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (1.
2.0)
Requirement already satisfied: cycler>=0.10 in c:\users\rohan\appdata\local\programs
\python\python310\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (0.12.1)
Requirement already satisfied: fonttools>=4.22.0 in c:\users\rohan\appdata\local\pro
grams\python\python310\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (4.
48.1)
Requirement already satisfied: kiwisolver>=1.3.1 in c:\users\rohan\appdata\local\pro
grams\python\python310\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (1.
4.5)
Requirement already satisfied: packaging>=20.0 in c:\users\rohan\appdata\local\progr
ams\python\python310\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (23.
2)
Requirement already satisfied: pillow>=8 in c:\users\rohan\appdata\local\programs\py
thon\python310\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (10.2.0)
Requirement already satisfied: pyparsing>=2.3.1 in c:\users\rohan\appdata\local\prog
rams\python\python310\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (3.
1.1)
Requirement already satisfied: python-dateutil>=2.7 in c:\users\rohan\appdata\local
\programs\python\python310\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn)
(2.8.2)
Requirement already satisfied: pytz>=2020.1 in c:\users\rohan\appdata\local\programs
\python\python310\lib\site-packages (from pandas>=1.2->seaborn) (2024.1)
Requirement already satisfied: tzdata>=2022.7 in c:\users\rohan\appdata\local\progra
ms\python\python310\lib\site-packages (from pandas>=1.2->seaborn) (2024.1)
Requirement already satisfied: six>=1.5 in c:\users\rohan\appdata\local\programs\pyt
hon\python310\lib\site-packages (from python-dateutil>=2.7->matplotlib!=3.6.1,>=3.4-
>seaborn) (1.16.0)
Using cached seaborn-0.13.2-py3-none-any.whl (294 kB)
Installing collected packages: seaborn
Successfully installed seaborn-0.13.2
Note: you may need to restart the kernel to use updated packages.
```

In [6]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

In [7]:
```
dataset = sns.load_dataset('titanic')
```

In [8]:
```
dataset.head()
```

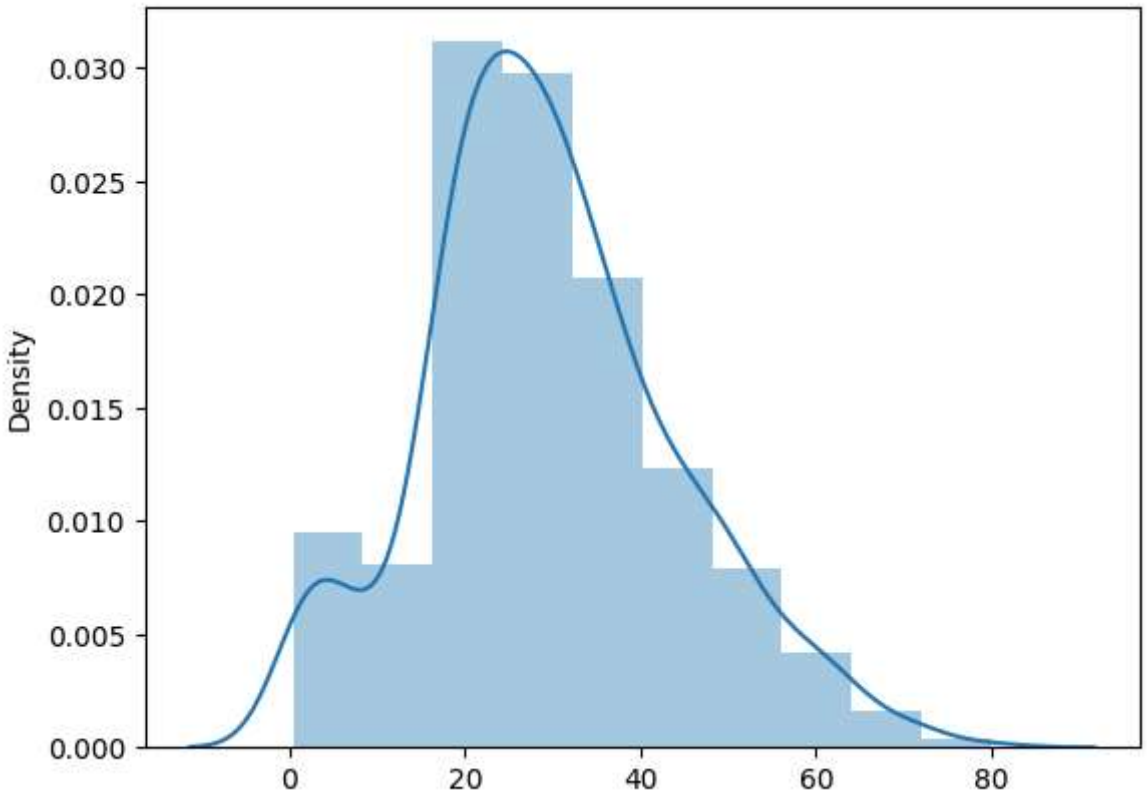
Out[8]:

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

In [9]:
```
import seaborn as sns
sns.distplot(x = dataset['age'], bins = 10)
```

```
C:\Users\Rohan\AppData\Local\Temp\ipykernel_18864\2548176949.py:2: UserWarning:

`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 with
similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

  sns.distplot(x = dataset['age'], bins = 10)
```

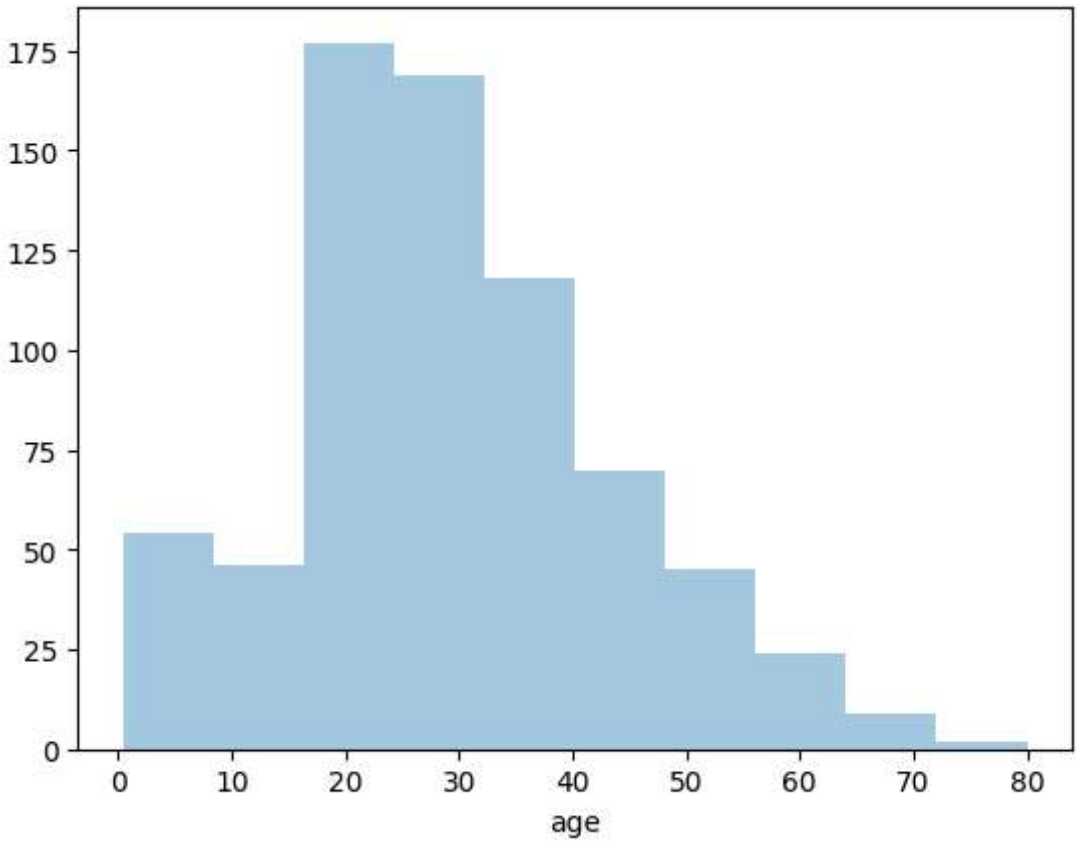
Out[9]: <Axes: ylabel='Density'>



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

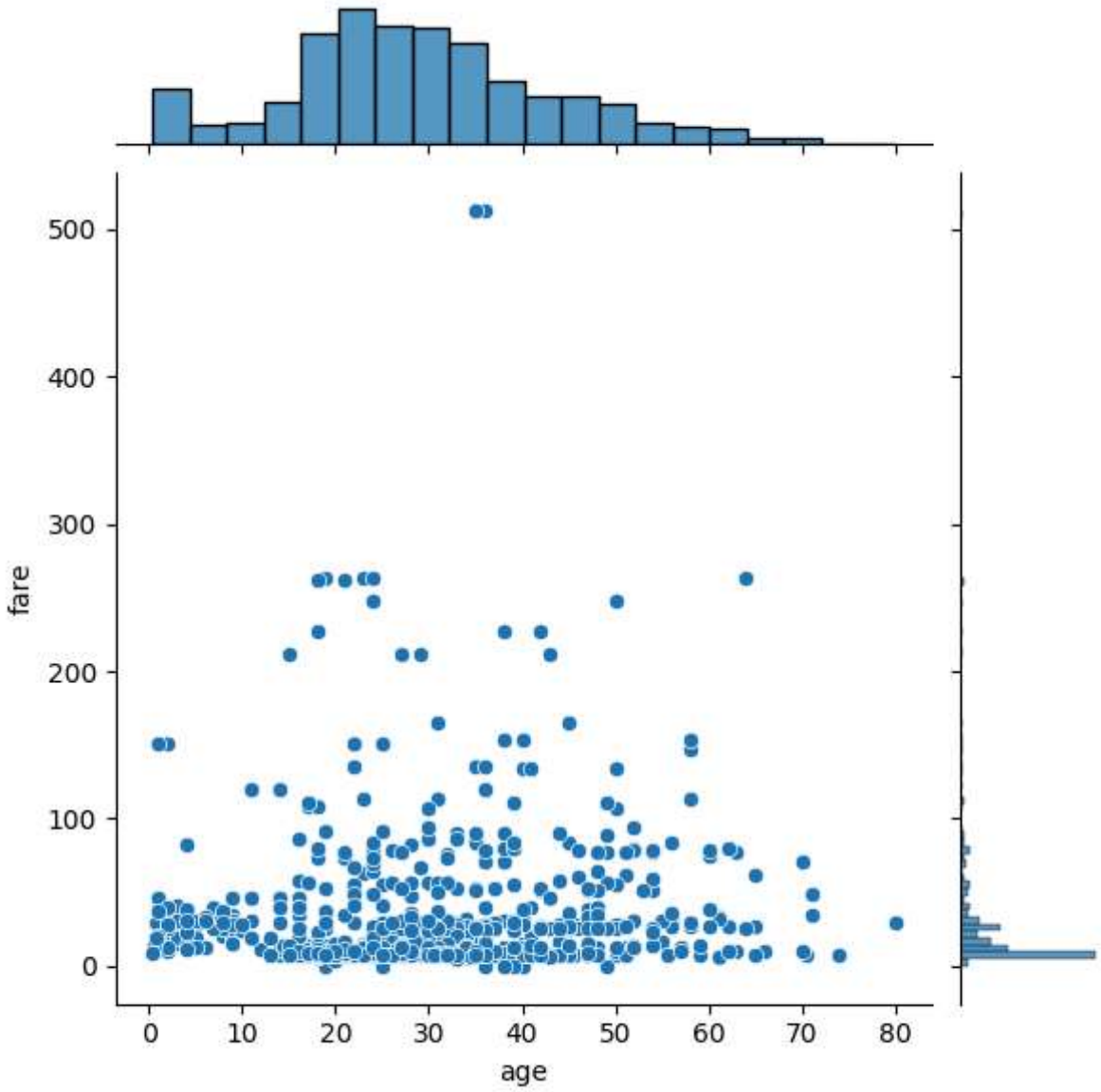
```
C:\Users\Rohan\AppData\Local\Temp\ipykernel_18864\3517108427.py:1: UserWarning:

