In [1]:
```
pip install seaborn
```

```
Requirement already satisfied: seaborn in d:\anaconda\lib\site-packages (0.1
3.2)
Requirement already satisfied: numpy!=1.24.0,>=1.20 in d:\anaconda\lib\site-
packages (from seaborn) (1.26.4)
Requirement already satisfied: pandas>=1.2 in d:\anaconda\lib\site-packages
(from seaborn) (2.2.2)
Requirement already satisfied: matplotlib!=3.6.1,>=3.4 in d:\anaconda\lib\si
te-packages (from seaborn) (3.9.2)
Requirement already satisfied: contourpy>=1.0.1 in d:\anaconda\lib\site-pack
ages (from matplotlib!=3.6.1,>=3.4->seaborn) (1.2.0)
Requirement already satisfied: cycler>=0.10 in d:\anaconda\lib\site-packages
(from matplotlib!=3.6.1,>=3.4->seaborn) (0.11.0)
Requirement already satisfied: fonttools>=4.22.0 in d:\anaconda\lib\site-pac
kages (from matplotlib!=3.6.1,>=3.4->seaborn) (4.51.0)
Requirement already satisfied: kiwisolver>=1.3.1 in d:\anaconda\lib\site-pac
kages (from matplotlib!=3.6.1,>=3.4->seaborn) (1.4.4)
Requirement already satisfied: packaging>=20.0 in d:\anaconda\lib\site-packa
ges (from matplotlib!=3.6.1,>=3.4->seaborn) (24.1)
Requirement already satisfied: pillow>=8 in d:\anaconda\lib\site-packages (f
rom matplotlib!=3.6.1,>=3.4->seaborn) (10.4.0)
Requirement already satisfied: pyparsing>=2.3.1 in d:\anaconda\lib\site-pack
ages (from matplotlib!=3.6.1,>=3.4->seaborn) (3.1.2)
Requirement already satisfied: python-dateutil>=2.7 in d:\anaconda\lib\site-
packages (from matplotlib!=3.6.1,>=3.4->seaborn) (2.9.0.post0)
Requirement already satisfied: pytz>=2020.1 in d:\anaconda\lib\site-packages
(from pandas>=1.2->seaborn) (2024.1)
Requirement already satisfied: tzdata>=2022.7 in d:\anaconda\lib\site-packag
es (from pandas>=1.2->seaborn) (2023.3)
Requirement already satisfied: six>=1.5 in d:\anaconda\lib\site-packages (fr
om python-dateutil>=2.7->matplotlib!=3.6.1,>=3.4->seaborn) (1.16.0)
Note: you may need to restart the kernel to use updated packages.
```

In [2]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

In [3]:
```
titanic = sns.load_dataset('titanic')
```

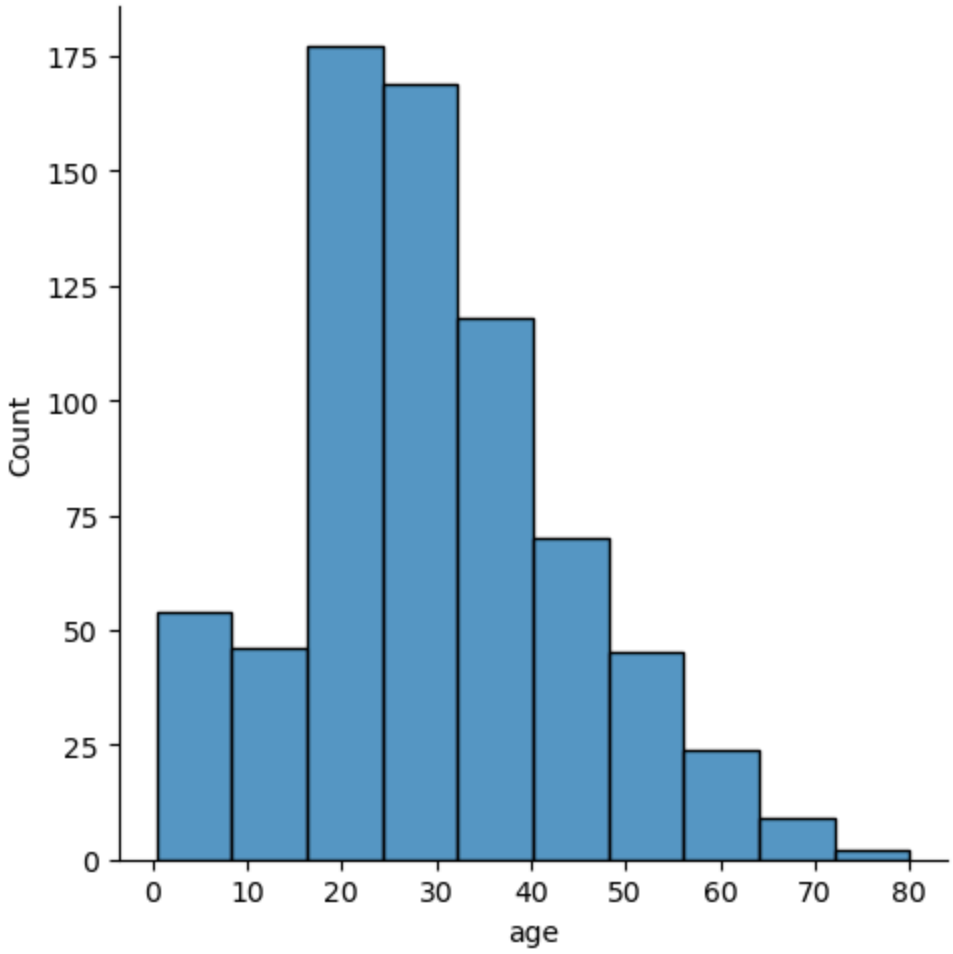
In [4]:
```
titanic.head()
```

Out[4]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	w
0	0	3	male	22.0	1	0	7.2500	S	Third	m
1	1	1	female	38.0	1	0	71.2833	C	First	wom
2	1	3	female	26.0	0	0	7.9250	S	Third	wom
3	1	1	female	35.0	1	0	53.1000	S	First	wom
4	0	3	male	35.0	0	0	8.0500	S	Third	m

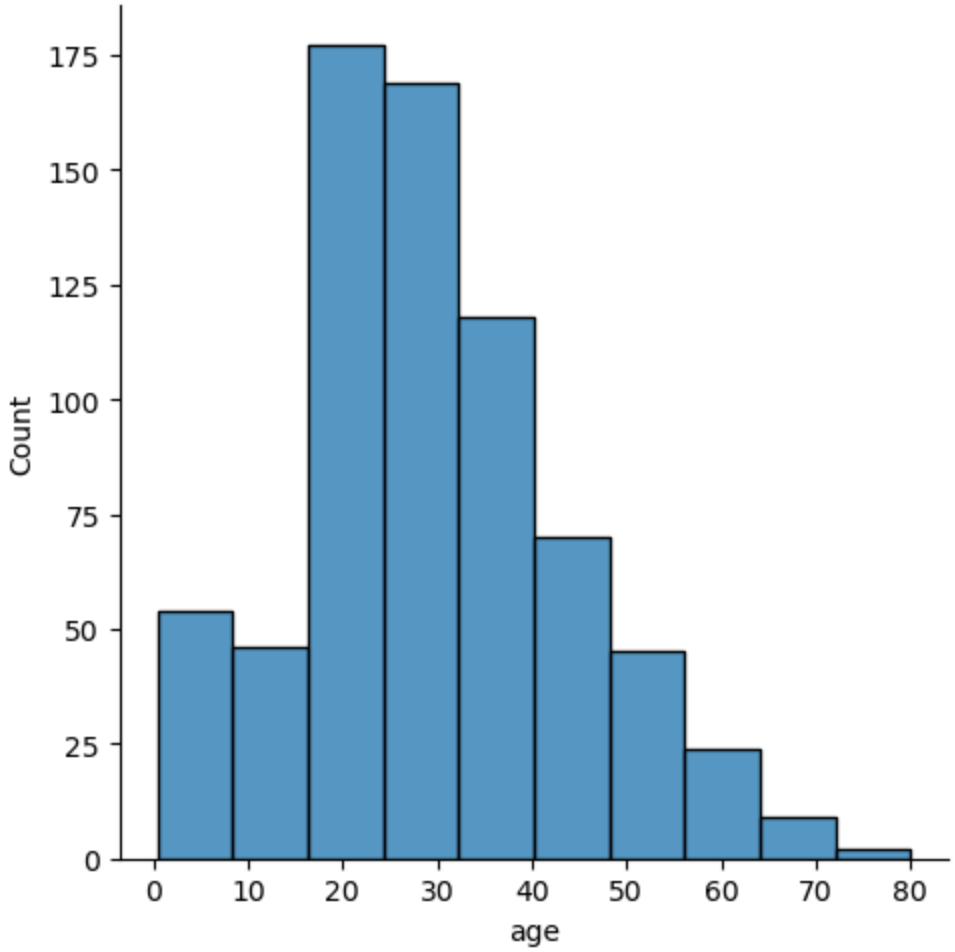
In [5]:
```
sns.displot(titanic['age'], bins = 10)
```

