

```
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')
```

```
In [3]: dataset.head()
```

```
Out[3]:
```

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	de
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	Na
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	Na
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	Na

```
In [4]: import seaborn as sns
sns.distplot(x = dataset['age'], bins = 10)
```

C:\Users\tsdes\AppData\Local\Temp\ipykernel_6140\3447981930.py:2: UserWarning:

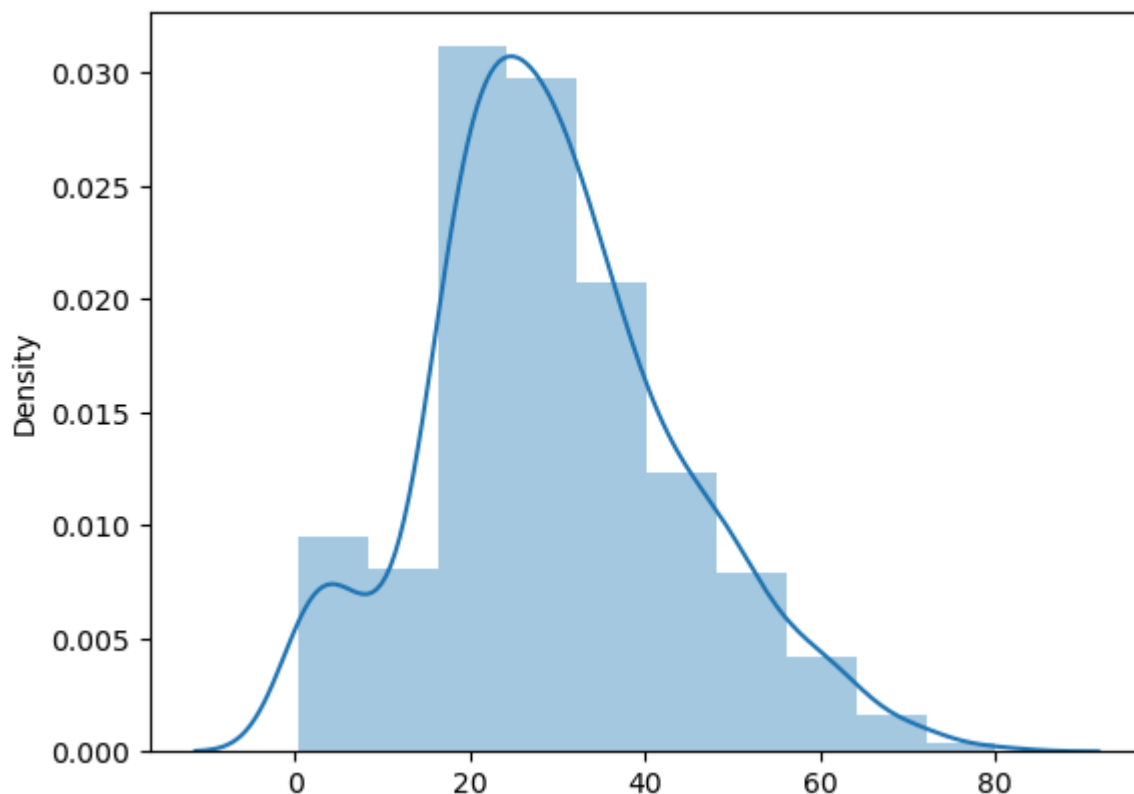
`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

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[4]: <Axes: ylabel='Density'>
```