`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 with
similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

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

Out[10]: <Axes: xlabel='age'>



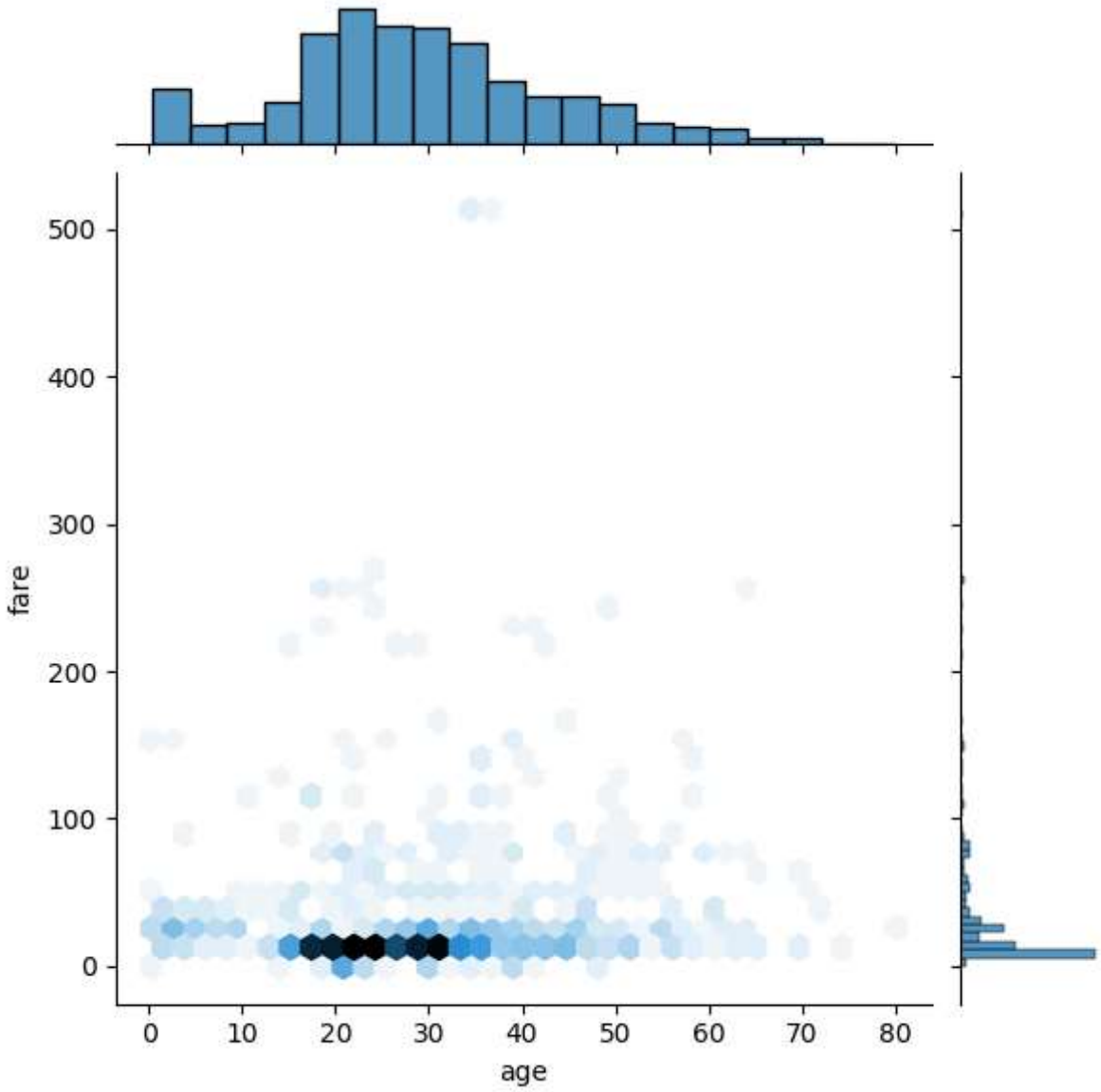
In [11]:
```
sns.jointplot(x = dataset['age'], y = dataset['fare'], kind ='scatter')
```

Out[11]: <seaborn.axisgrid.JointGrid at 0x1ef376eb910>



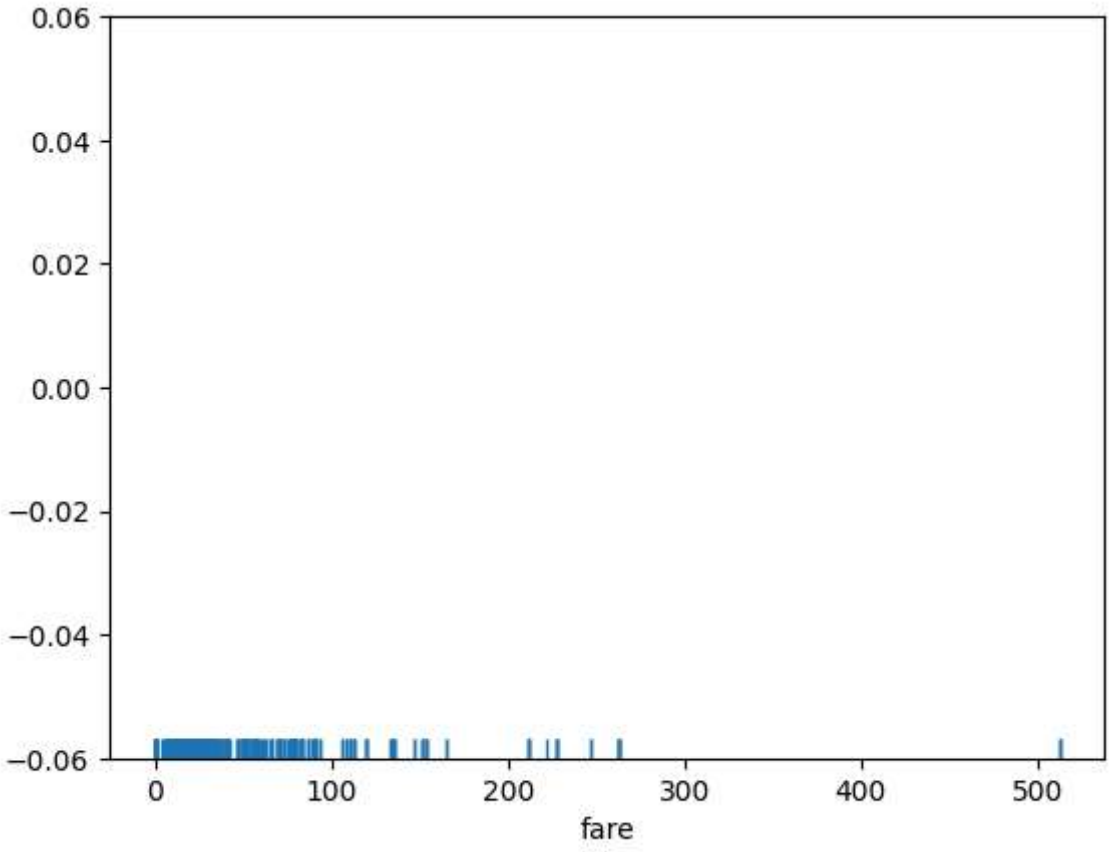
In [12]:
```
sns.jointplot(x = dataset['age'], y = dataset['fare'], kind = 'hex')
```