Out[5]: <seaborn.axisgrid.FacetGrid at 0x2295a29a000>



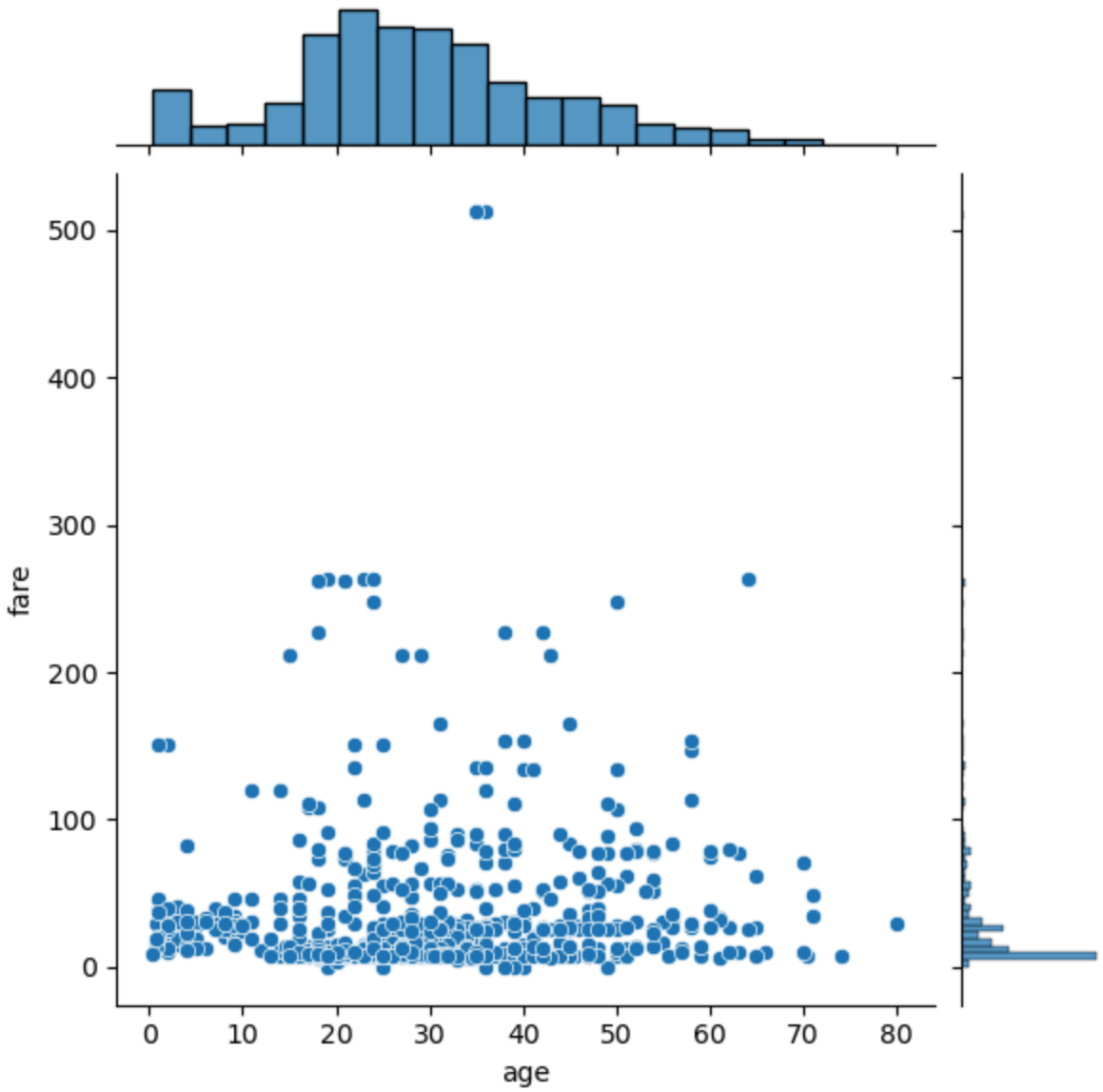
In [6]:
```
sns.displot(titanic['age'], bins = 10, kde = False)
```

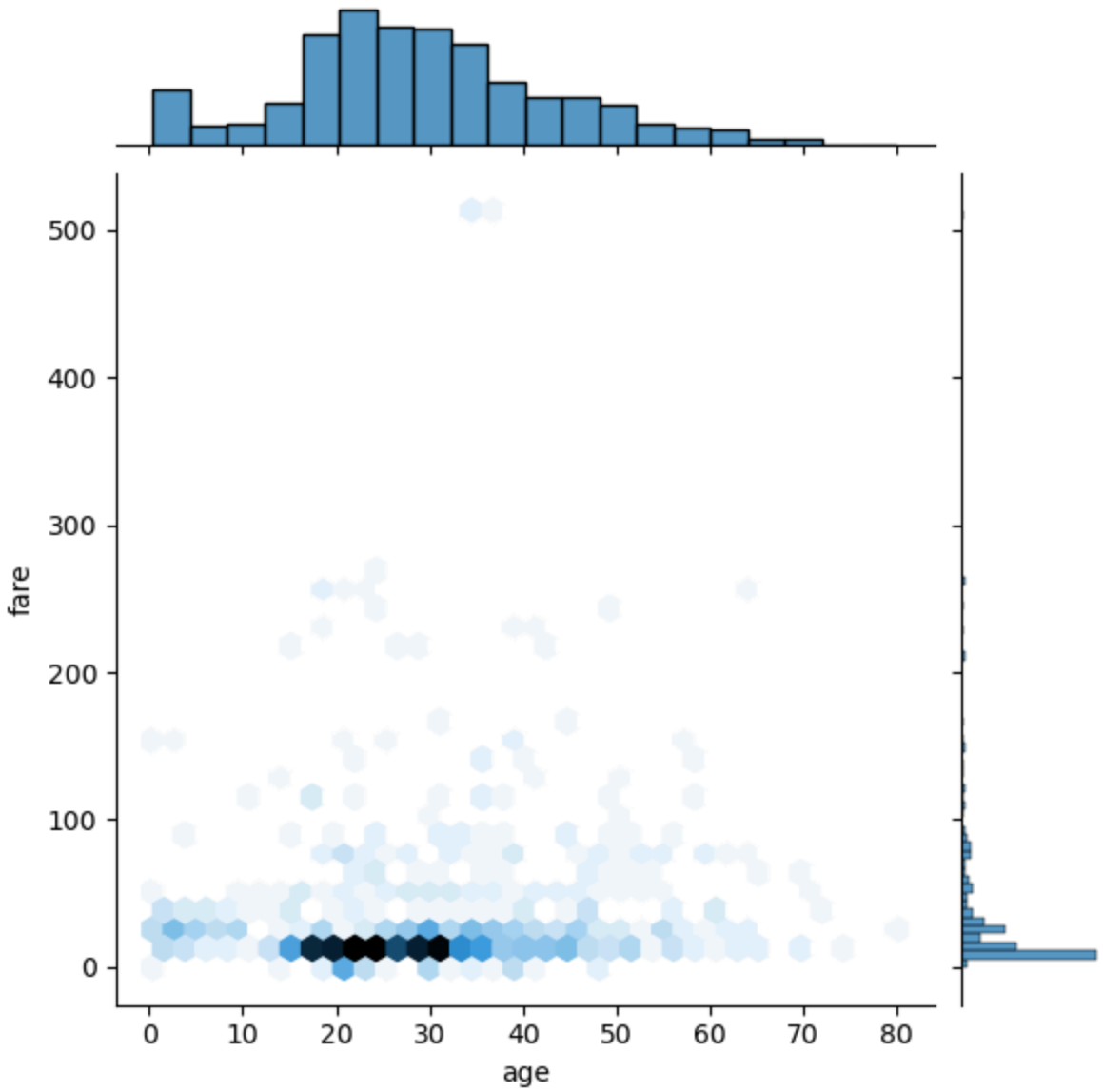
Out[6]: <seaborn.axisgrid.FacetGrid at 0x2295a3e28d0>