```
In [6]: sns.distplot(dataset['age'], bins = 10,kde=False)
```

C:\Users\tsdes\AppData\Local\Temp\ipykernel_6140\3517108427.py:1: UserWarning:

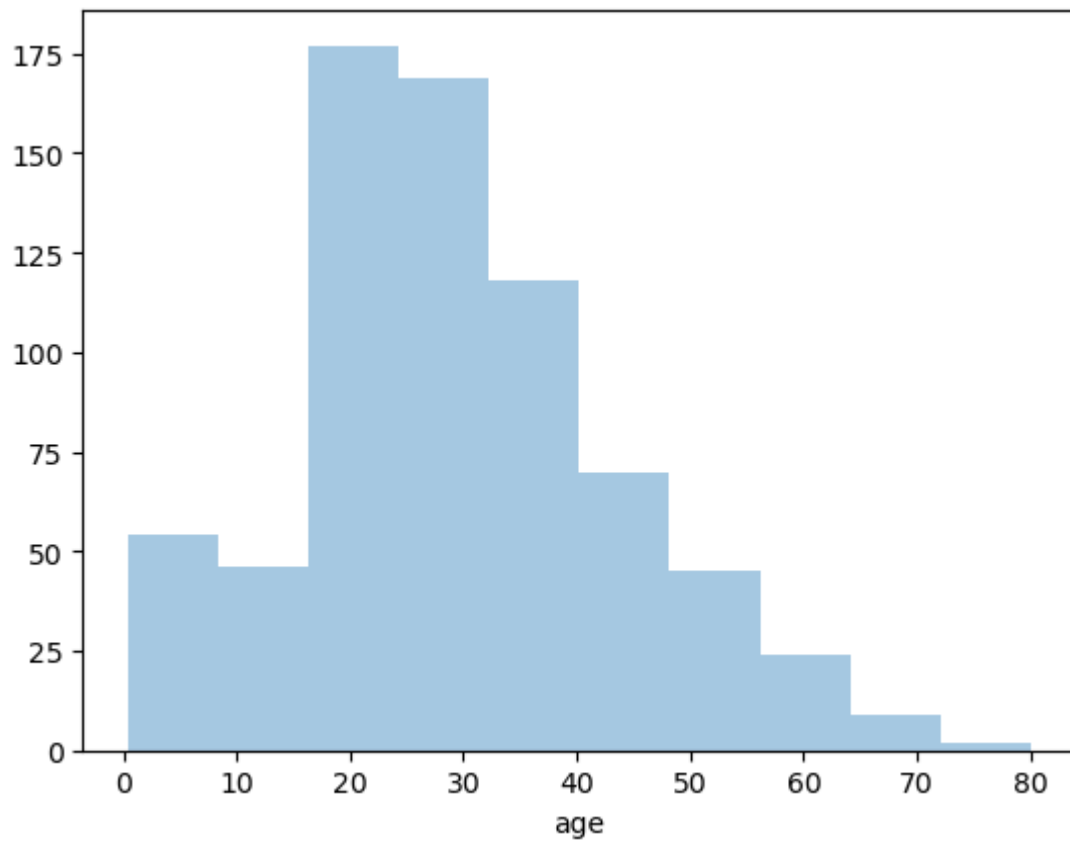
`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

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>

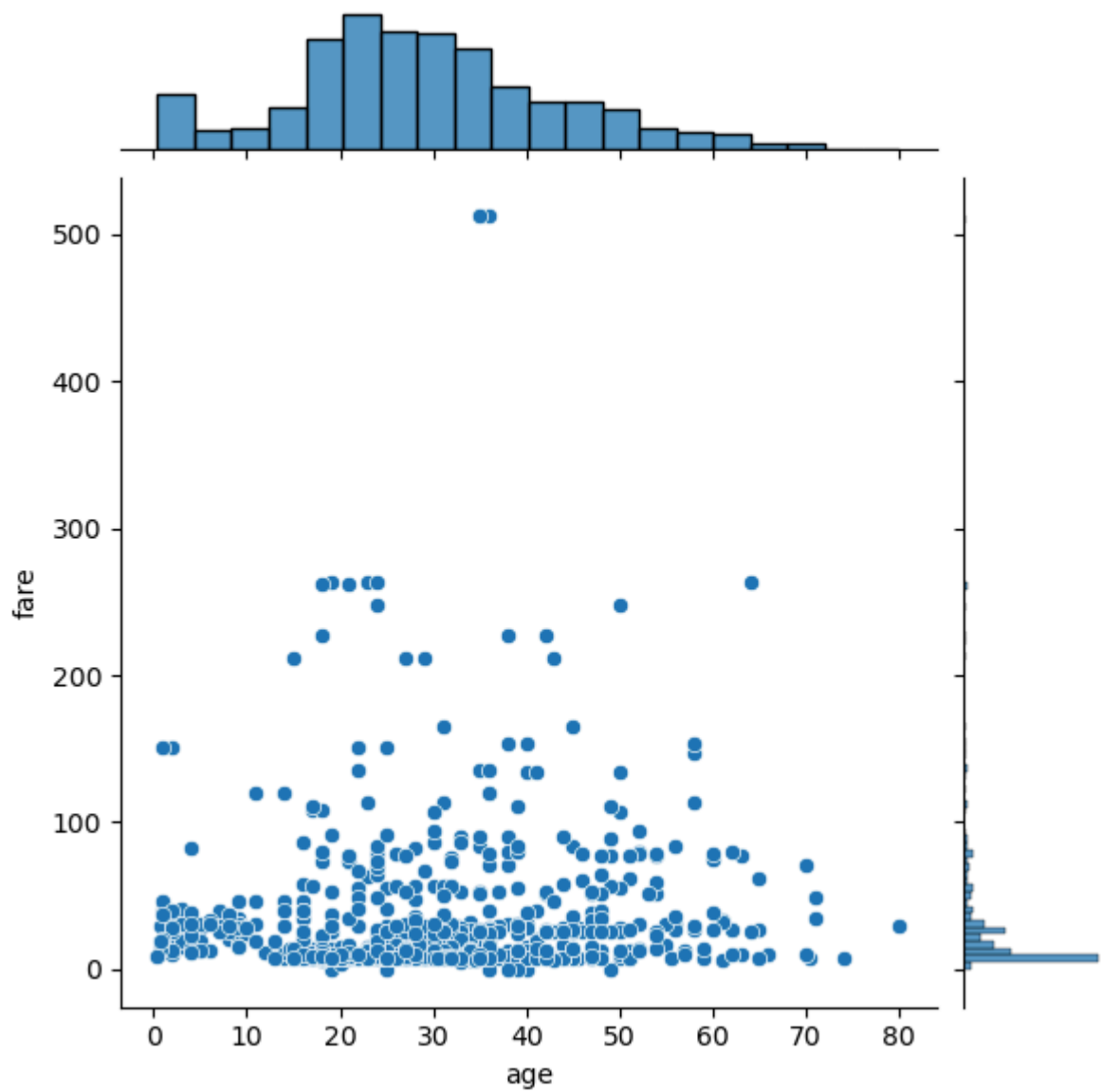
```
sns.distplot(dataset['age'], bins = 10,kde=False)
```

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



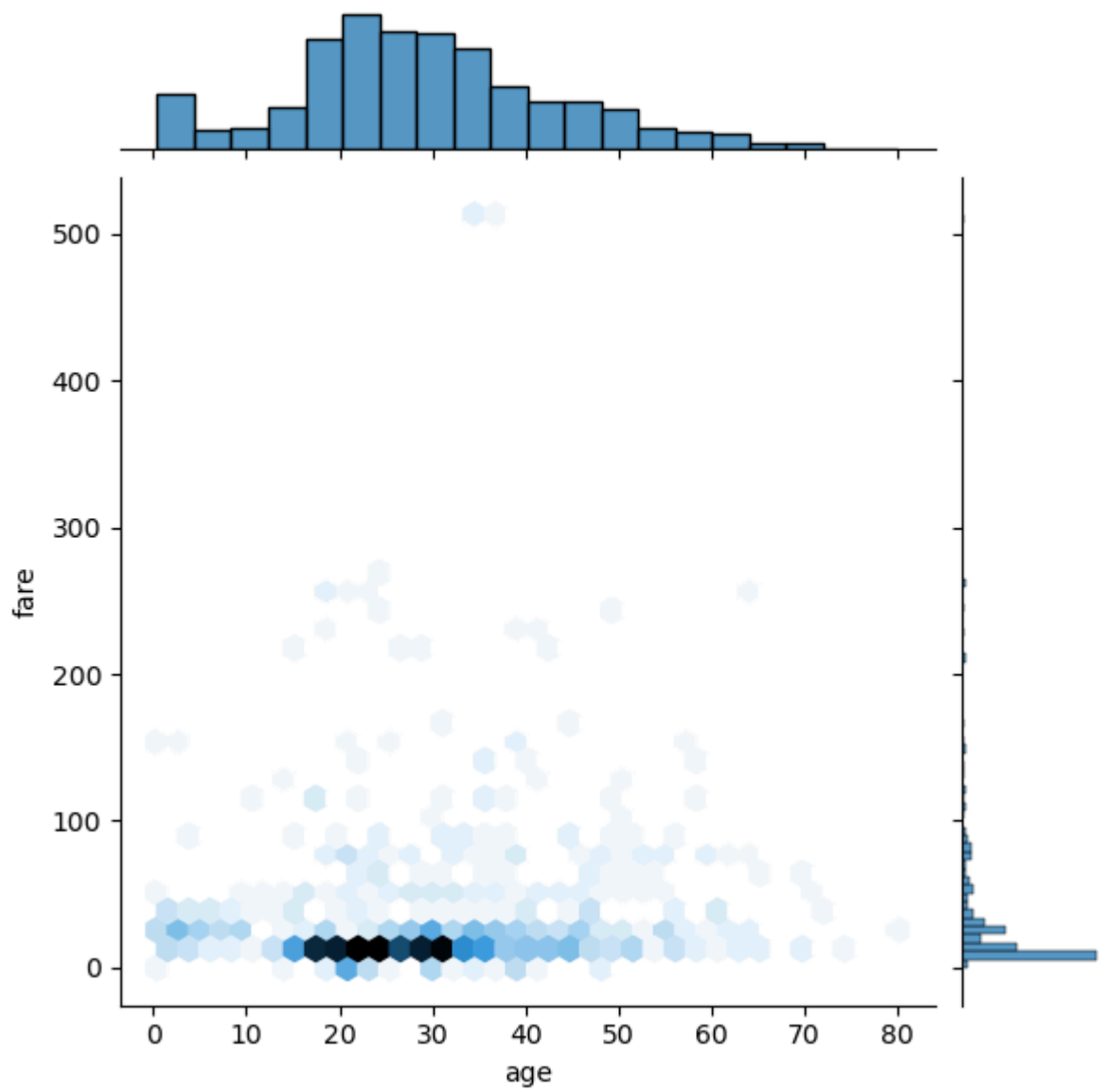
```
In [7]: sns.jointplot(x = dataset['age'], y = dataset['fare'], kind = 'scatter')
```

```
Out[7]: <seaborn.axisgrid.JointGrid at 0x27879236ad0>
```



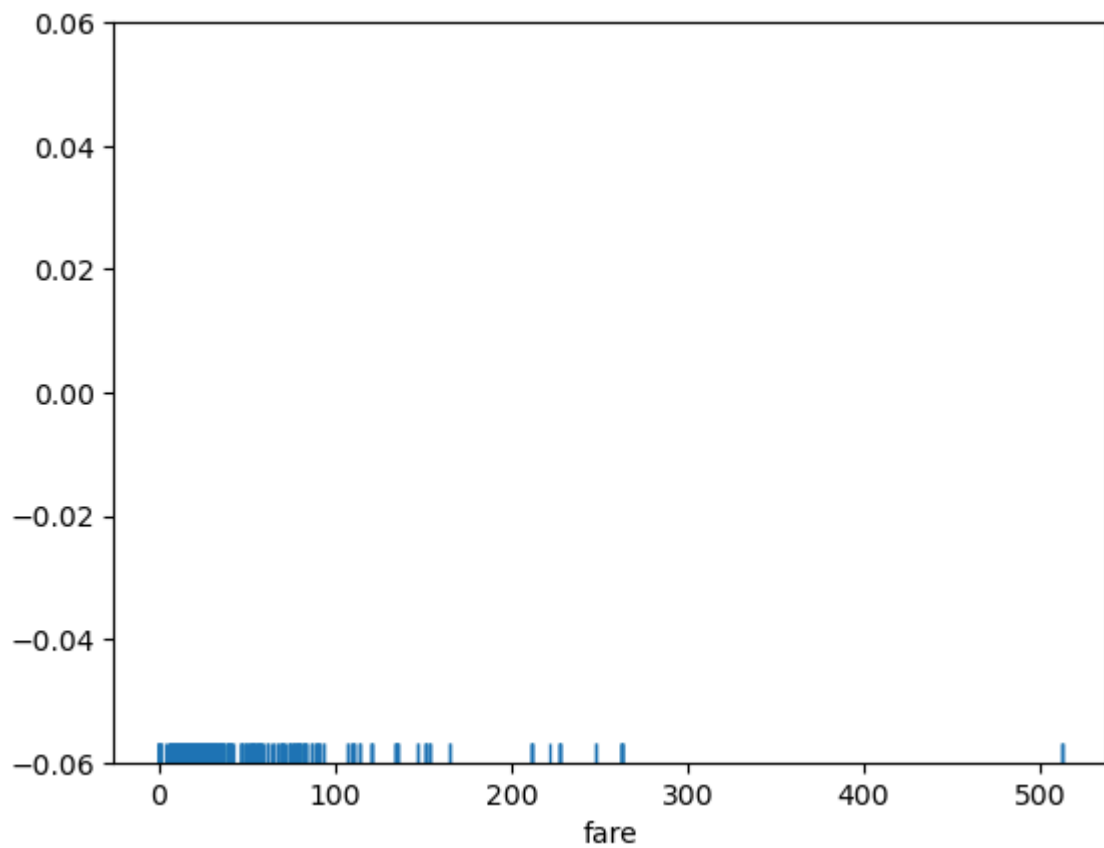
```
In [8]: sns.jointplot(x = dataset['age'], y = dataset['fare'], kind = 'hex')
```