Out[12]: <seaborn.axisgrid.JointGrid at 0x1ef3b7b74f0>



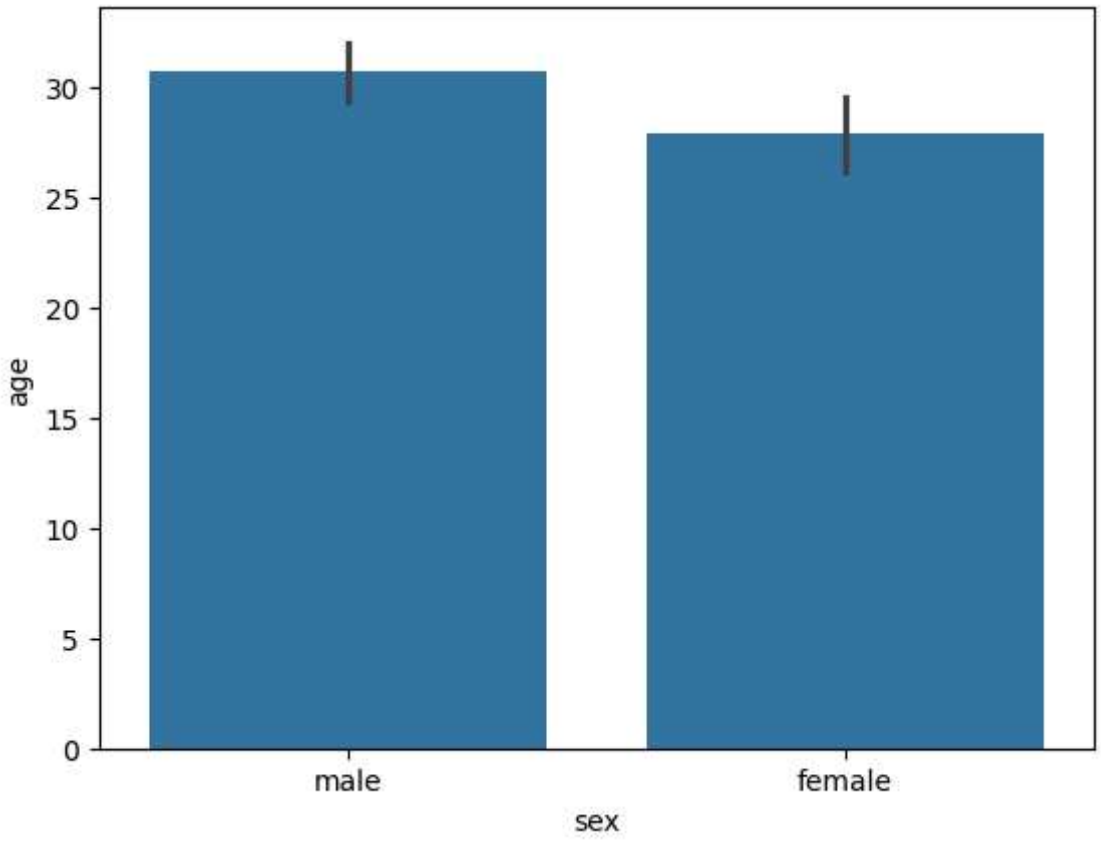
In [13]:
```
sns.rugplot(dataset['fare'])
```

Out[13]: <Axes: xlabel='fare'>



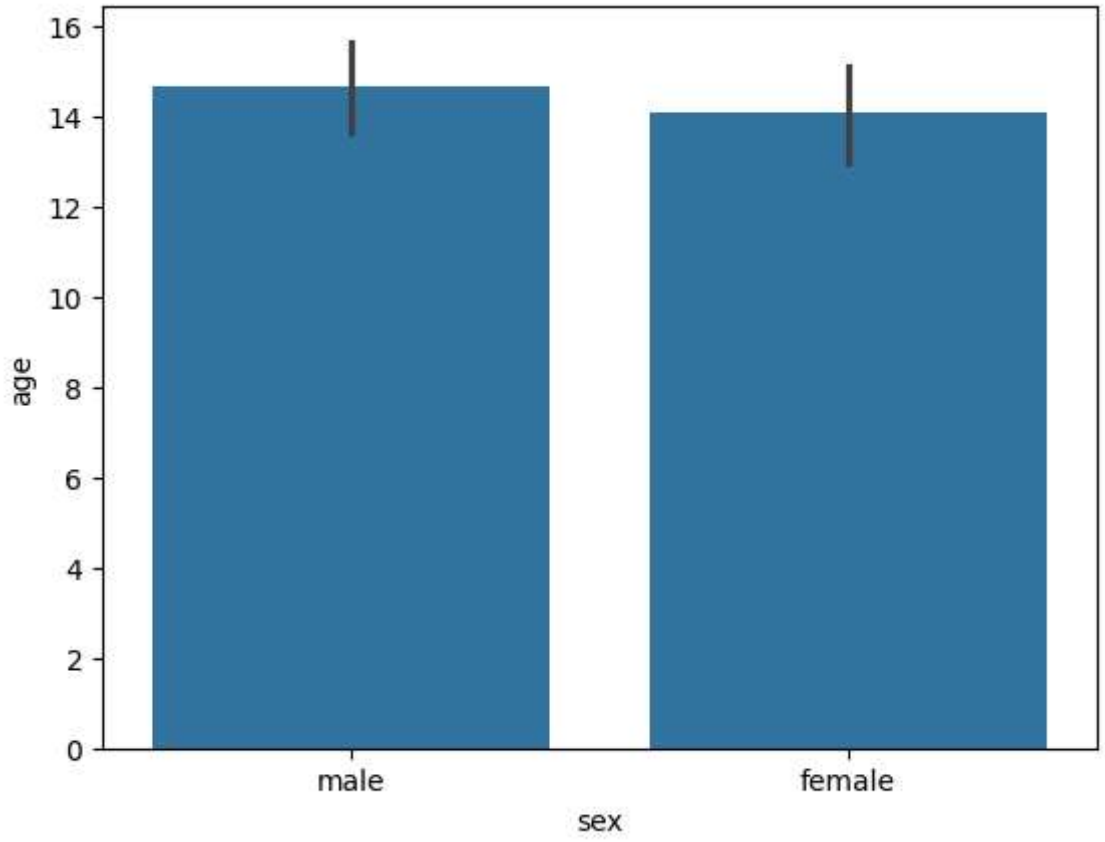
In [14]:
```
sns.barplot(x='sex', y='age', data=dataset)
```