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

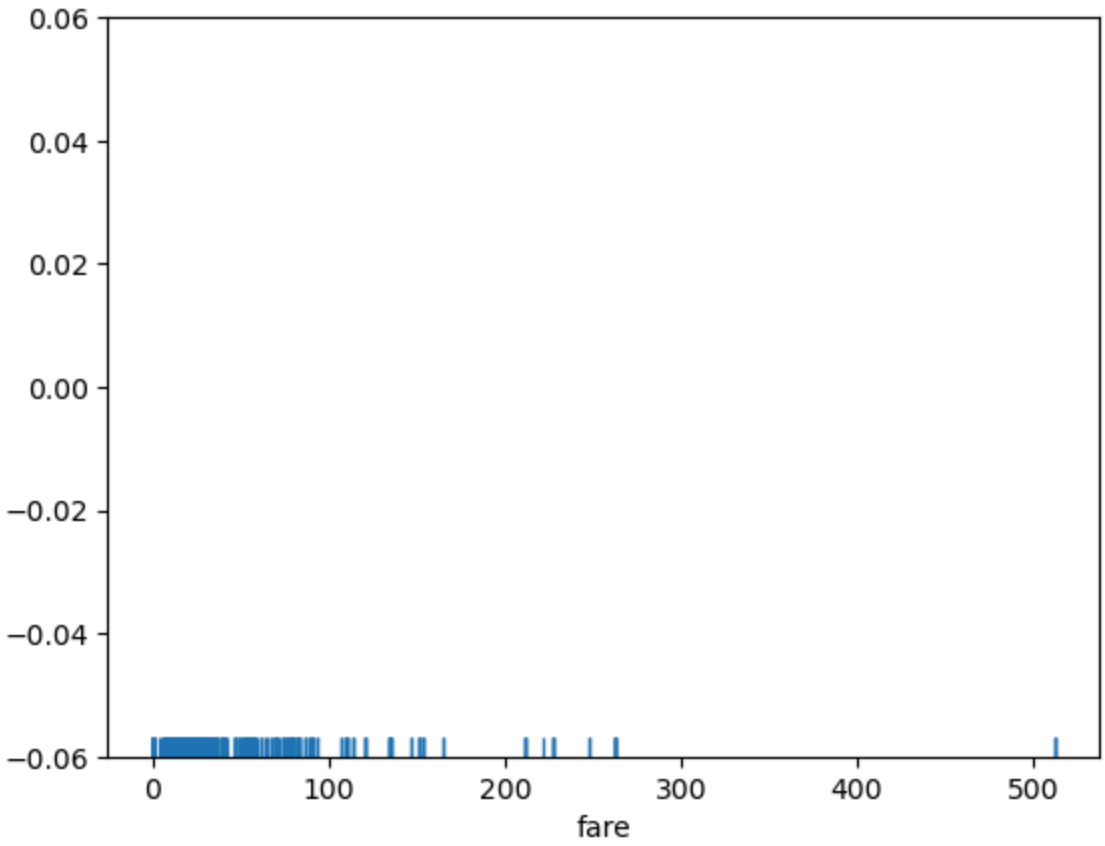
Out[7]: <seaborn.axisgrid.JointGrid at 0x2295aecab10>


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



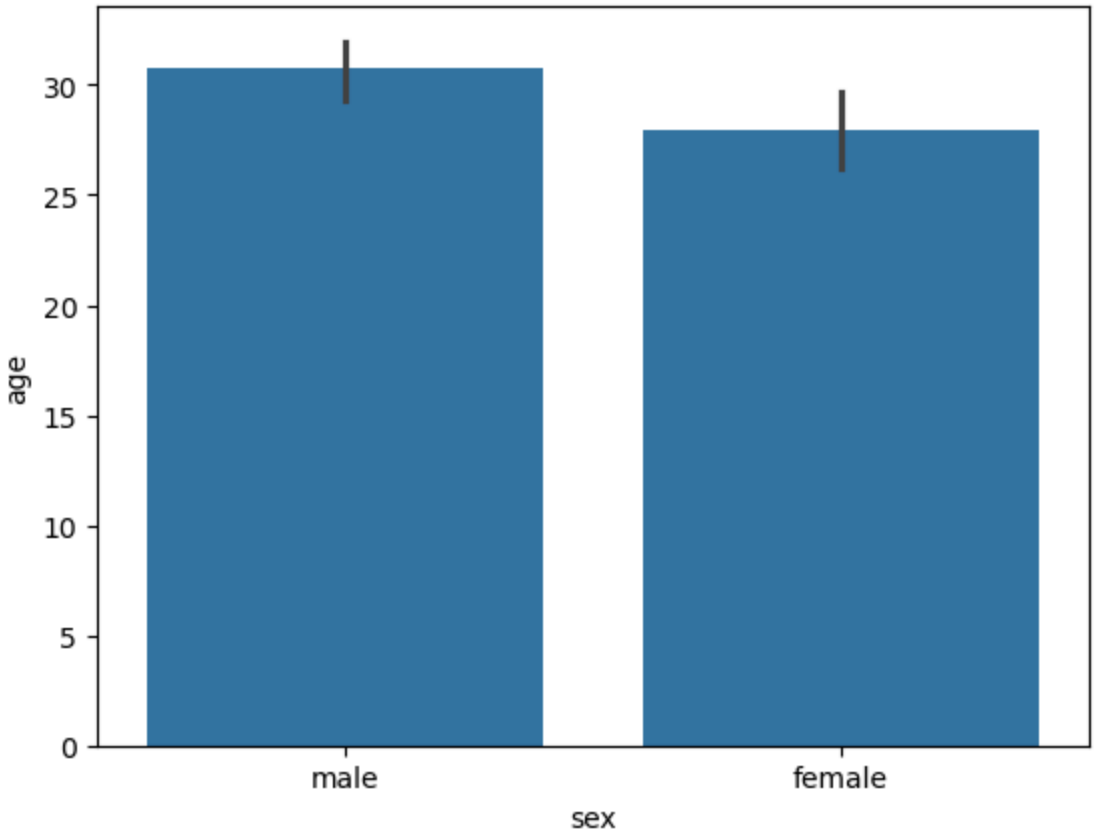
In [8]:
```
sns.rugplot(titanic['fare'])
```