```
Out[8]: <seaborn.axisgrid.JointGrid at 0x2787aa0a450>
```



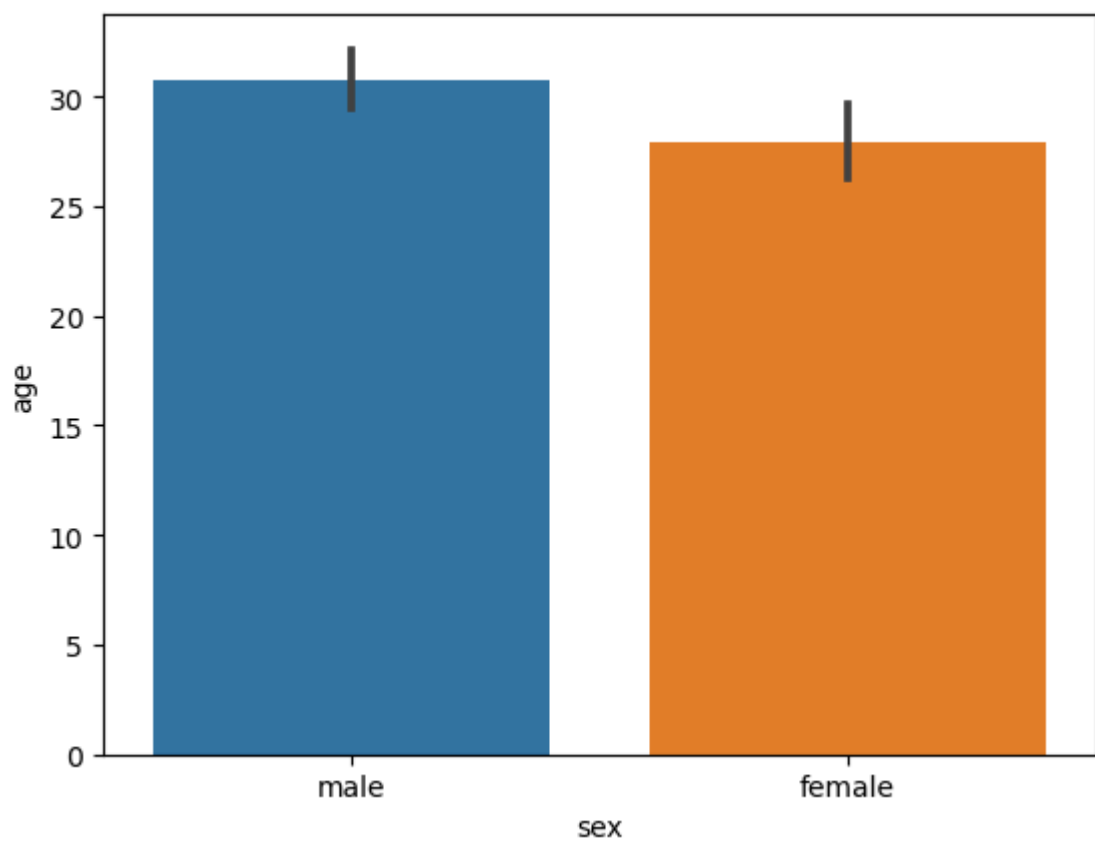
```
In [9]: sns.rugplot(dataset['fare'])
```

```
Out[9]: <Axes: xlabel='fare'>
```



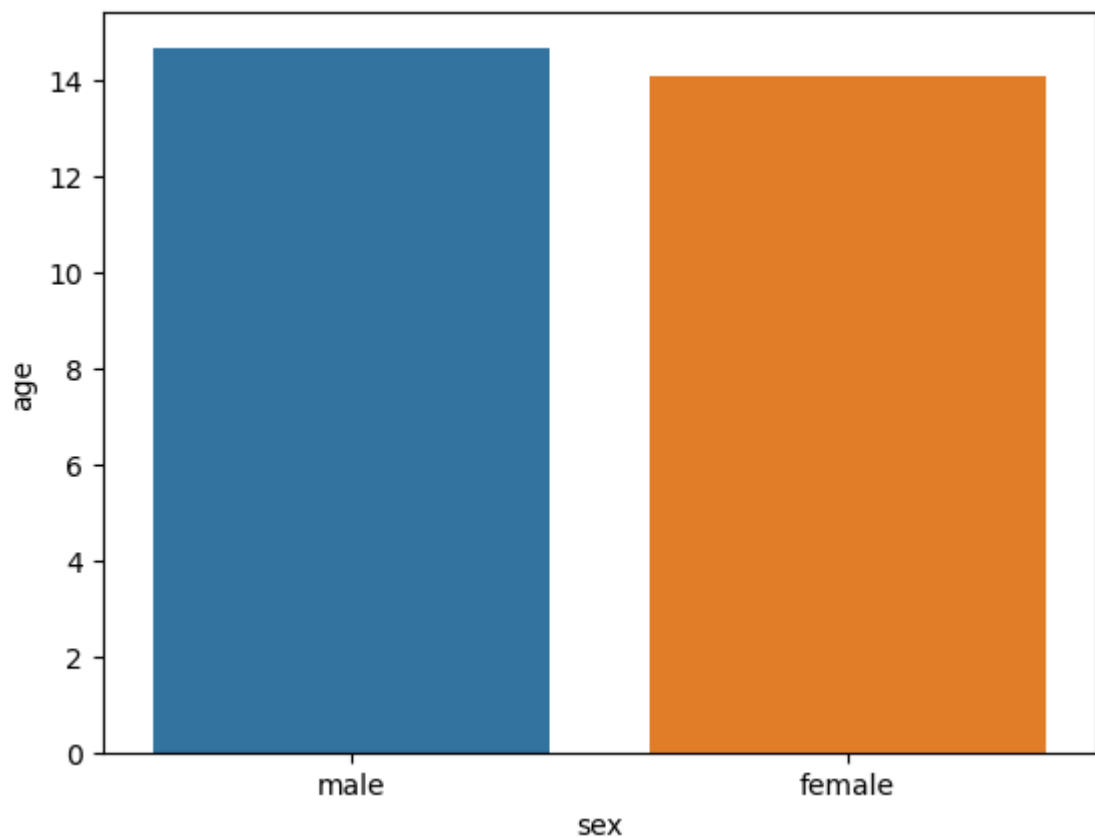
```
In [10]: sns.barplot(x='sex', y='age', data=dataset)
```

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



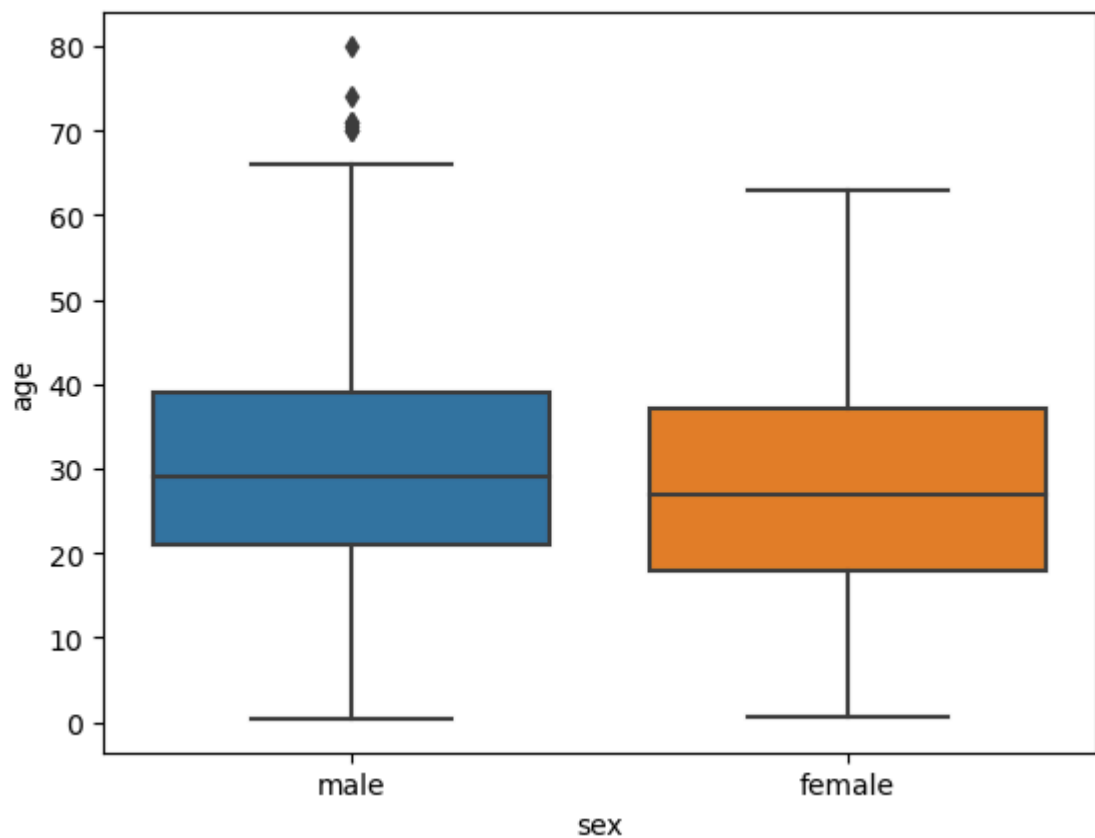
```
In [11]: sns.barplot(x='sex', y='age', data=dataset, estimator=np.std)
```