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



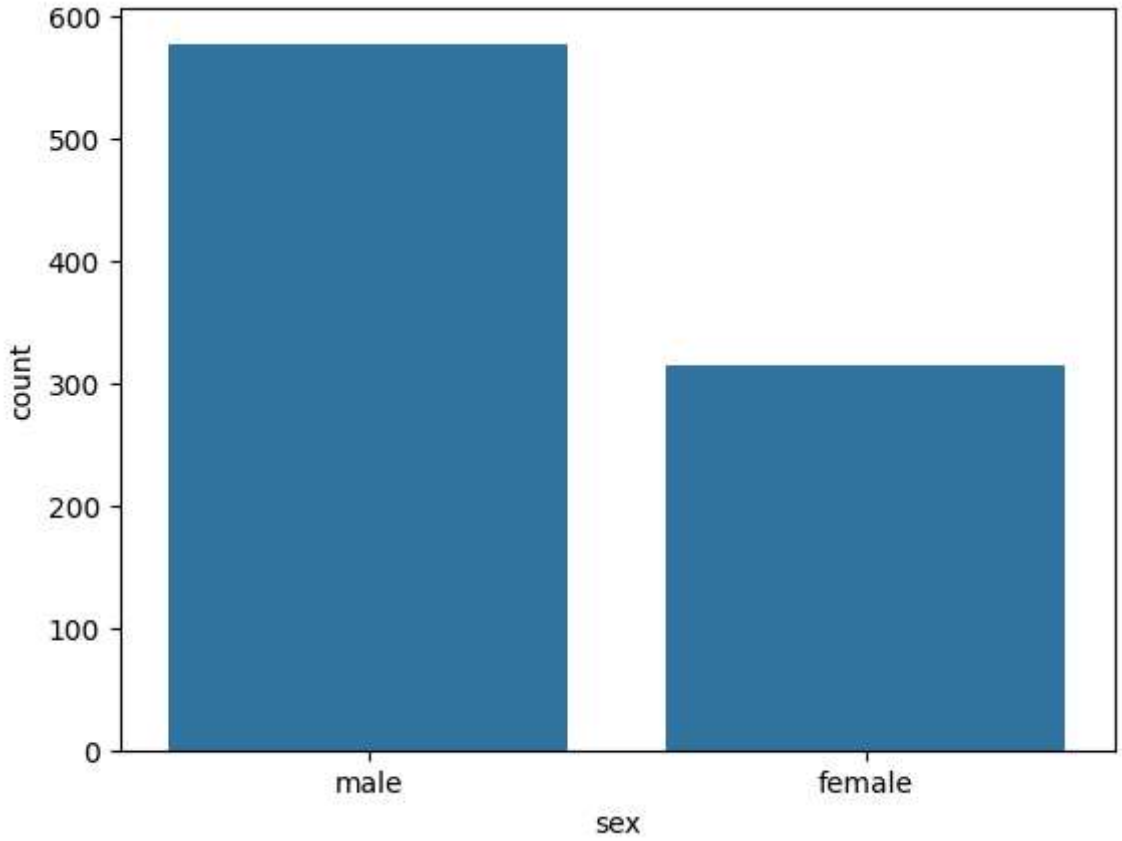
In [15]:
```
sns.barplot(x='sex', y='age', data=dataset, estimator=np.std)
```

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



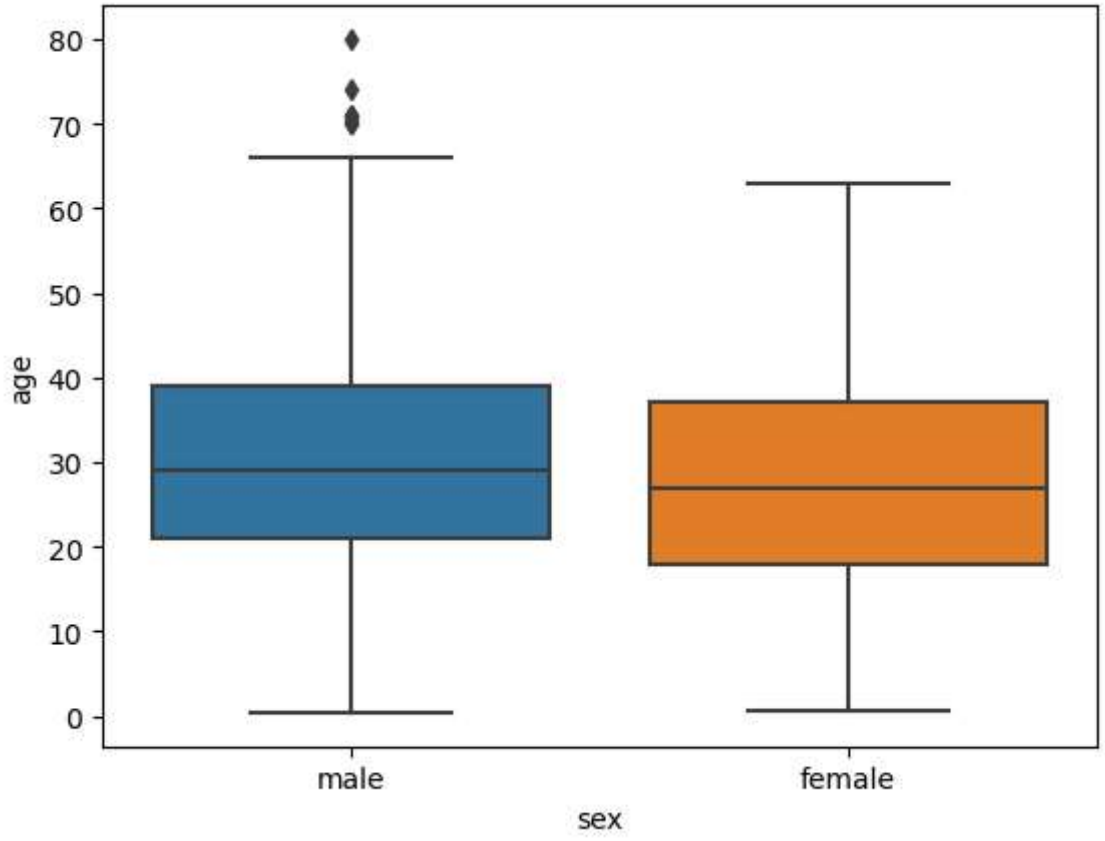
In [16]:
```
sns.countplot(x='sex', data=dataset)
```

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



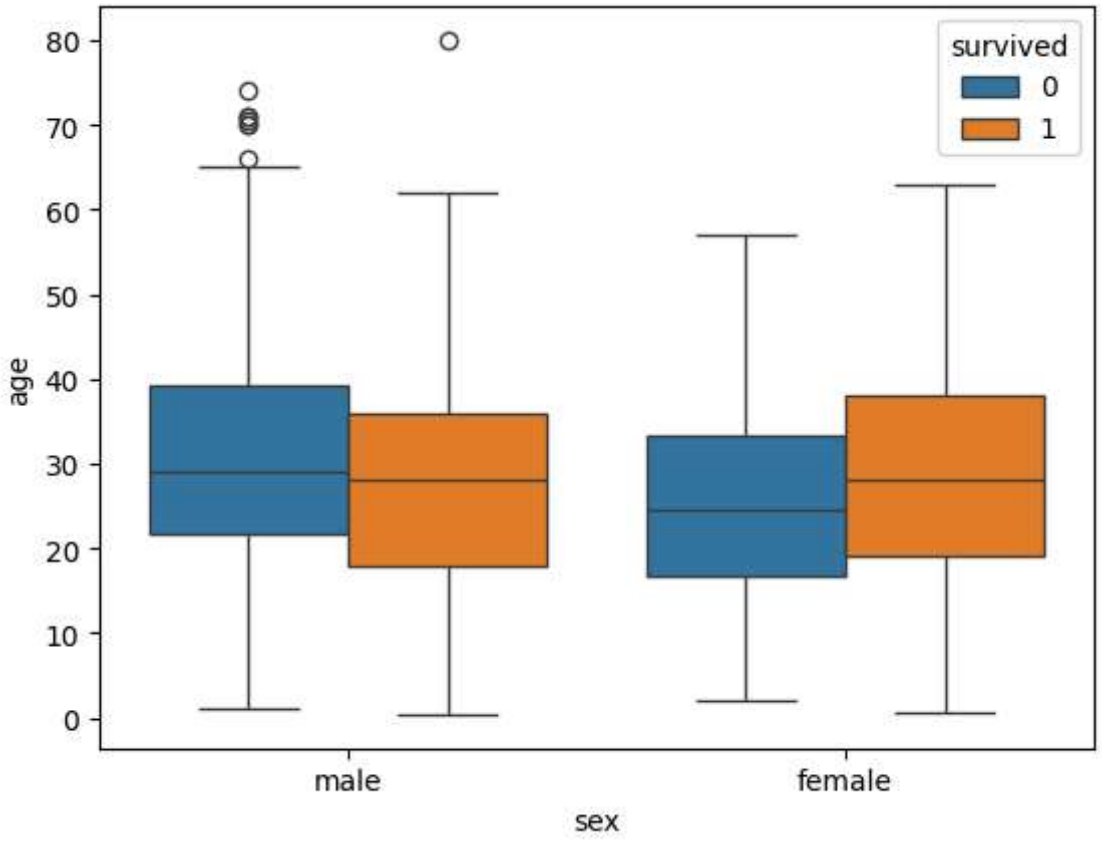
In [13]:
```
sns.boxplot(x='sex', y='age', data=dataset)
```