Out[8]: <Axes: xlabel='fare'>



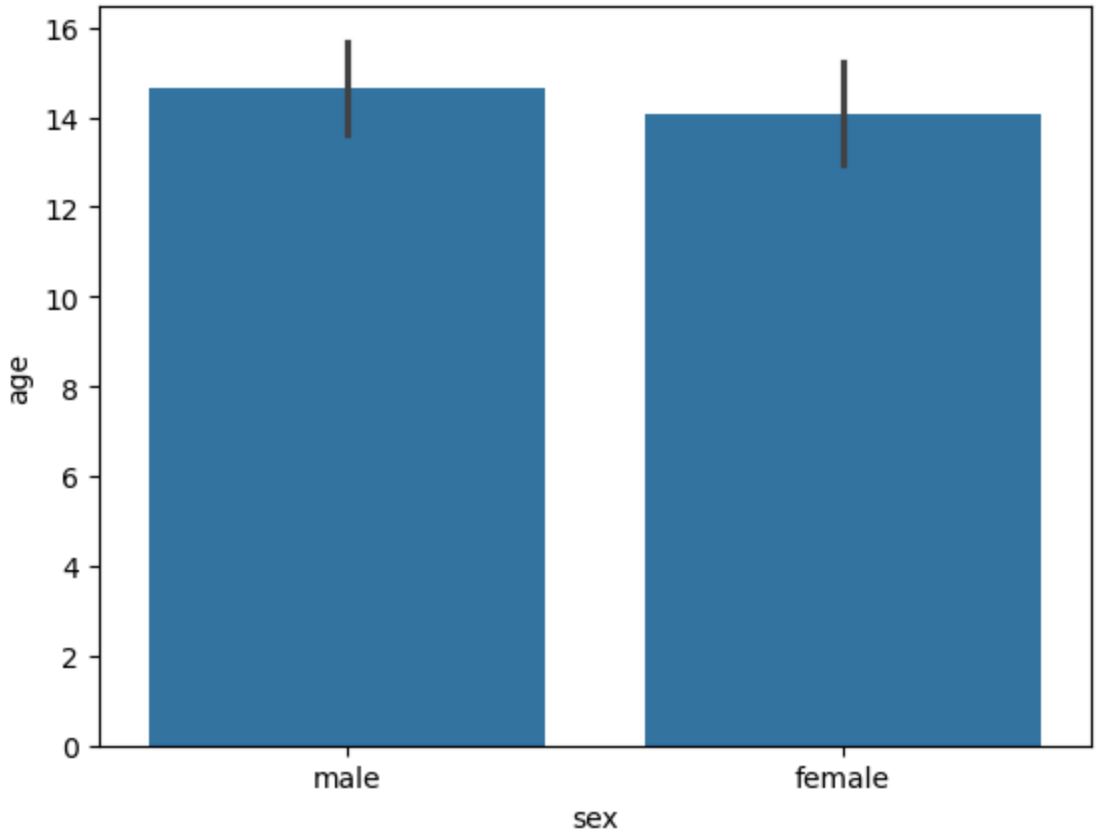
In [9]:
```
sns.barplot(x = 'sex', y = 'age', data = titanic)
```

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



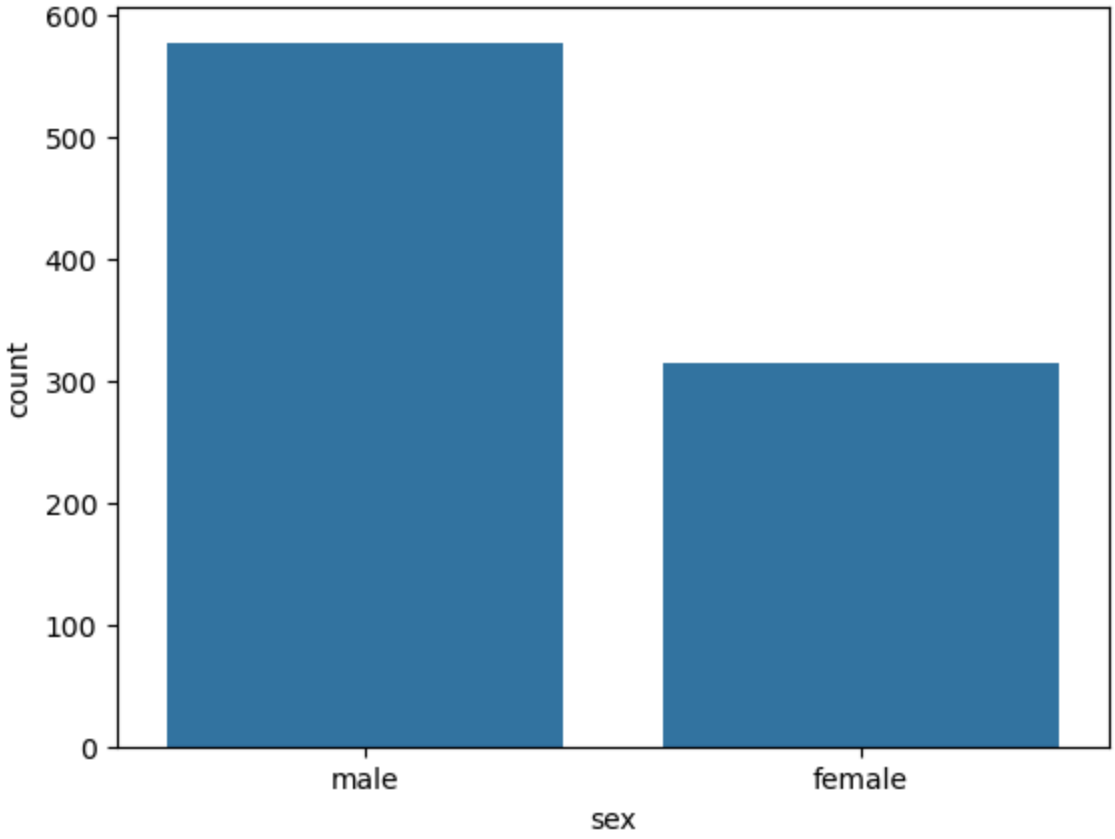
In [10]:
```
sns.barplot(x = 'sex', y = 'age', data = titanic, estimator = np.std)
```

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



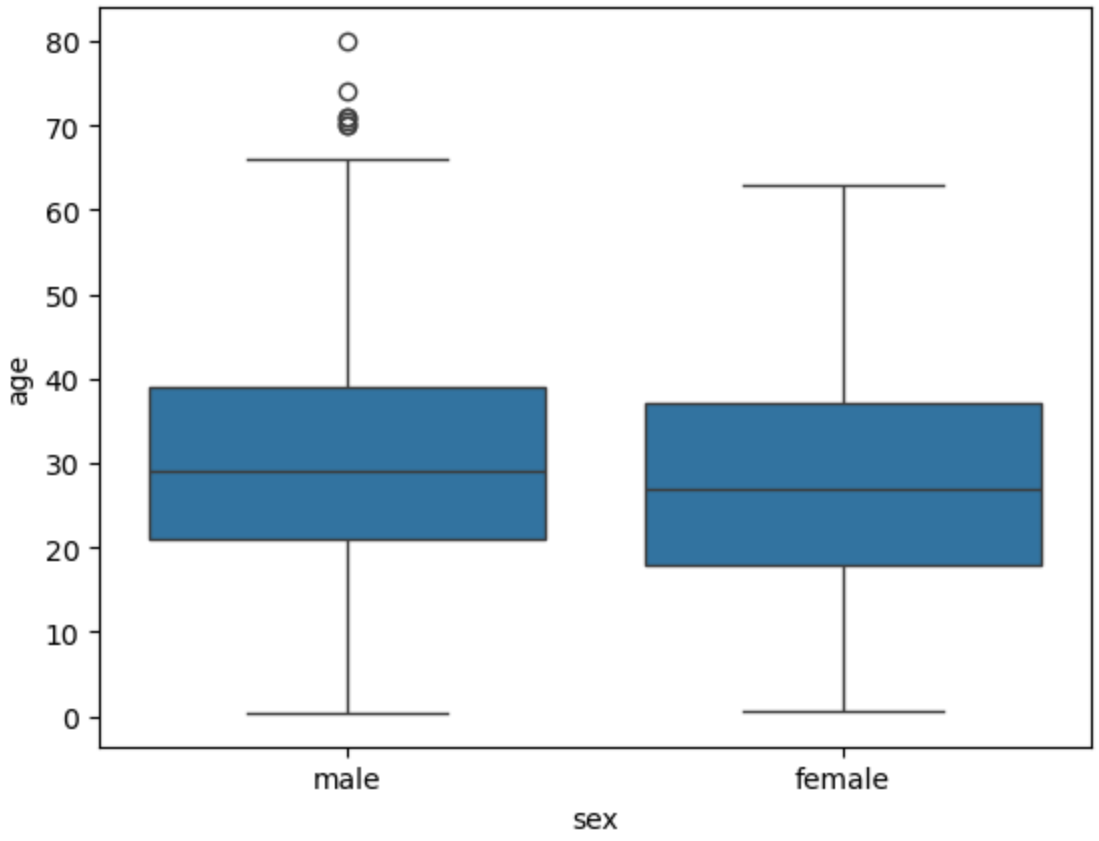
In [11]:
```
sns.countplot(x = 'sex', data = titanic)
```