```
C:\Users\tsdes\anaconda3\Lib\site-packages\numpy\lib\nanfunctions.py:1556: Runtime  
Warning: All-NaN slice encountered  
return function_base._ureduce(a,  
Out[11]: <Axes: xlabel='sex', ylabel='age'>
```



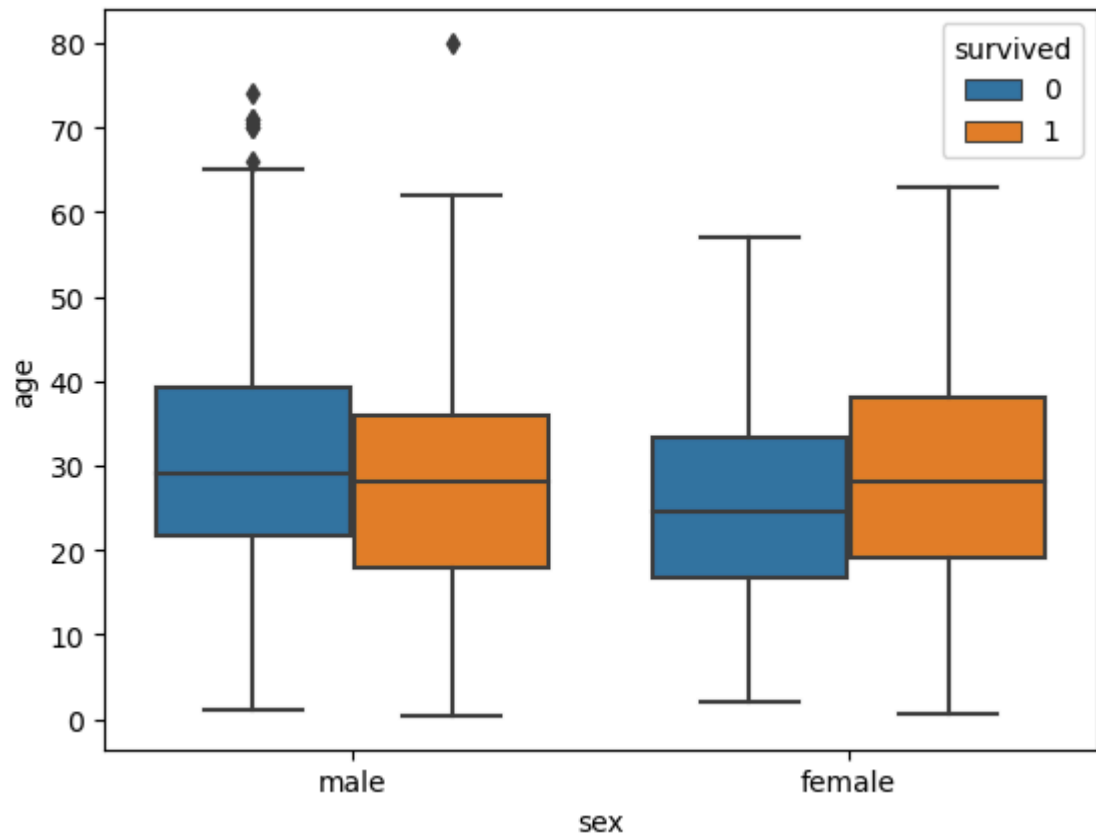
```
In [12]: sns.boxplot(x='sex', y='age', data=dataset)
```

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



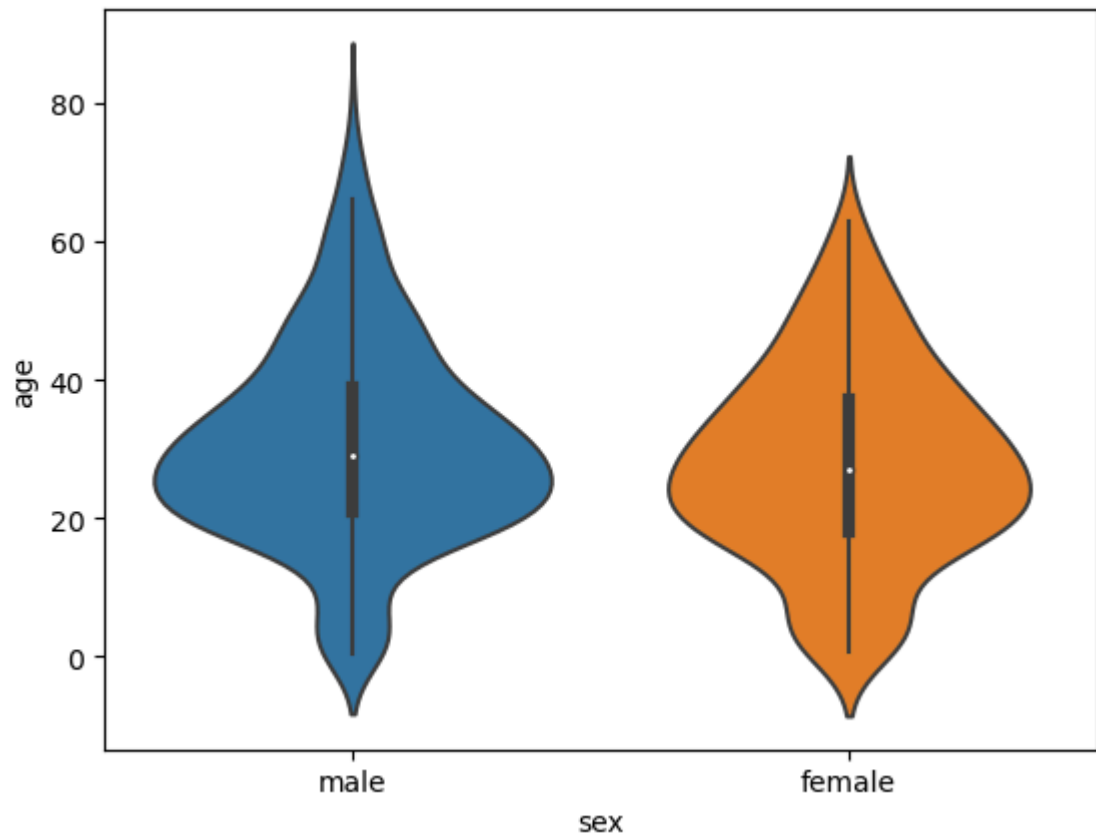
```
In [13]: sns.boxplot(x='sex', y='age', data=dataset, hue="survived")
```

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



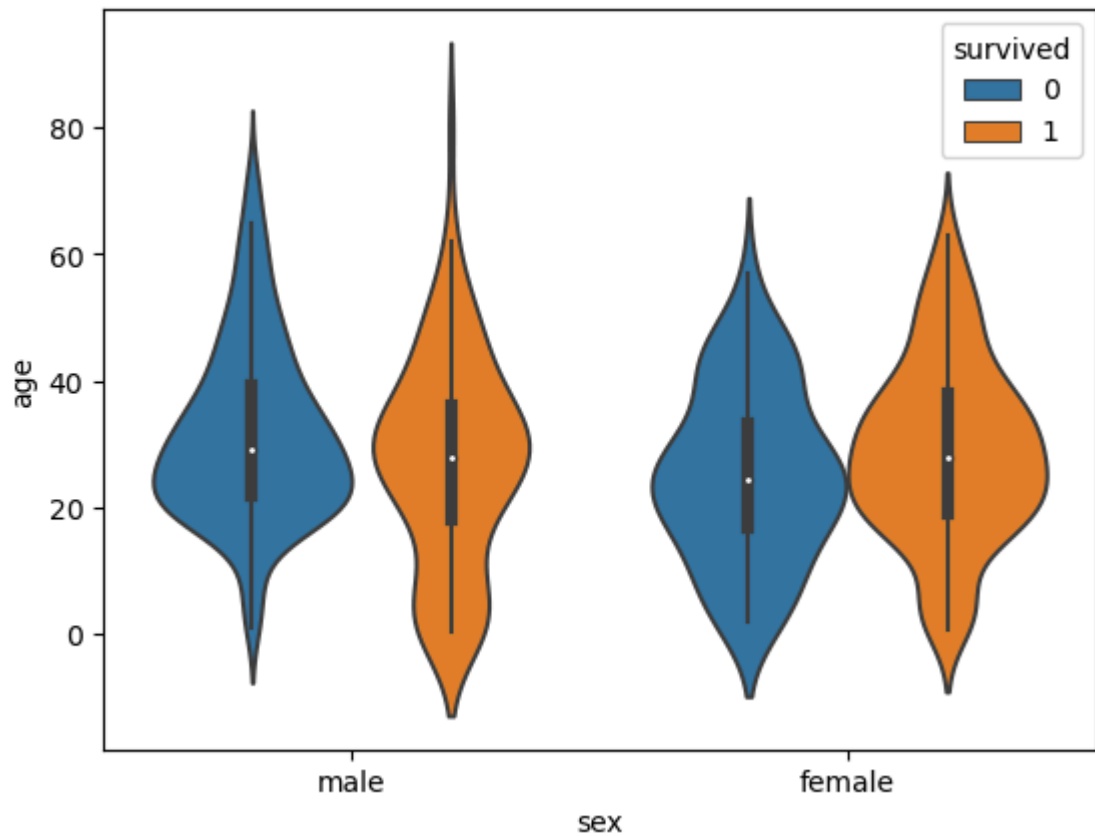
```
In [14]: sns.violinplot(x='sex', y='age', data=dataset)
```

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



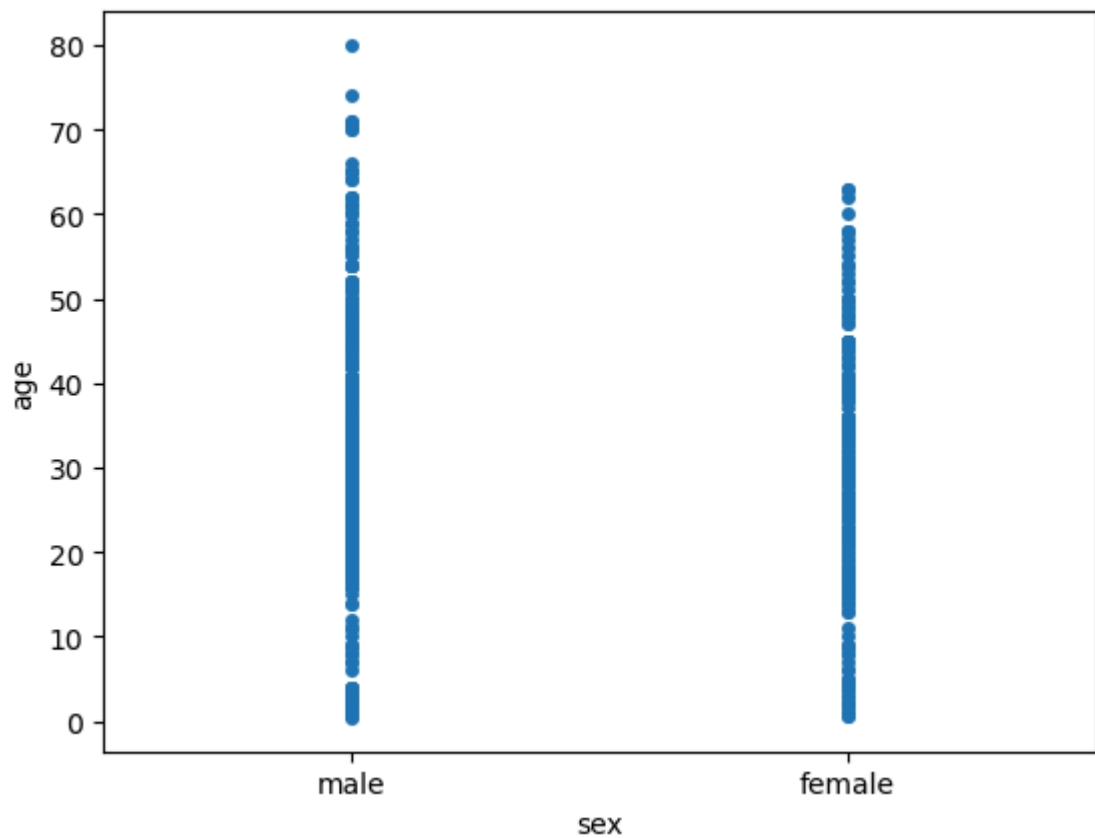