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



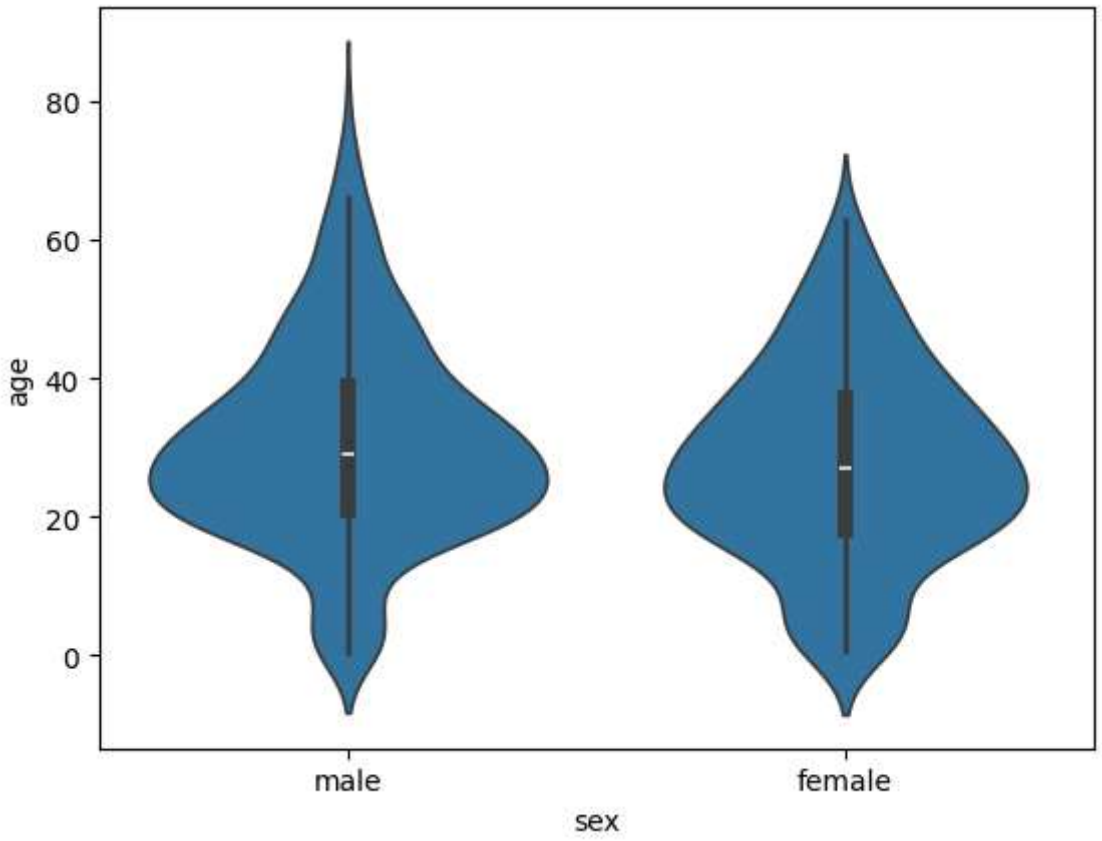
In [17]:
```
sns.boxplot(x='sex', y='age', data=dataset, hue="survived")
```

Out[17]: <Axes: xlabel='sex', ylabel='age'>



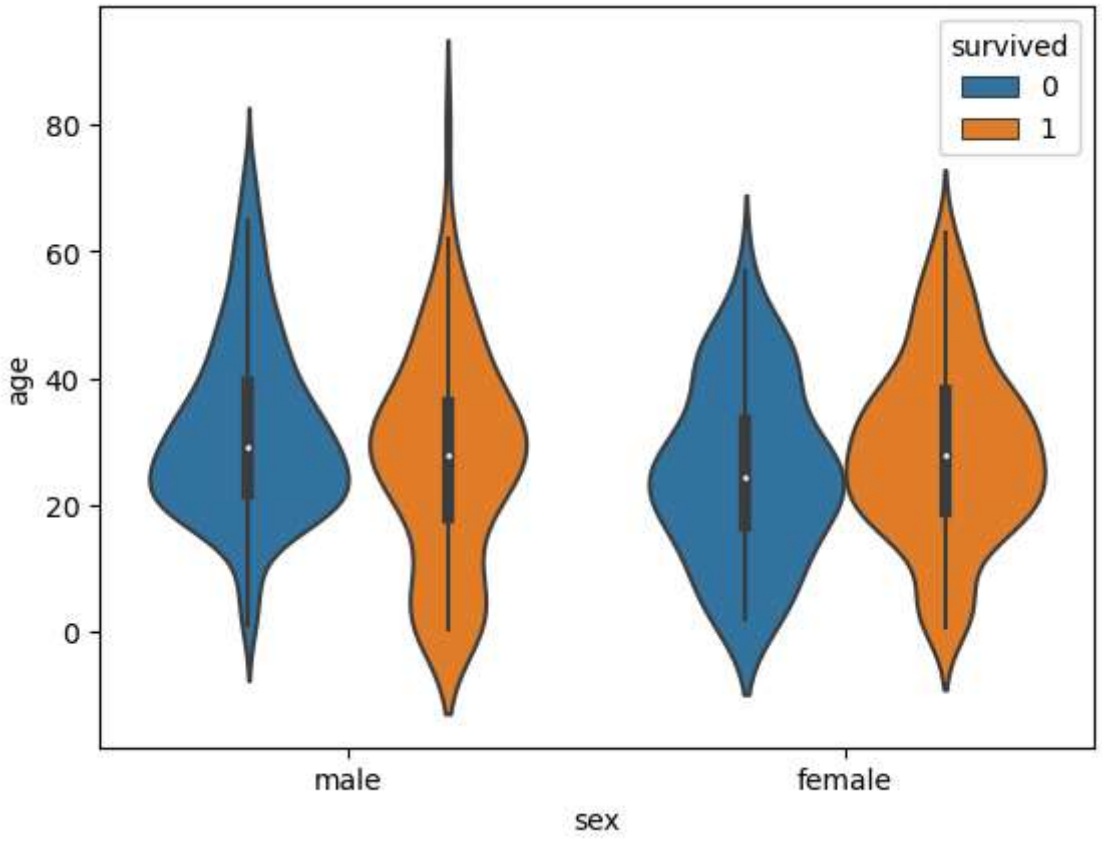
In [18]:
```
sns.violinplot(x='sex', y='age', data=dataset)
```

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



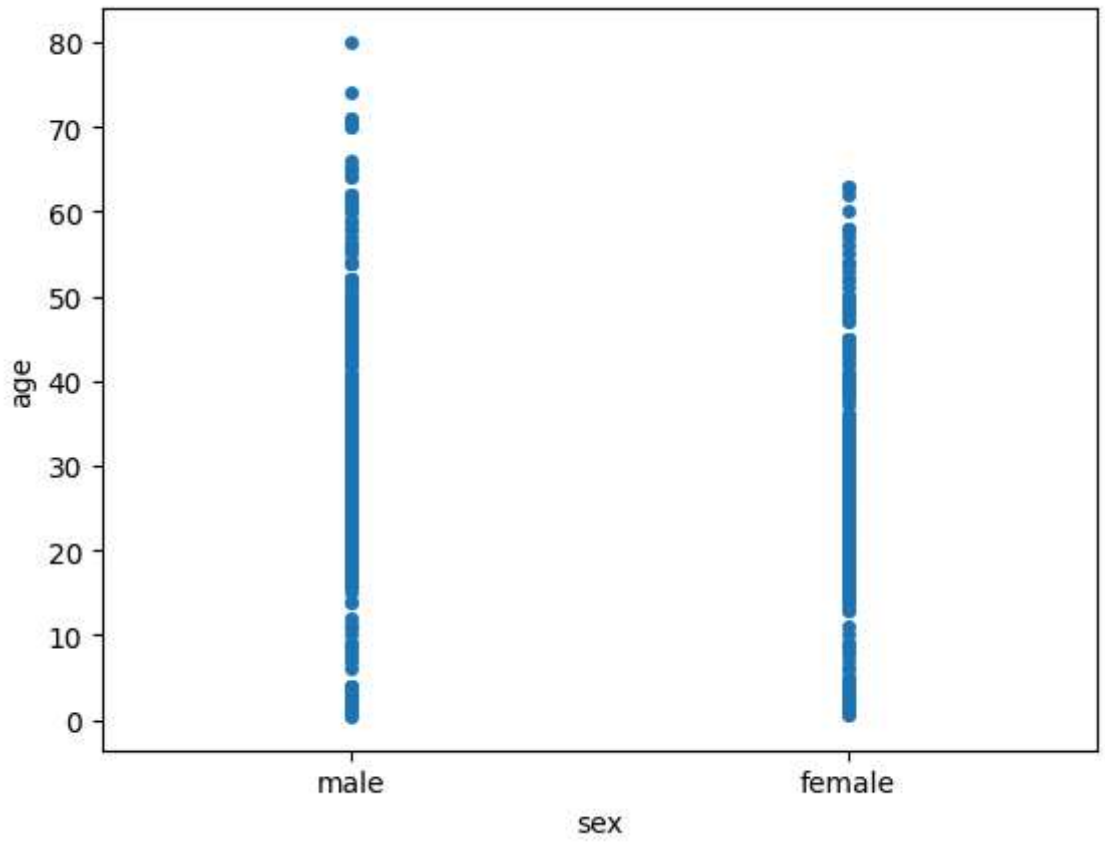
In [16]:
```
sns.violinplot(x='sex', y='age', data=dataset, hue="survived")
```