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



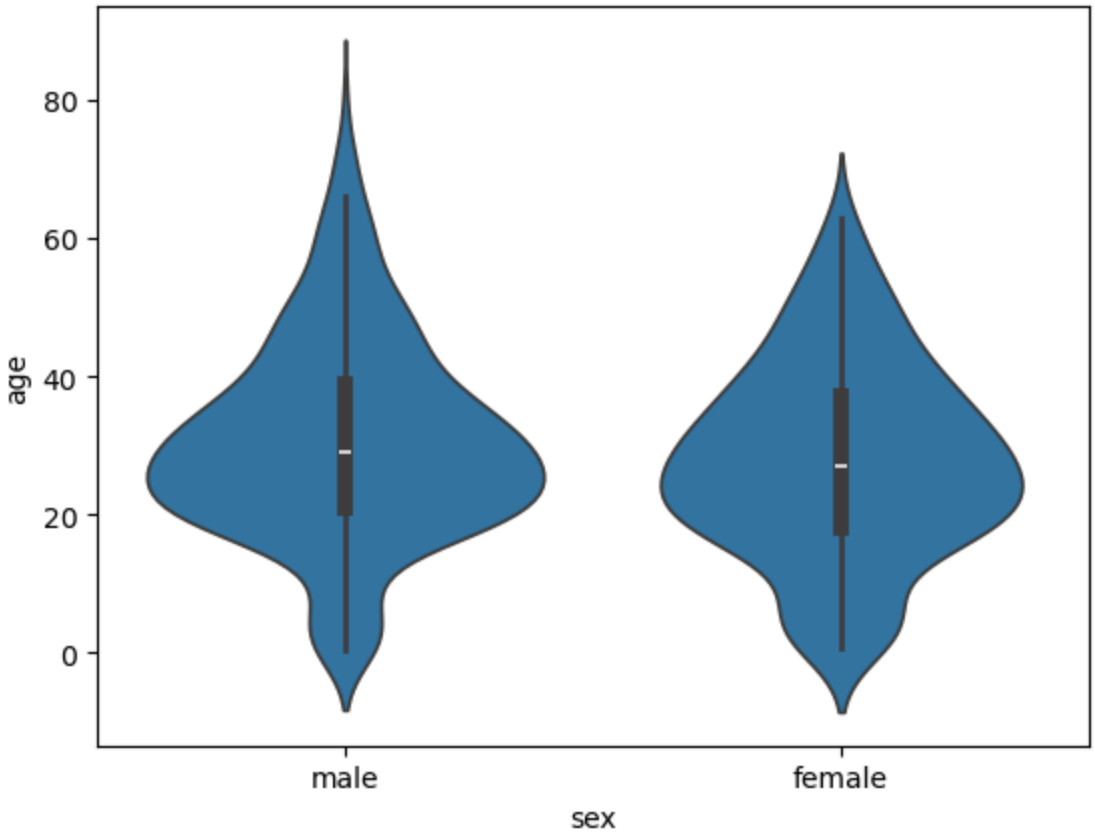
In [12]:
```
sns.boxplot(x = 'sex', y = 'age', data = titanic)
```

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



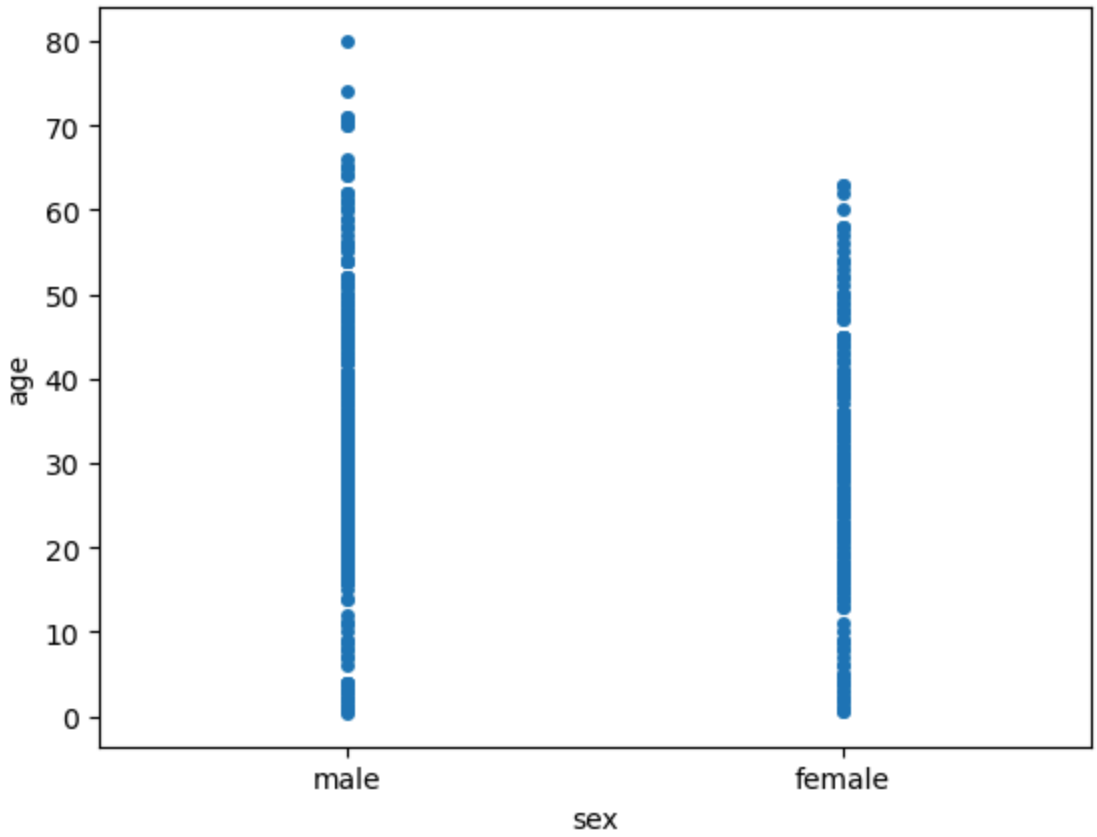
In [13]:
```
sns.violinplot(x = 'sex', y = 'age', data = titanic)
```

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



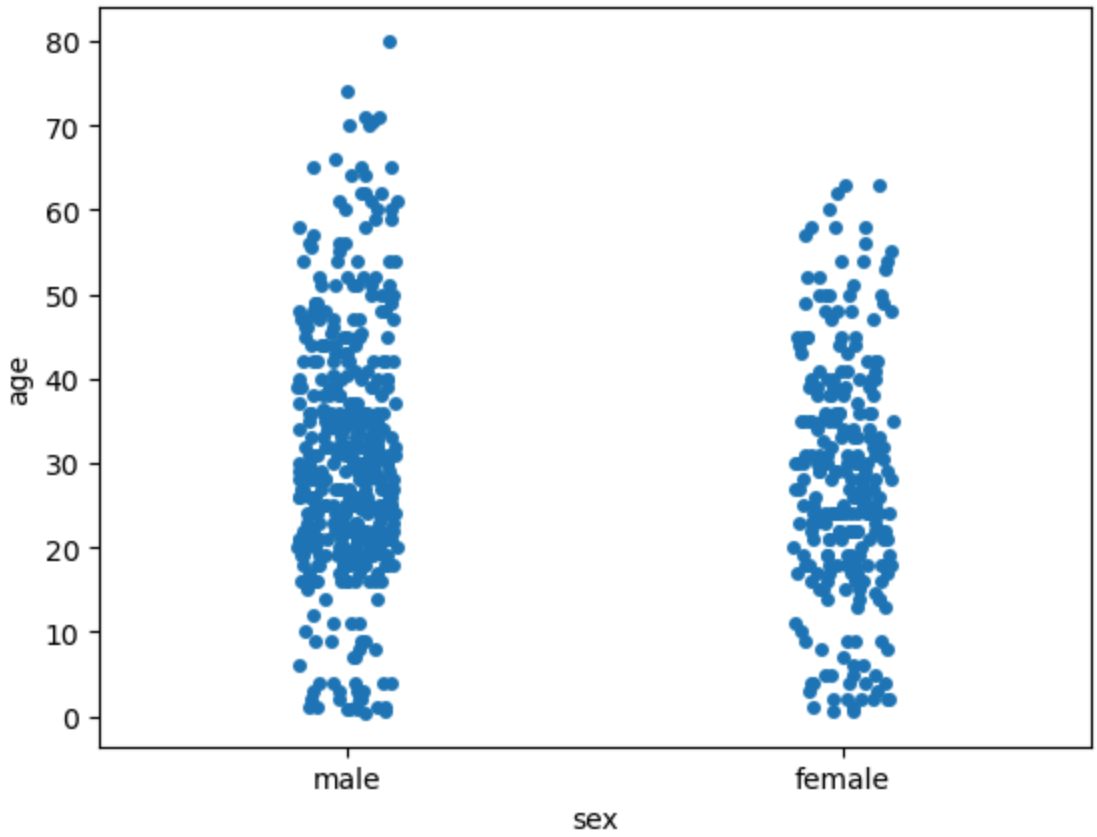
In [14]:
```
sns.stripplot(x = 'sex', y = 'age', data = titanic, jitter=False)
```