```
In [15]: sns.violinplot(x='sex', y='age', data=dataset, hue="survived")
```

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



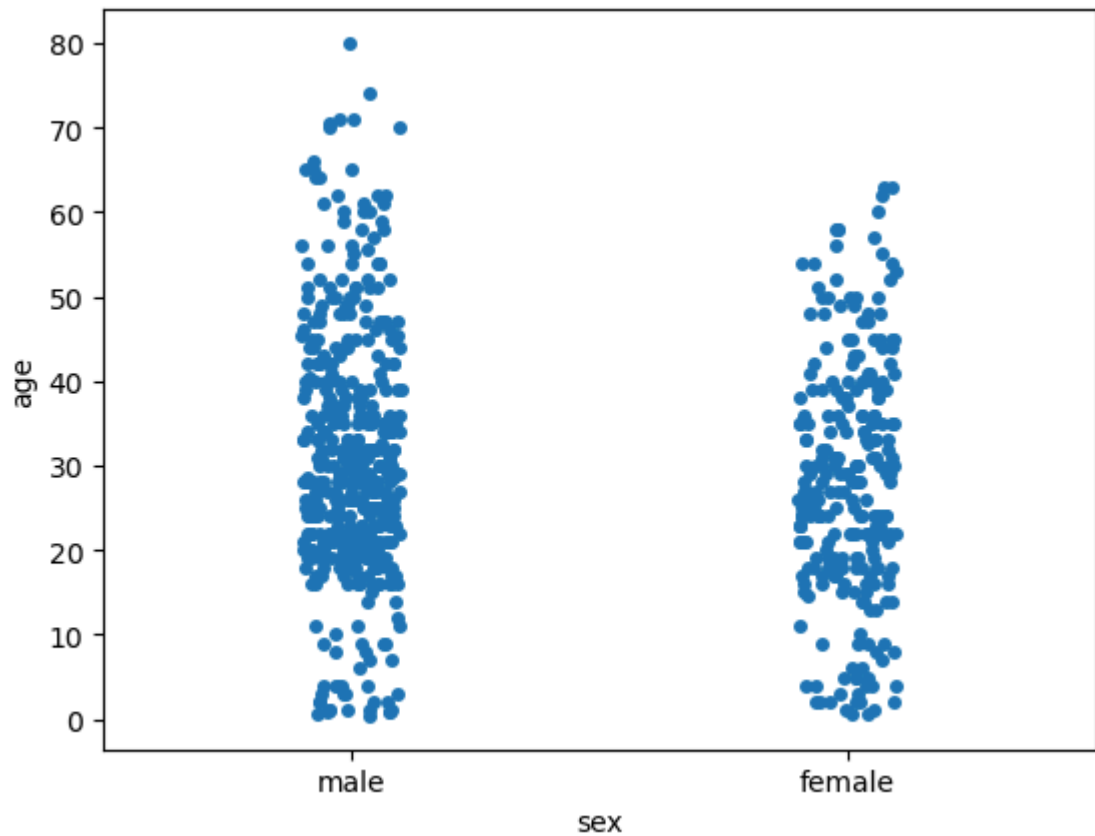
```
In [16]: sns.stripplot(x='sex', y='age', data=dataset, jitter=False)
```

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



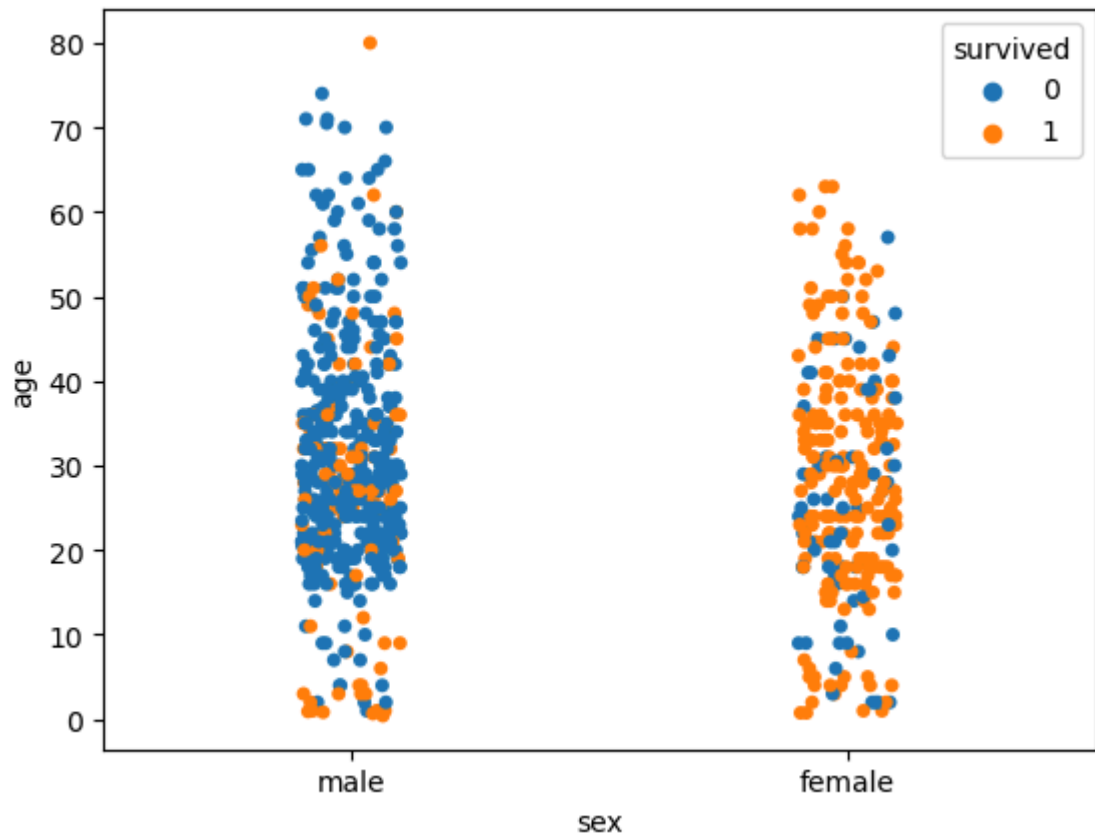
```
In [17]: sns.stripplot(x='sex', y='age', data=dataset, jitter=True)
```

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



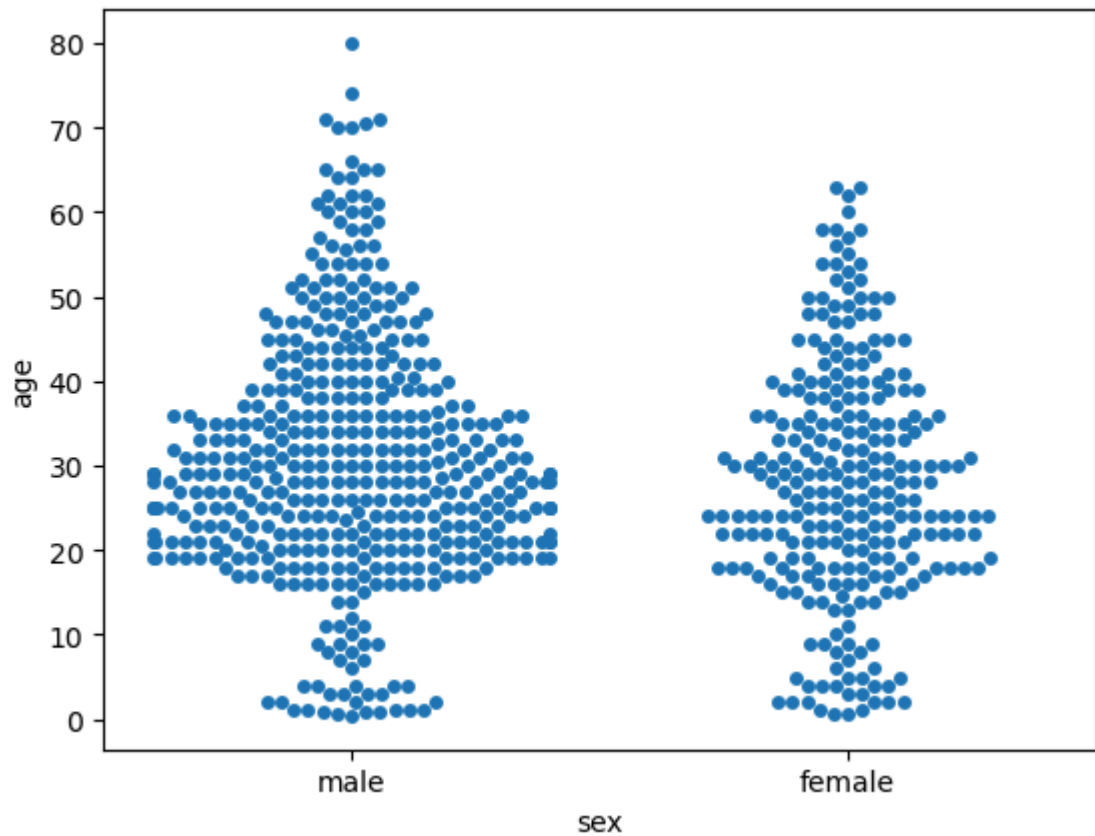
```
In [18]: sns.stripplot(x='sex', y='age', data=dataset, jitter=True, hue="survived")
```

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



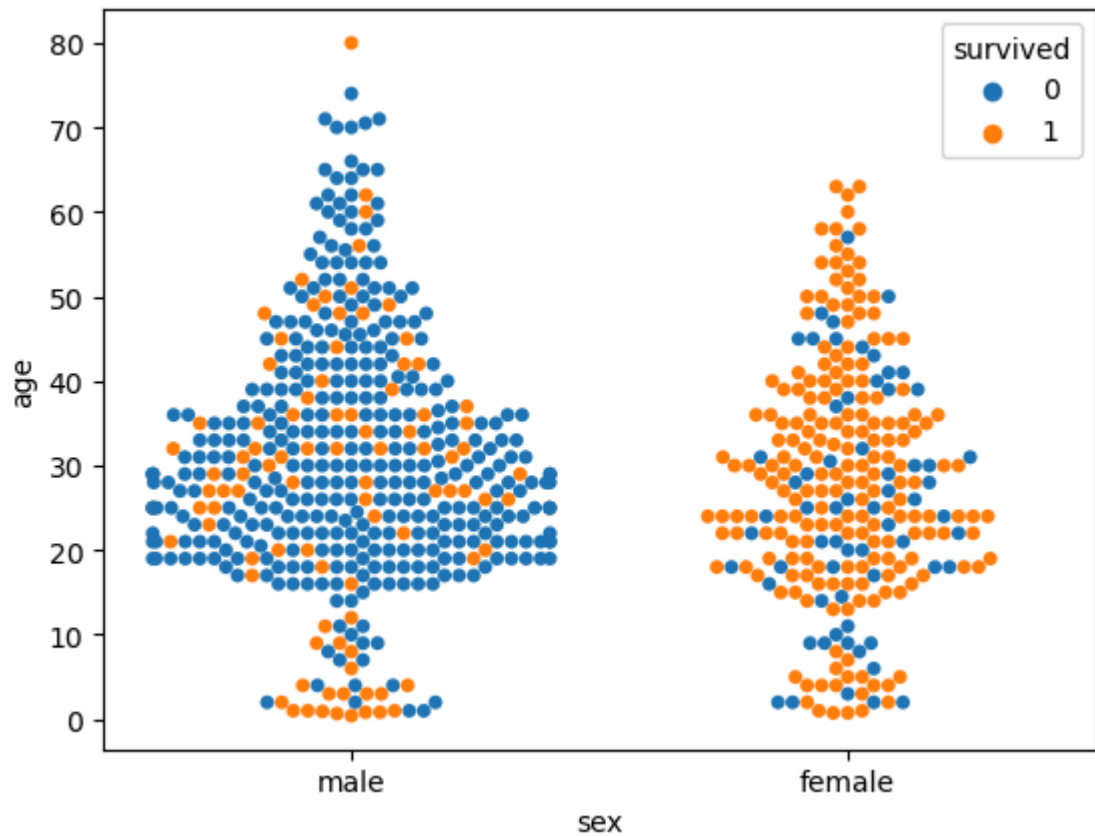
```
In [19]: sns.swarmplot(x='sex', y='age', data=dataset)
```

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