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



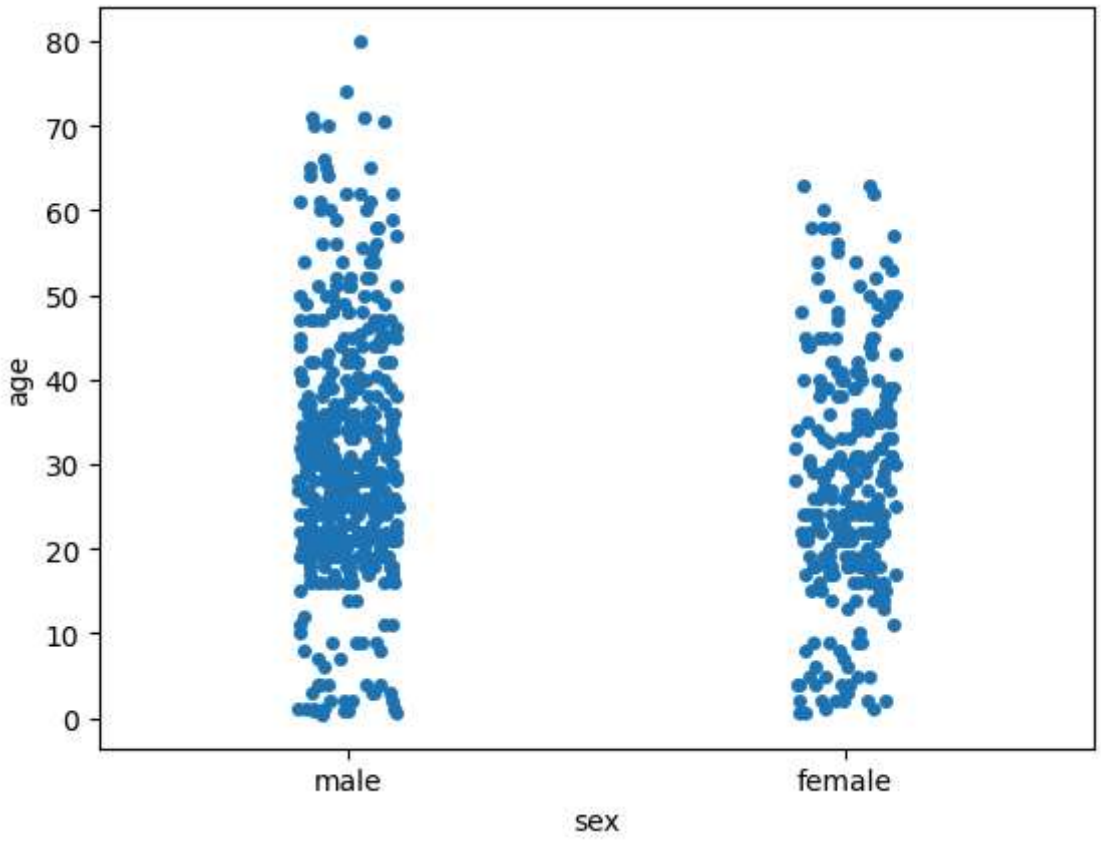
In [19]:
```
sns.stripplot(x='sex', y='age', data=dataset, jitter=False)
```

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



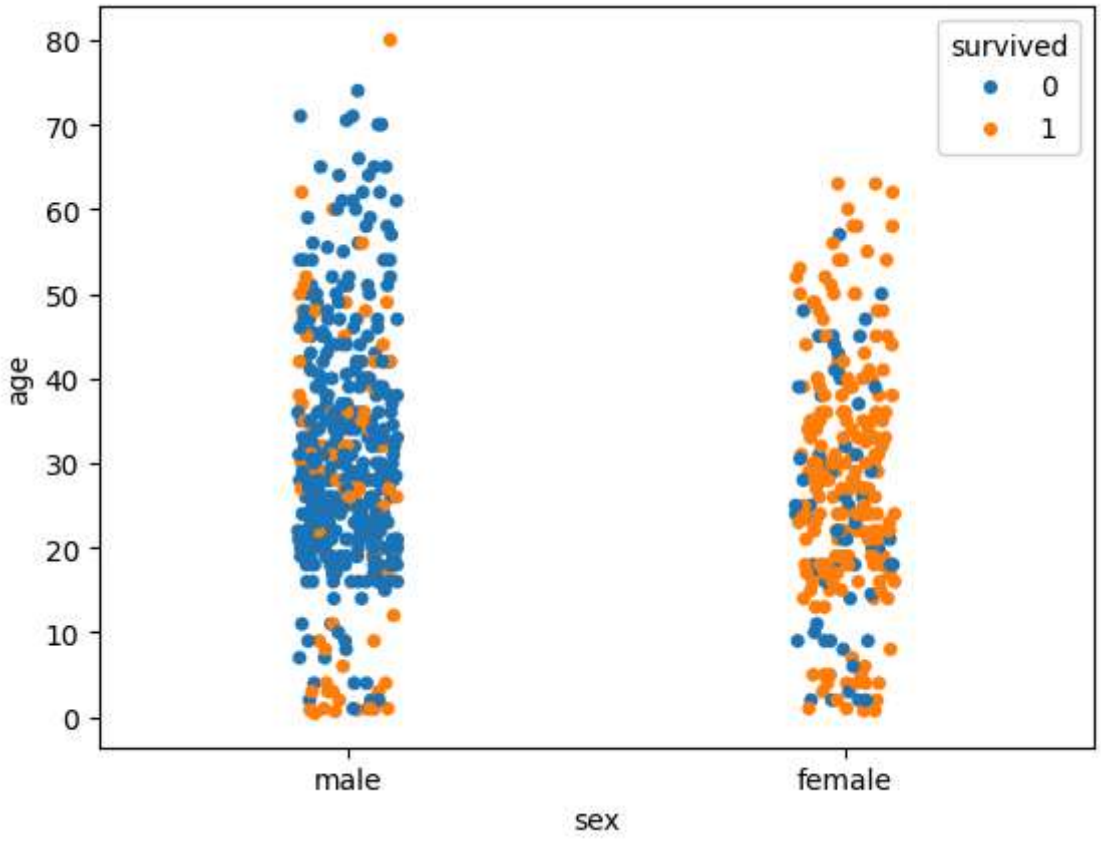
In [20]:
```
sns.stripplot(x='sex', y='age', data=dataset, jitter=True)
```

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



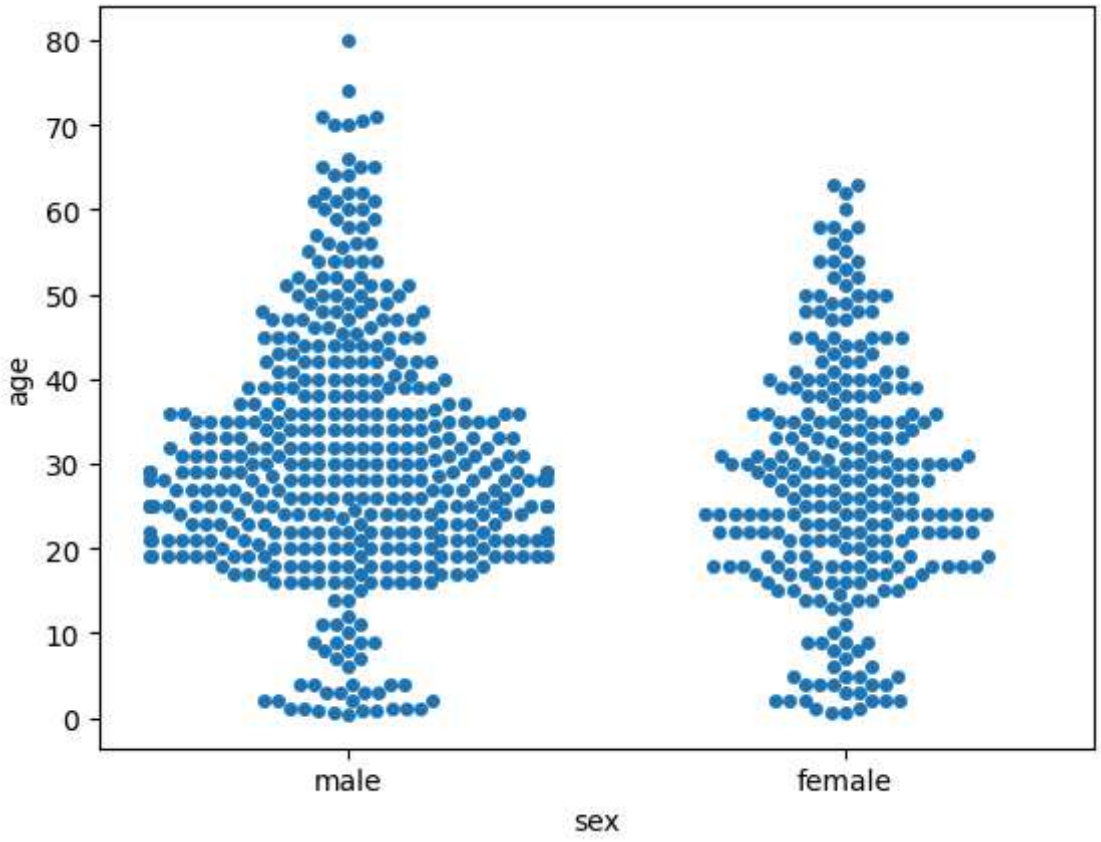
In [21]:
```
sns.stripplot(x='sex', y='age', data=dataset, jitter=True, hue="survived")
```

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



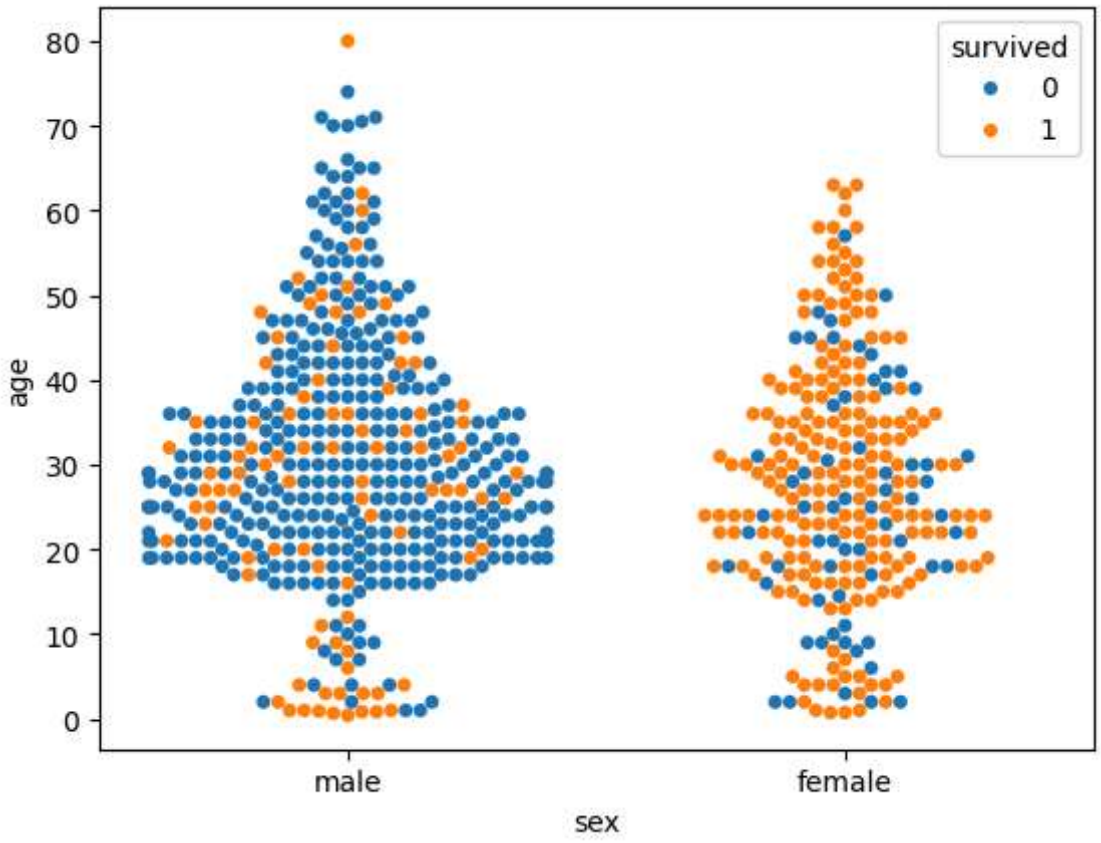
In [22]:
```
sns.swarmplot(x='sex', y='age', data=dataset)
```

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



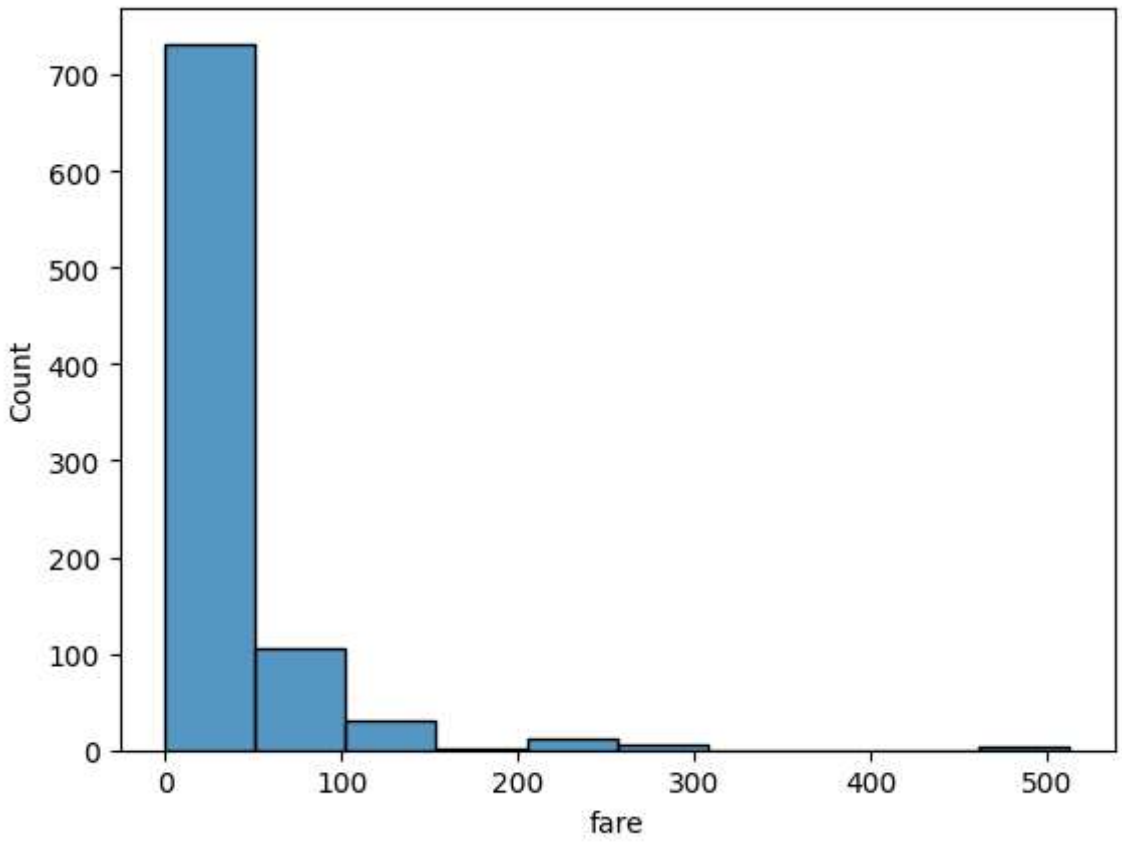
In [23]:
```
sns.swarmplot(x='sex', y='age', data=dataset, hue="survived")
```

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



In [24]:
```
import seaborn as sns
dataset = sns.load_dataset('titanic')
sns.histplot(dataset["fare"], kde=False, bins=10)
```

Out[24]: <Axes: xlabel='fare', ylabel='Count'>



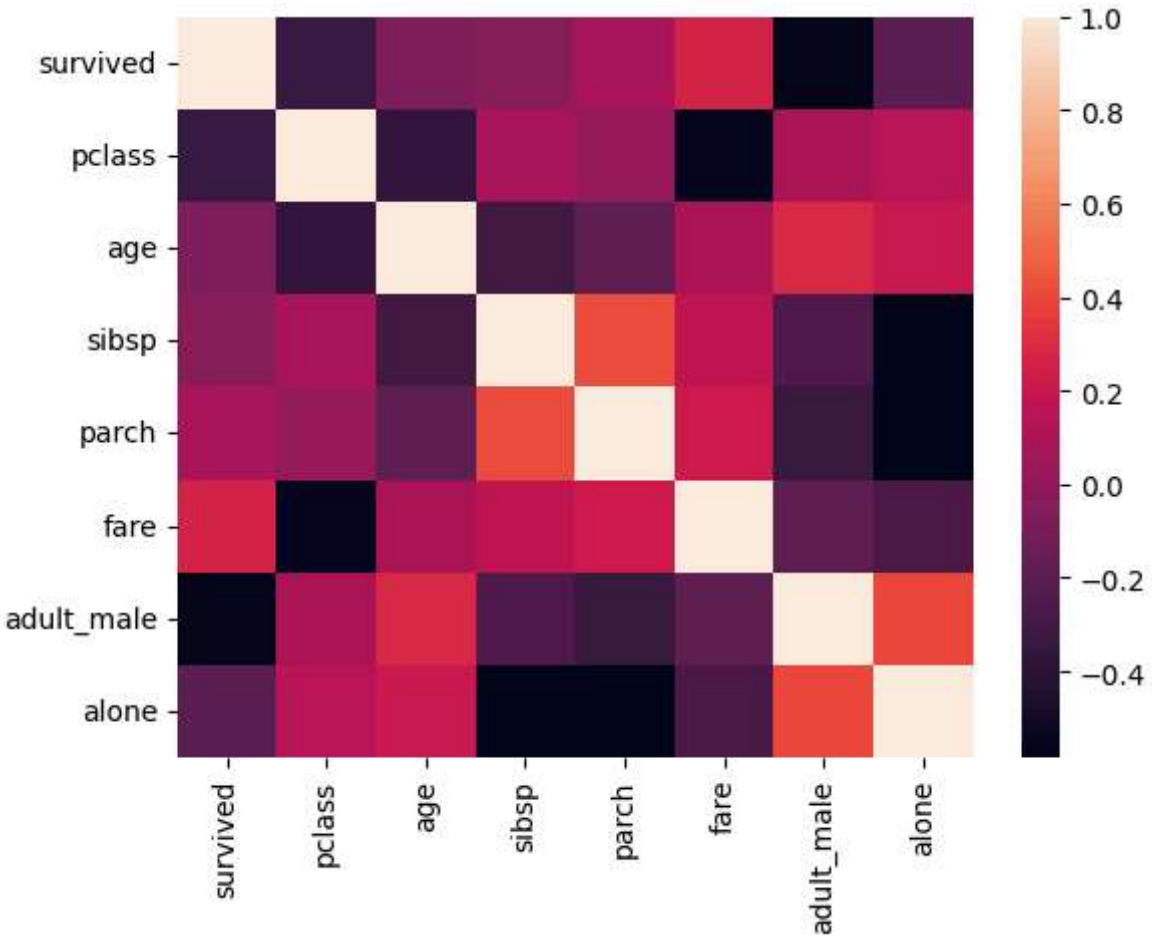
In [25]:
```
dataset.corr(numeric_only = True)
```

Out[25]:

	survived	pclass	age	sibsp	parch	fare	adult_male	
survived	1.000000	-0.338481	-0.077221	-0.035322	0.081629	0.257307	-0.557080	-0
pclass	-0.338481	1.000000	-0.369226	0.083081	0.018443	-0.549500	0.094035	0
age	-0.077221	-0.369226	1.000000	-0.308247	-0.189119	0.096067	0.280328	0
sibsp	-0.035322	0.083081	-0.308247	1.000000	0.414838	0.159651	-0.253586	-0
parch	0.081629	0.018443	-0.189119	0.414838	1.000000	0.216225	-0.349943	-0
fare	0.257307	-0.549500	0.096067	0.159651	0.216225	1.000000	-0.182024	-0
adult_male	-0.557080	0.094035	0.280328	-0.253586	-0.349943	-0.182024	1.000000	0
alone	-0.203367	0.135207	0.198270	-0.584471	-0.583398	-0.271832	0.404744	1

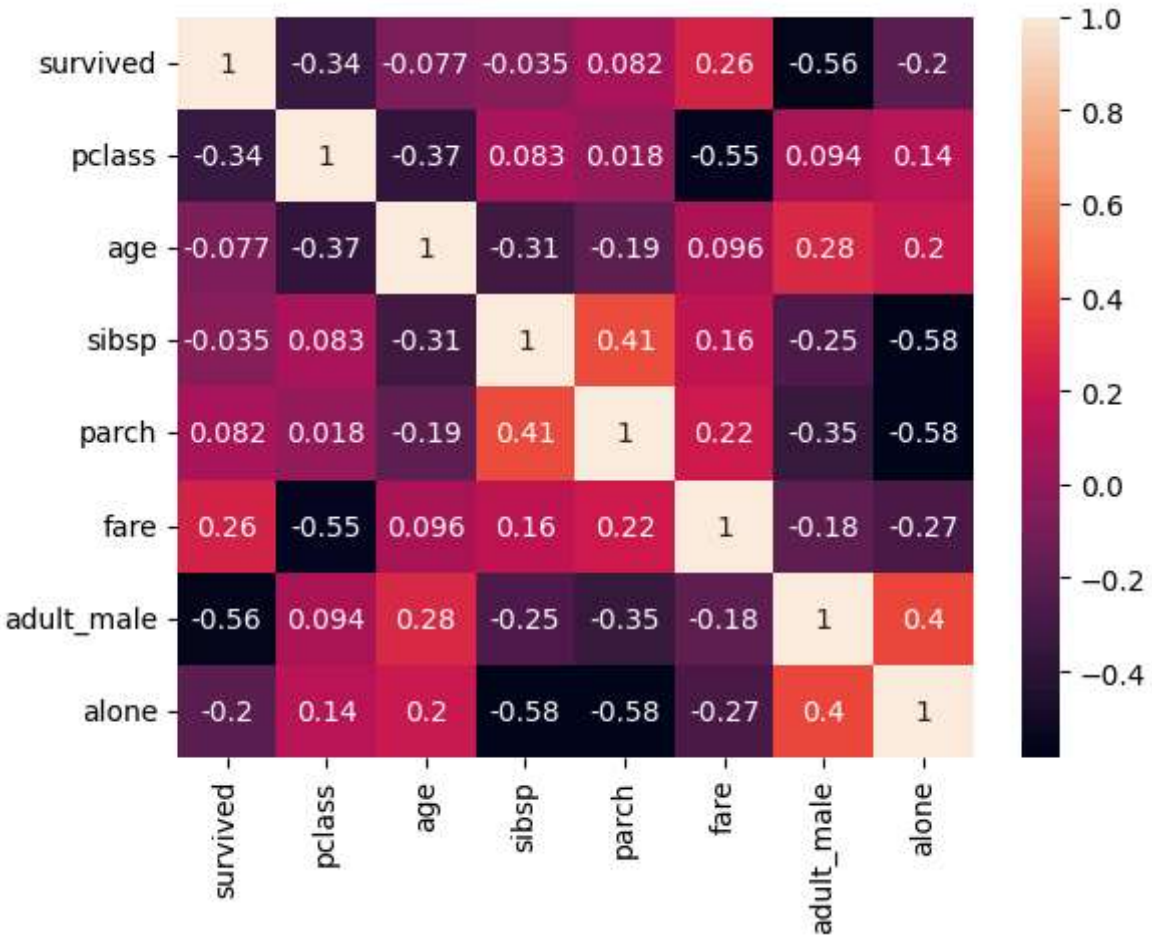
In [26]:
```
corr= dataset.corr(numeric_only = True)
sns.heatmap(corr)
```

Out[26]: <Axes: >



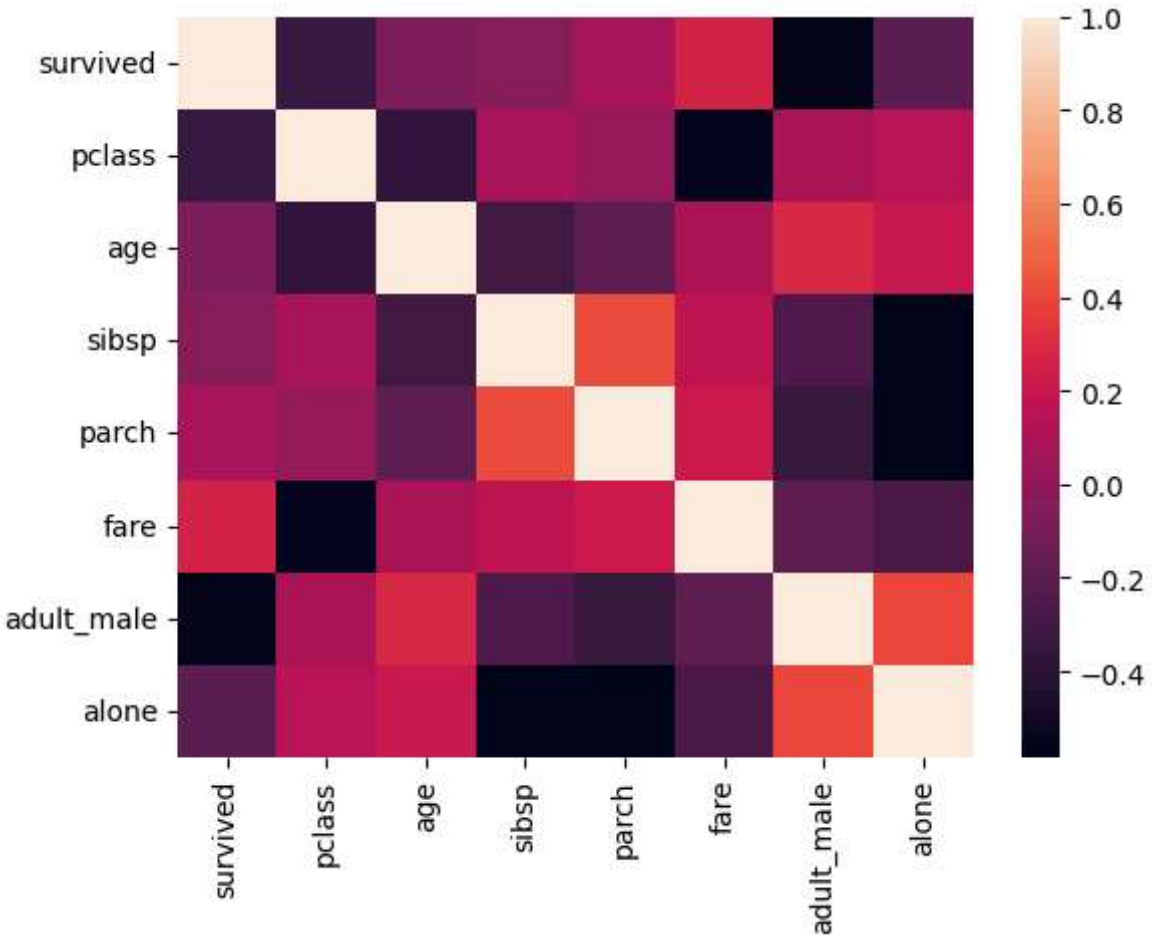
In [27]:
```
corr = dataset.corr(numeric_only = True)
sns.heatmap(corr, annot=True)
```

Out[27]: <Axes: >



In [28]:
```
corr = dataset.corr(numeric_only = True)
sns.heatmap(corr)
```

Out[28]: <Axes: >



In [ ]:
```
'''
Name: Rohan Chimaji Dhadke
Class: TE-A2
'''
```