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



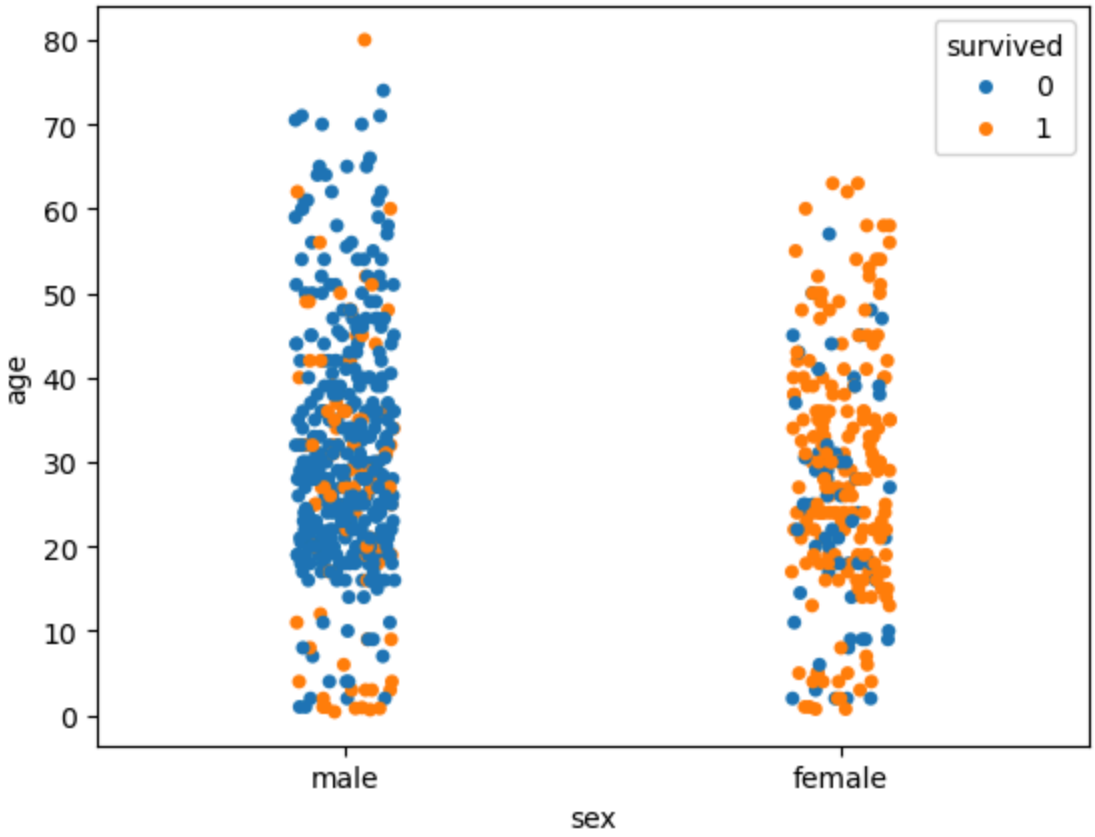
In [15]:
```
sns.stripplot(x = 'sex', y = 'age', data = titanic, jitter=True)
```

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



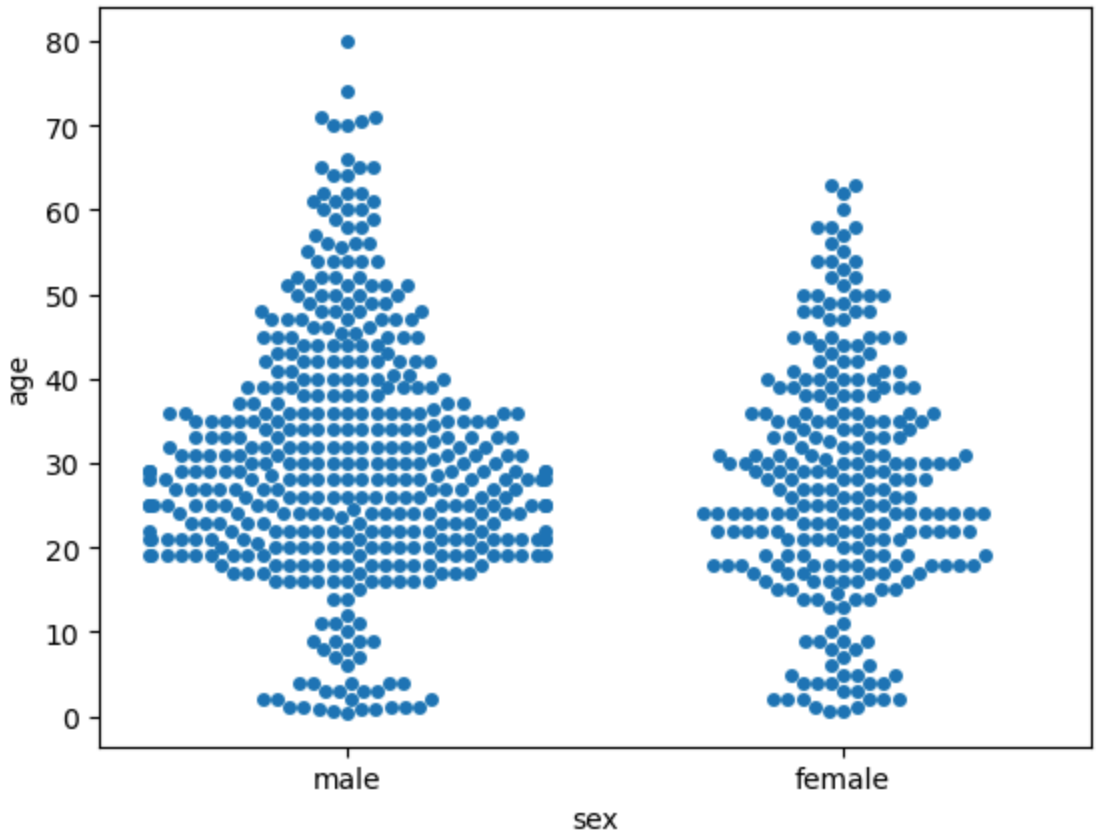
In [16]:
```
sns.stripplot(x = 'sex', y = 'age', data = titanic, jitter=True, hue = 'surv
```