```
In [20]: sns.swarmplot(x='sex', y='age', data=dataset, hue="survived")
```

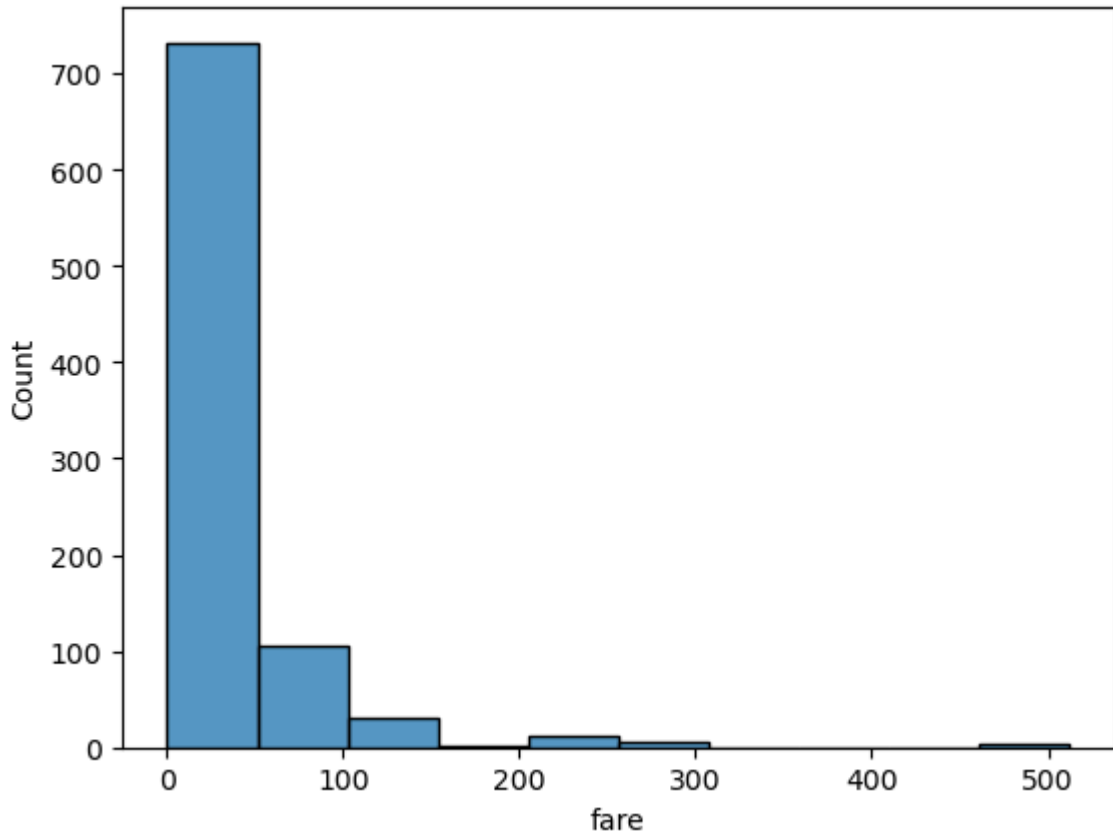
```
Out[20]: <Axes: xlabel='sex', ylabel='age'>
```