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



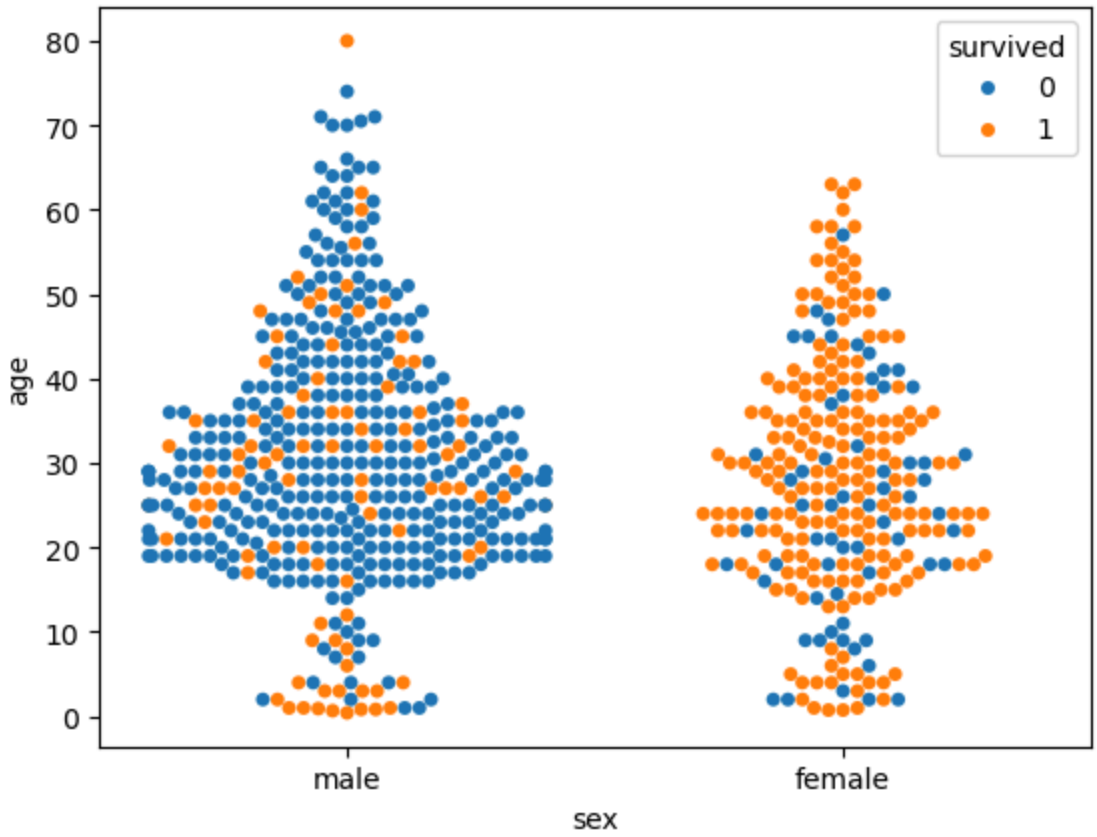
In [17]:
```
sns.swarmplot(x = 'sex', y = 'age', data = titanic)
```

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



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

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



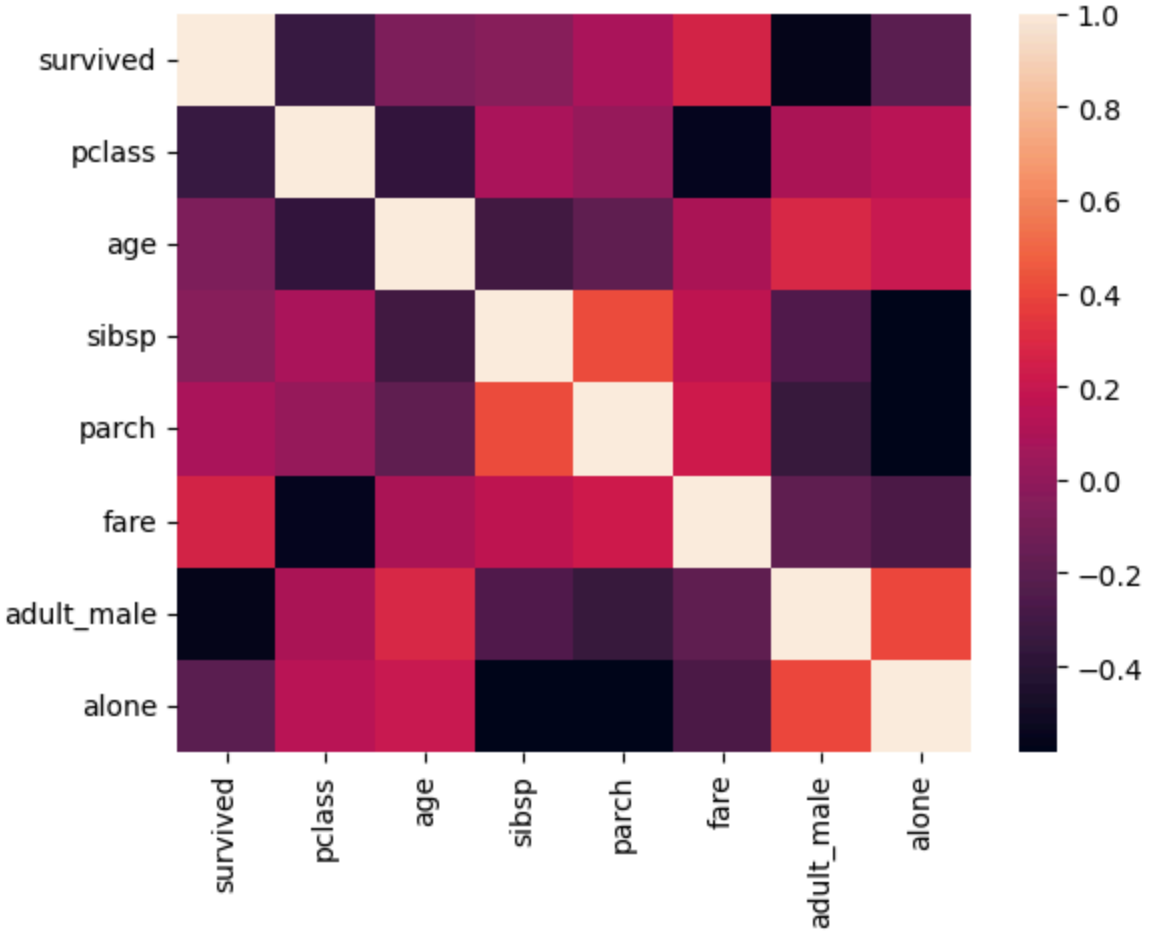
In [19]:
```
titanic.corr(numeric_only= True)
```

Out[19]:

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

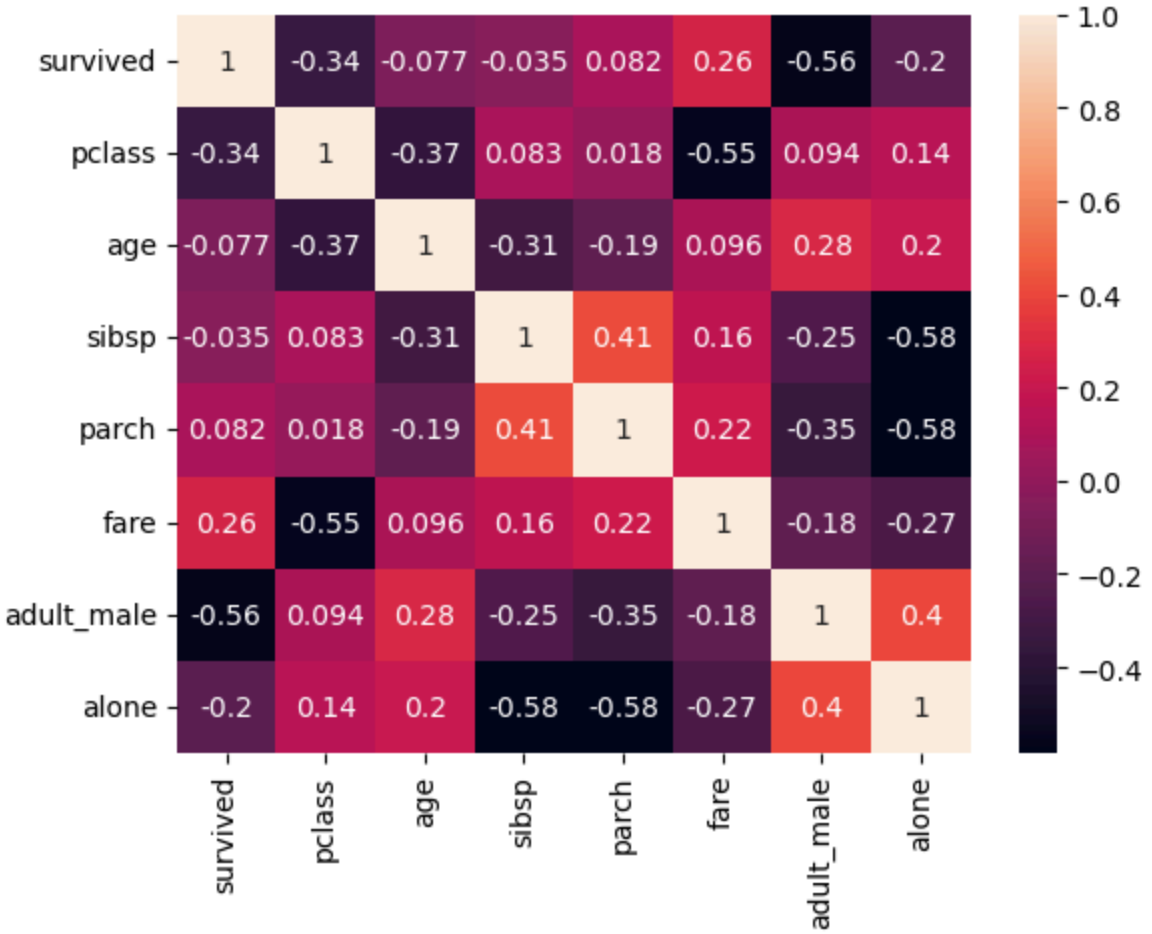
In [20]:
```
sns.heatmap(titanic.corr(numeric_only= True))
```