```
In [21]: #dataset = sns.load_dataset('titanic')
#dataset.head()
```

```
In [22]: import seaborn as sns
dataset = sns.load_dataset('titanic')
sns.histplot(dataset["fare"], kde=False, bins=10)
```

```
Out[22]: <Axes: xlabel='fare', ylabel='Count'>
```



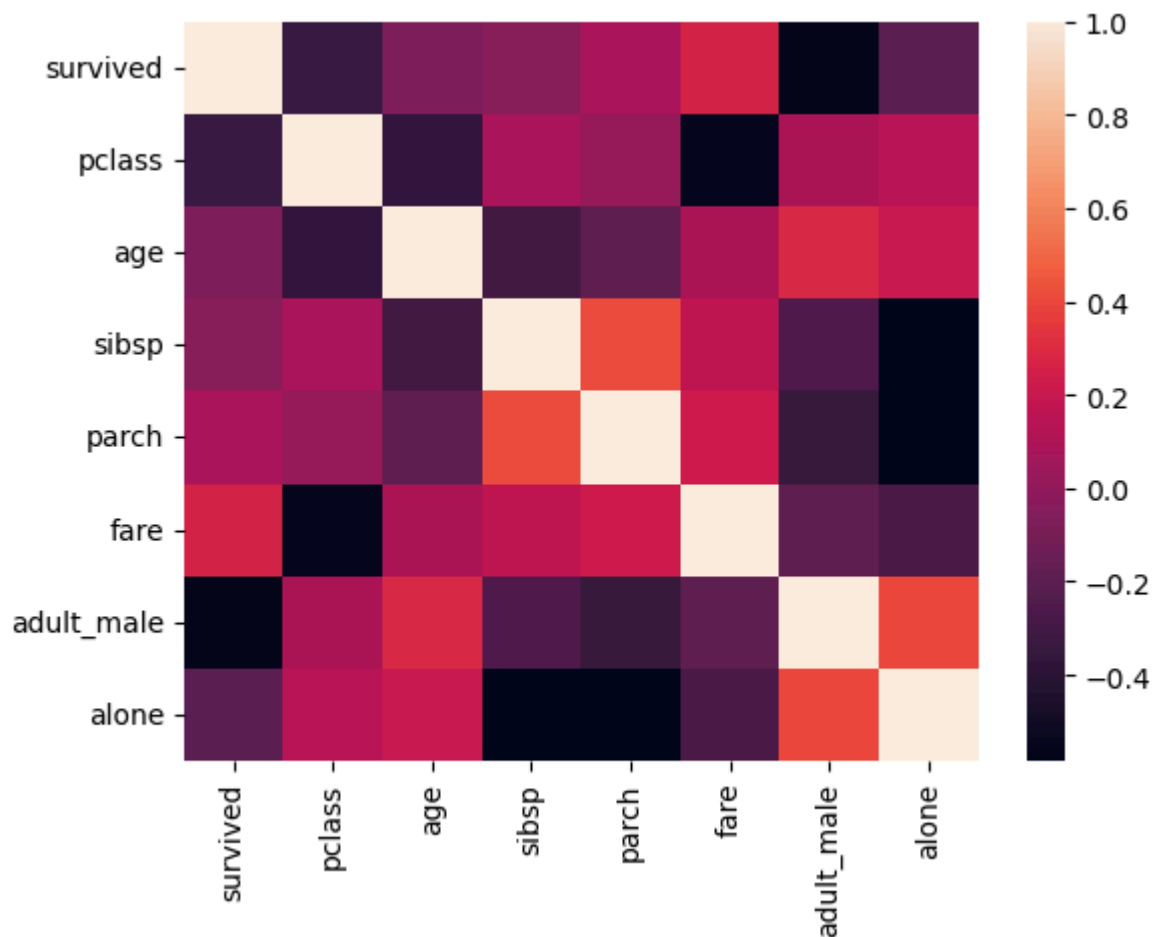
```
In [23]: dataset.corr(numeric_only = True)
```

```
Out[23]:
```

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

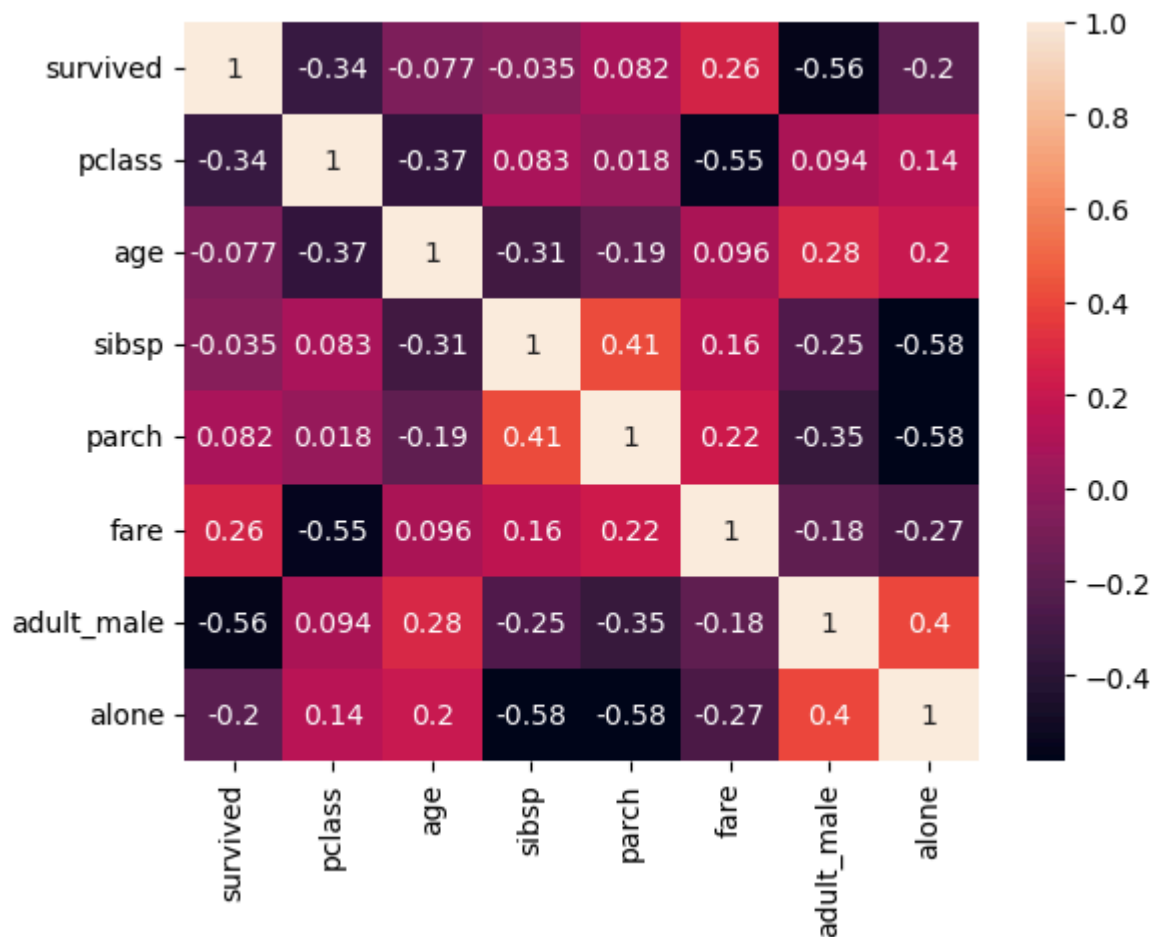
```
In [24]: corr= dataset.corr(numeric_only = True)
sns.heatmap(corr)
```

```
Out[24]: <Axes: >
```



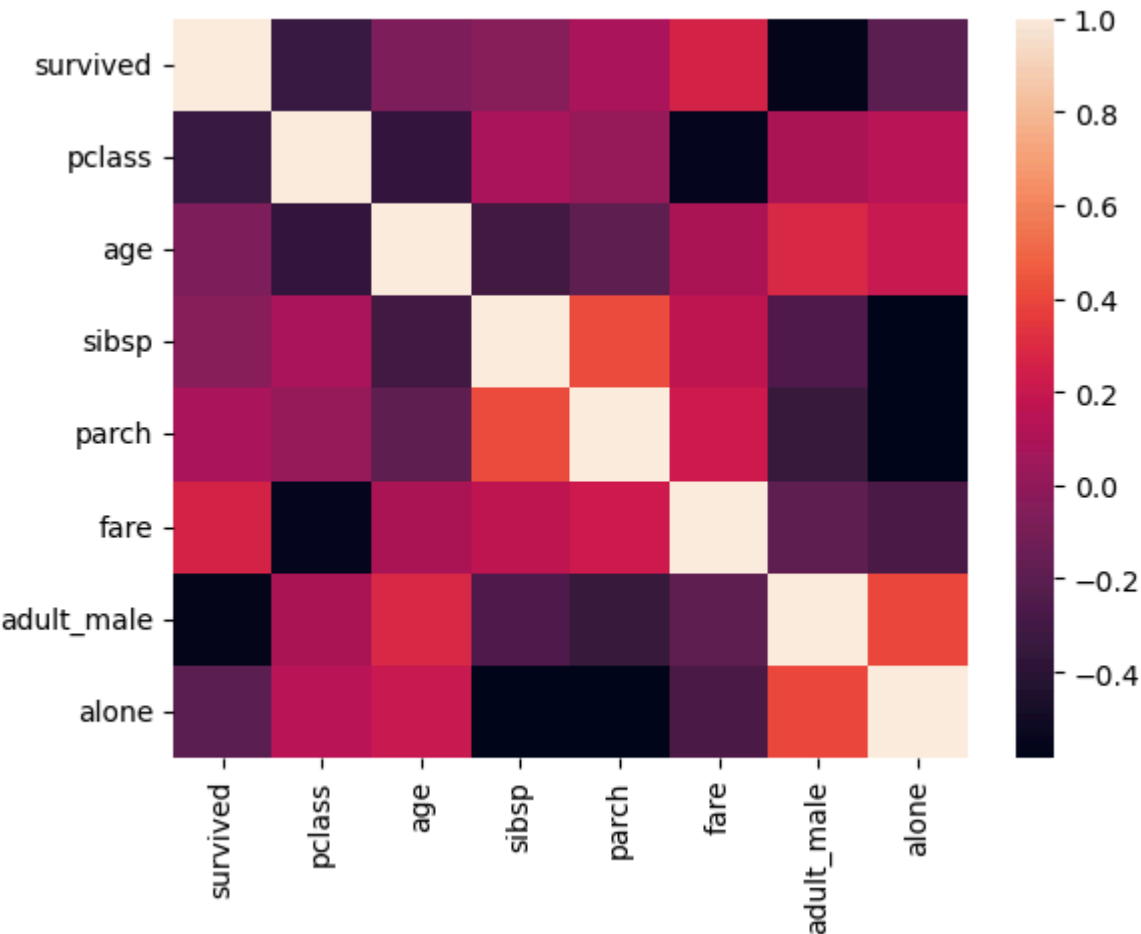
```
In [25]: corr = dataset.corr(numeric_only = True)
sns.heatmap(corr, annot=True)
```

```
Out[25]: <Axes: >
```



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

```
Out[26]: <Axes: >
```



```
In [ ]: Name :- Swayambhu Bhapkar
Roll No: 13121
```