Out[20]: <Axes: >



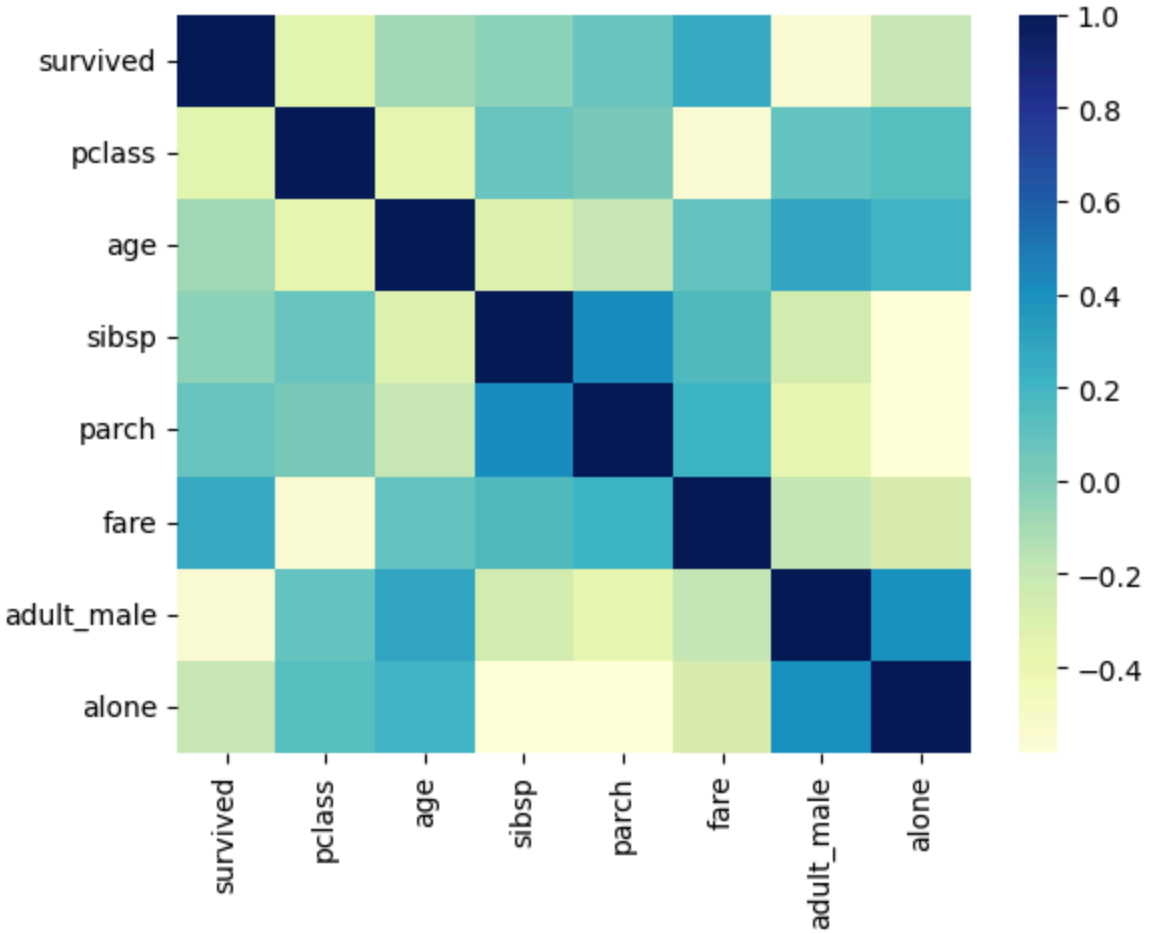
In [21]:
```
sns.heatmap(titanic.corr(numeric_only= True), annot = True)
```

Out[21]: <Axes: >



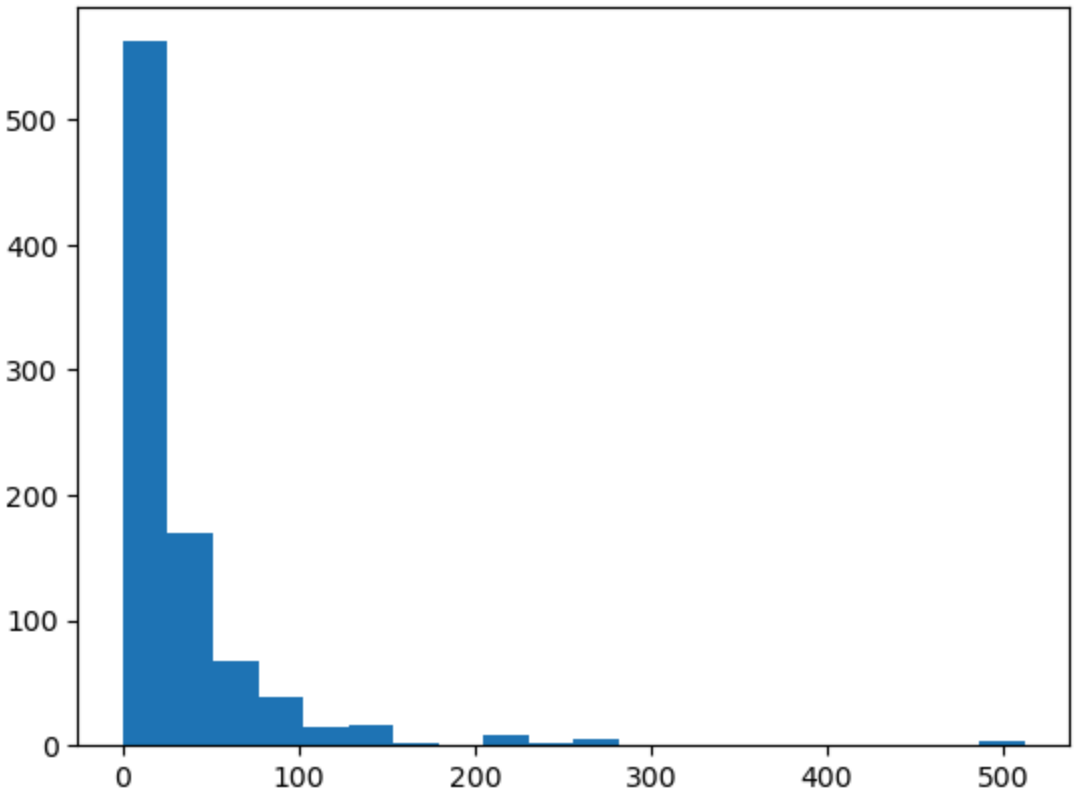
In [22]:
```
sns.heatmap(titanic.corr(numeric_only= True), cmap = 'YlGnBu')
```

Out[22]: <Axes: >



In [23]:
```
plt.hist(x = titanic['fare'], bins = 20)
```

Out[23]:
```
(array([562., 170.,  67.,  39.,  15.,  16.,   2.,   0.,   9.,   2.,   6.,
          0.,   0.,   0.,   0.,   0.,   0.,   0.,   0.,   3.]),
 array([  0.     ,  25.61646,  51.23292,  76.84938, 102.46584, 128.0823 ,
        153.69876, 179.31522, 204.93168, 230.54814, 256.1646 , 281.78106,
        307.39752, 333.01398, 358.63044, 384.2469 , 409.86336, 435.47982,
        461.09628, 486.71274, 512.3292 ]),
 <BarContainer object of 20 artists>)
```



In [ ]: