

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)
```

/tmp/ipykernel\_7426/2548176949.py:2: UserWarning:

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

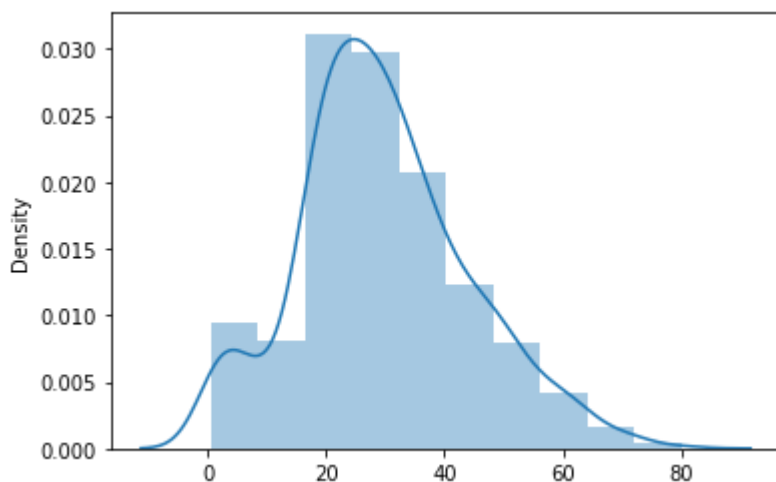
Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

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

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

Out[3]:

<Axes: ylabel='Density'>



In [4]:

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

/tmp/ipykernel\_7426/3517108427.py:1: UserWarning:

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

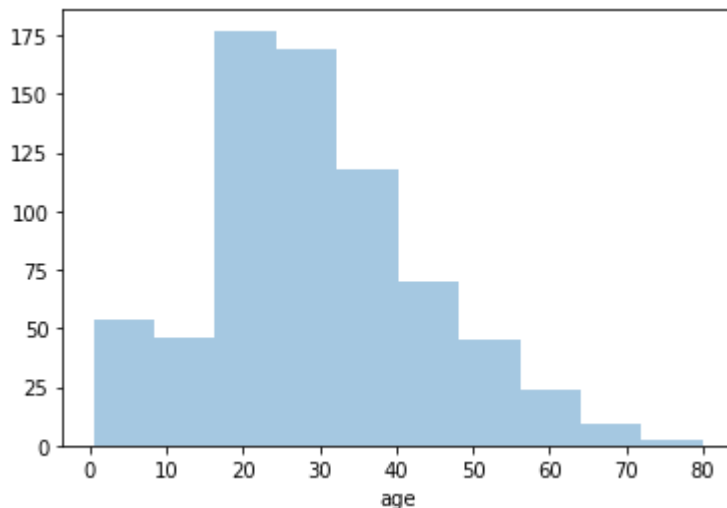
Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

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

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

Out[4]:

<Axes: xlabel='age'>

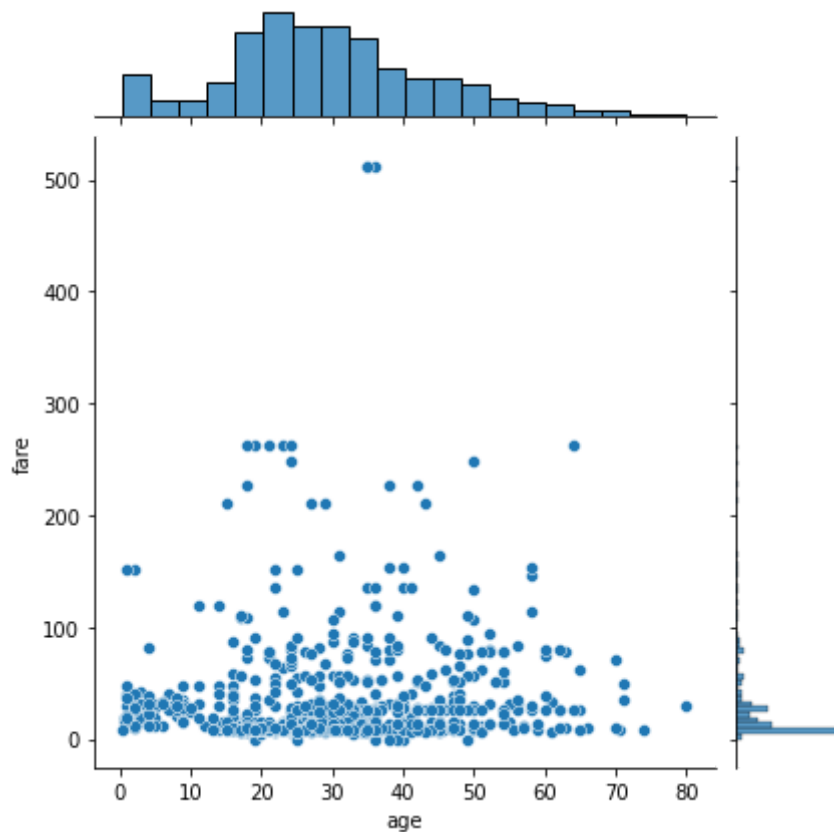


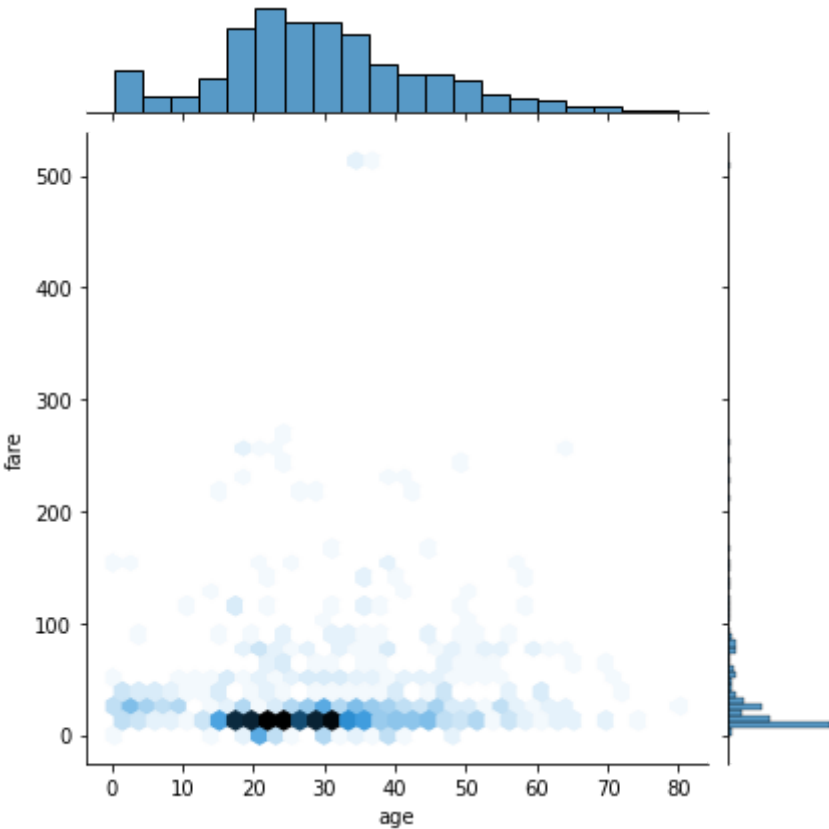
In [5]:

```
import seaborn as sns
# For Plot 1
sns.jointplot(x = dataset['age'], y = dataset['fare'], kind =
'scatter')
# For Plot 2
sns.jointplot(x = dataset['age'], y = dataset['fare'], kind = 'hex')
```

Out[5]:

<seaborn.axisgrid.JointGrid at 0x7f629b41d280>



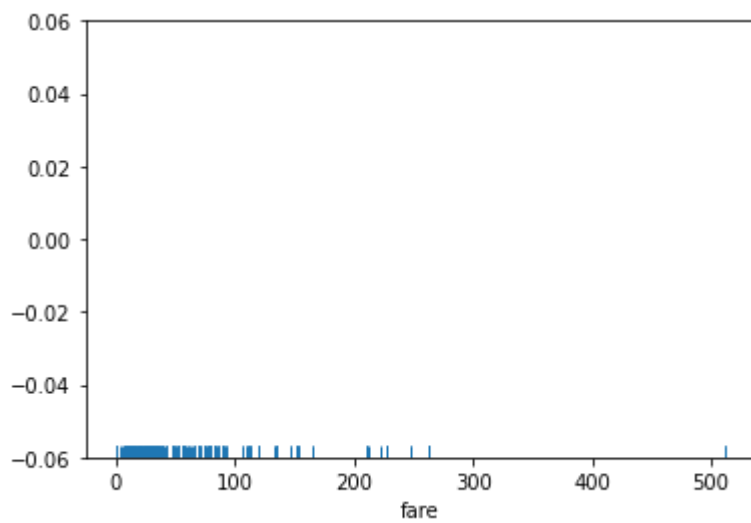


In [6]:

```
sns.rugplot(dataset['fare'])
```

Out[6]:

<Axes: xlabel='fare'>

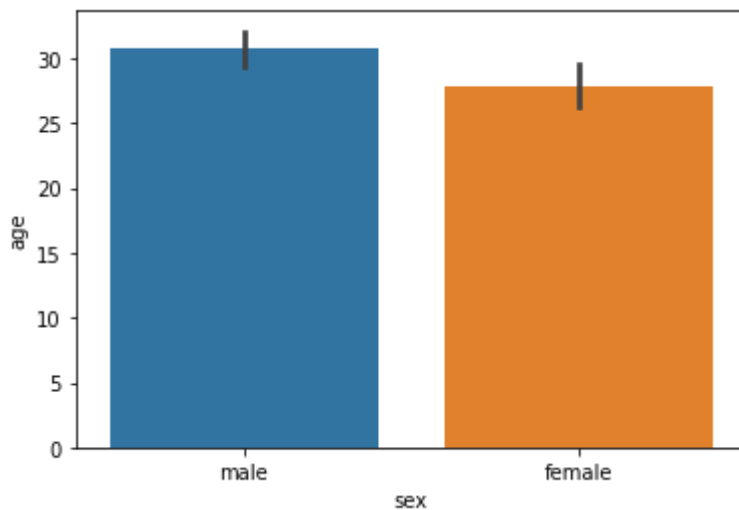


In [7]:

```
sns.barplot(x='sex', y='age', data=dataset)
```

Out[7]:

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



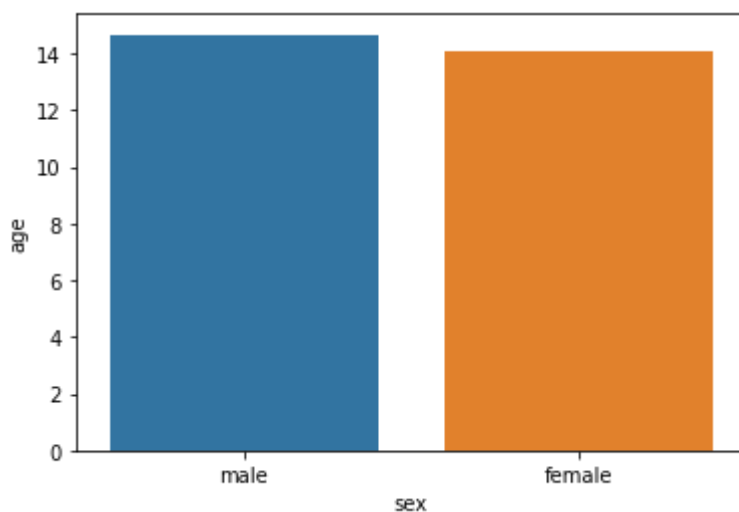
In [8]:

```
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
sns.barplot(x='sex', y='age', data=dataset, estimator=np.std)
```

```
/home/ubuntu/.local/lib/python3.8/site-packages/numpy/lib/nanfunction
s.py:1560: RuntimeWarning: All-NaN slice encountered
  r, k = function_base._ureduce(a,
/home/ubuntu/.local/lib/python3.8/site-packages/numpy/lib/nanfunction
s.py:1560: RuntimeWarning: All-NaN slice encountered
  r, k = function_base._ureduce(a,
```

Out[8]:

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

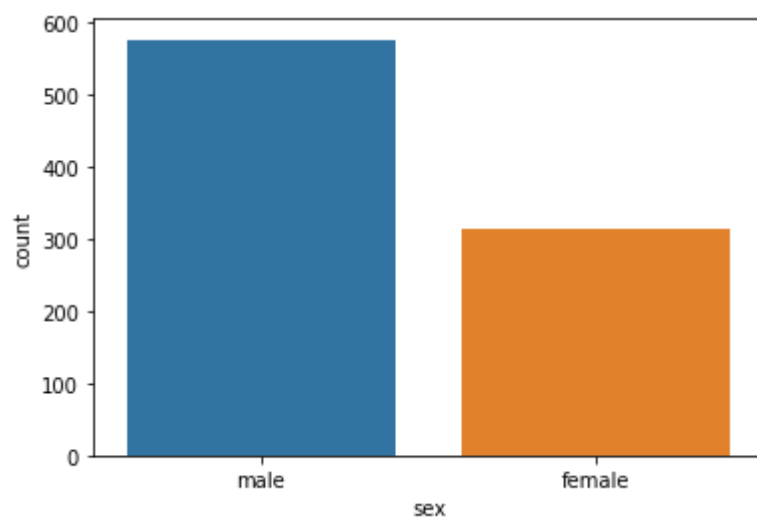


In [9]:

```
sns.countplot(x='sex', data=dataset)
```

Out[9]:

<Axes: xlabel='sex', ylabel='count'>

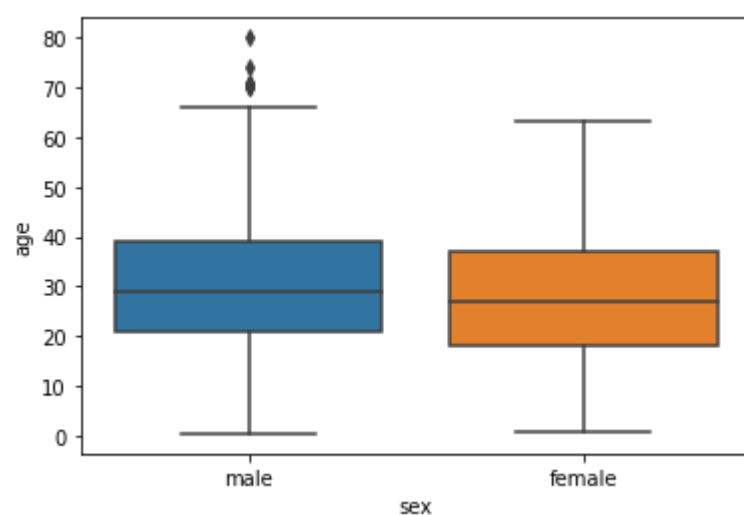


In [10]:

```
sns.boxplot(x='sex', y='age', data=dataset)
```

Out[10]:

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



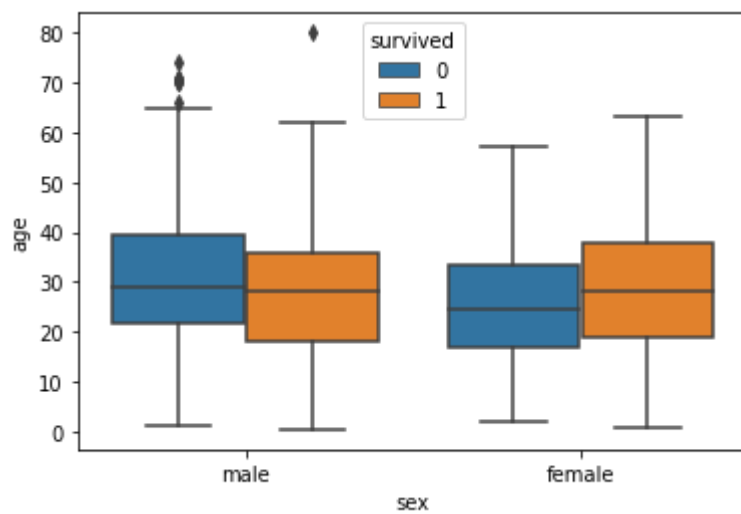


In [11]:

```
sns.boxplot(x='sex', y='age', data=dataset, hue="survived")
```

Out[11]:

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

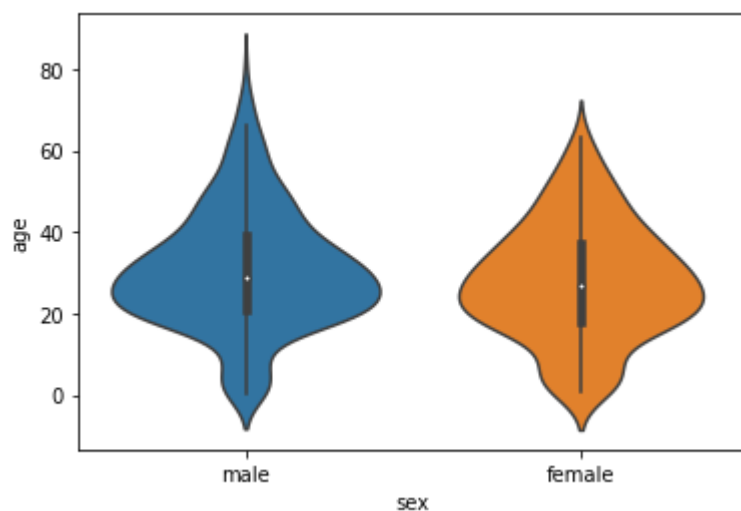


In [12]:

```
sns.violinplot(x='sex', y='age', data=dataset)
```

Out[12]:

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

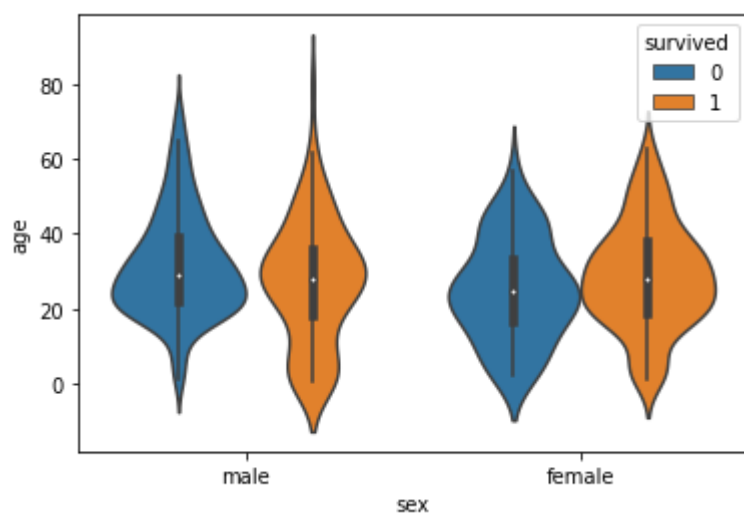


In [13]:

```
sns.violinplot(x='sex', y='age', data=dataset, hue='survived')
```

Out[13]:

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

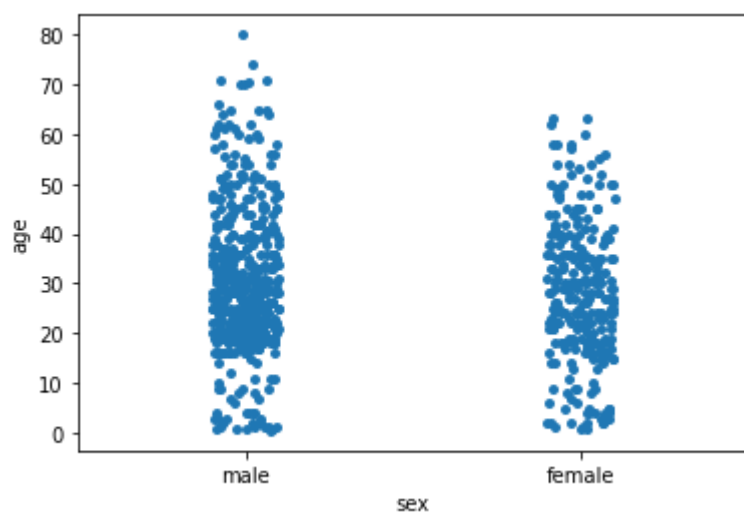


In [15]:

```
sns.stripplot(x='sex', y='age', data=dataset, jitter=True)
```

Out[15]:

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

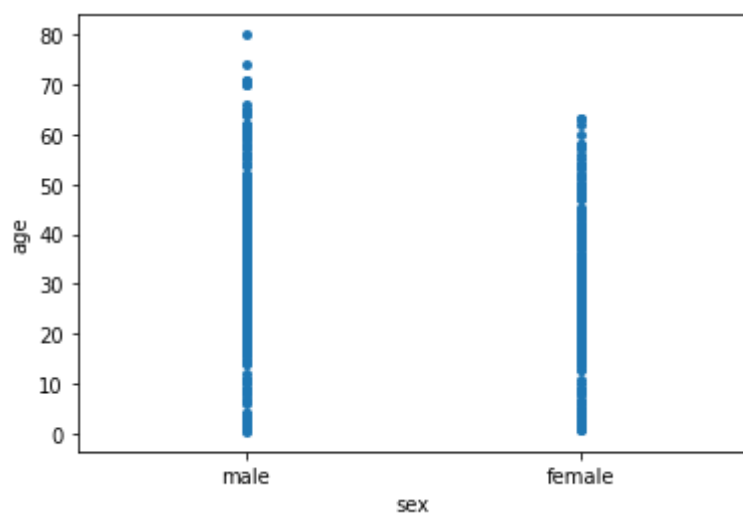


In [16]:

```
sns.stripplot(x='sex', y='age', data=dataset, jitter=False)
```

Out[16]:

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

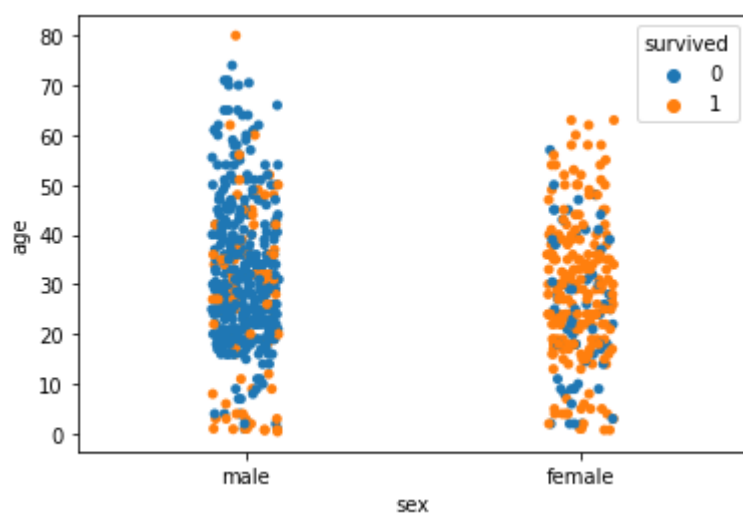


In [17]:

```
sns.stripplot(x='sex', y='age', data=dataset, jitter=True, hue='survived')
```

Out[17]:

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



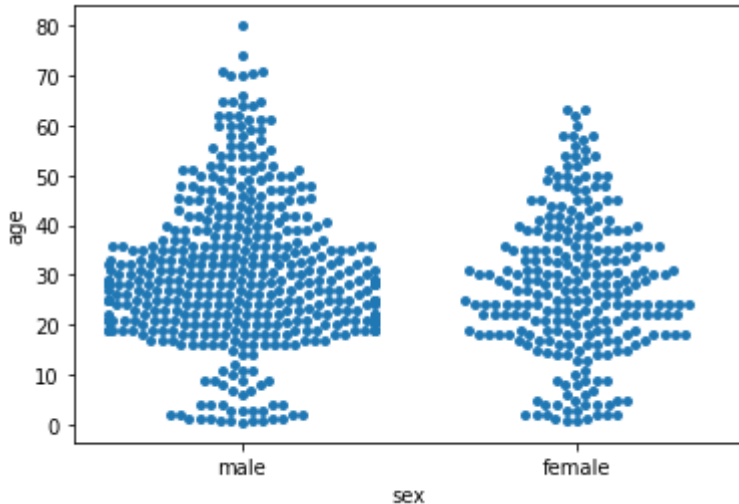
In [18]:

```
sns.swarmplot(x='sex', y='age', data=dataset)
```

Out[18]:

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

/home/ubuntu/.local/lib/python3.8/site-packages/seaborn/categorical.py:3544: UserWarning: 7.5% of the points cannot be placed; you may want to decrease the size of the markers or use stripplot.  
warnings.warn(msg, UserWarning)



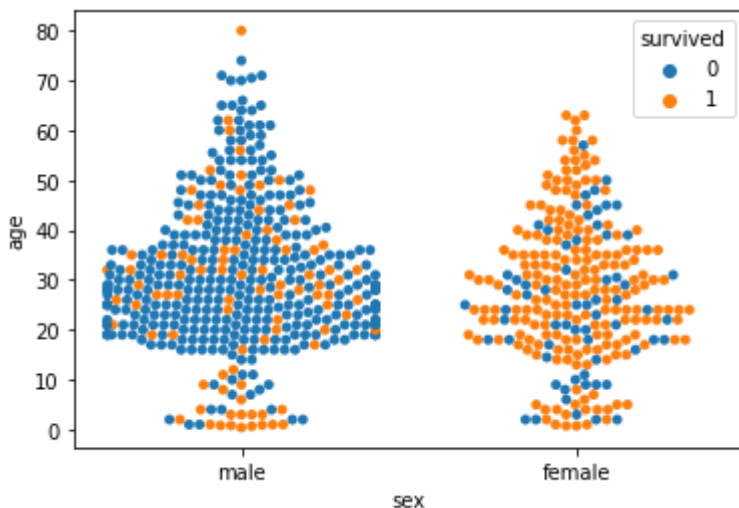
In [19]:

```
sns.swarmplot(x='sex', y='age', data=dataset, hue='survived')
```

Out[19]:

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

/home/ubuntu/.local/lib/python3.8/site-packages/seaborn/categorical.py:3544: UserWarning: 7.5% of the points cannot be placed; you may want to decrease the size of the markers or use stripplot.  
warnings.warn(msg, UserWarning)



In [20]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
dataset = sns.load_dataset('titanic')
dataset.head()
```

Out[20]:

	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 [21]:

```
dataset.corr()
```

Out[21]:

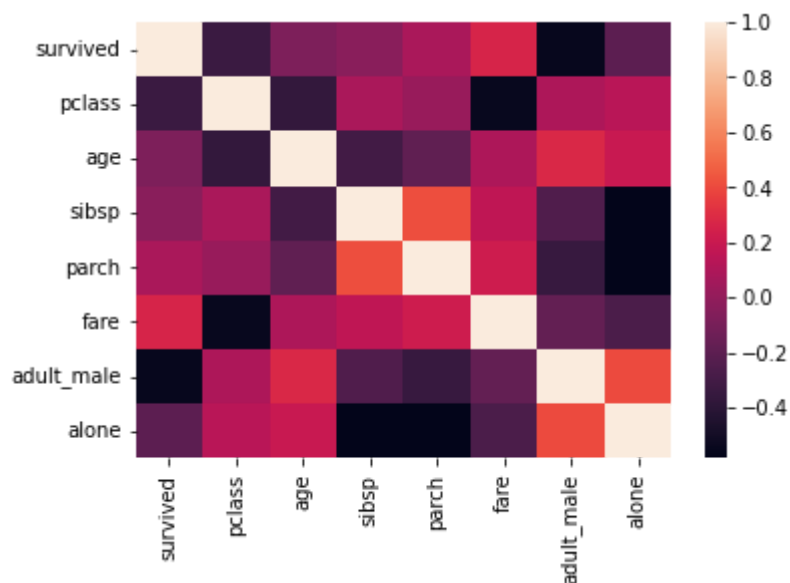
	survived	pclass	age	sibsp	parch	fare	adult_male	alone
survived	1.000000	-0.338481	-0.077221	-0.035322	0.081629	0.257307	-0.557080	-0.203367
pclass	-0.338481	1.000000	-0.369226	0.083081	0.018443	-0.549500	0.094035	0.135207
age	-0.077221	-0.369226	1.000000	-0.308247	-0.189119	0.096067	0.280328	0.198270
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 [22]:

```
corr = dataset.corr()  
sns.heatmap(corr)
```

Out[22]:

<Axes: >

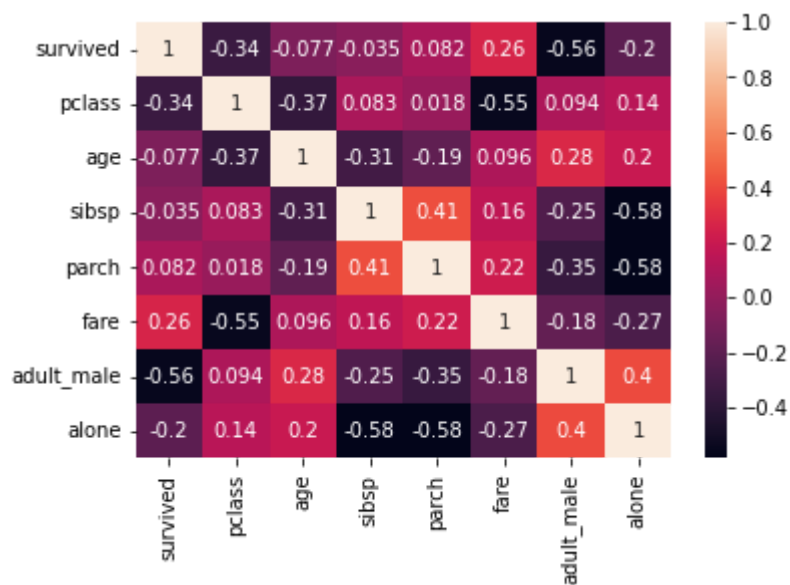


In [23]:

```
corr = dataset.corr()  
sns.heatmap(corr, annot=True)
```

Out[23]:

<Axes: >

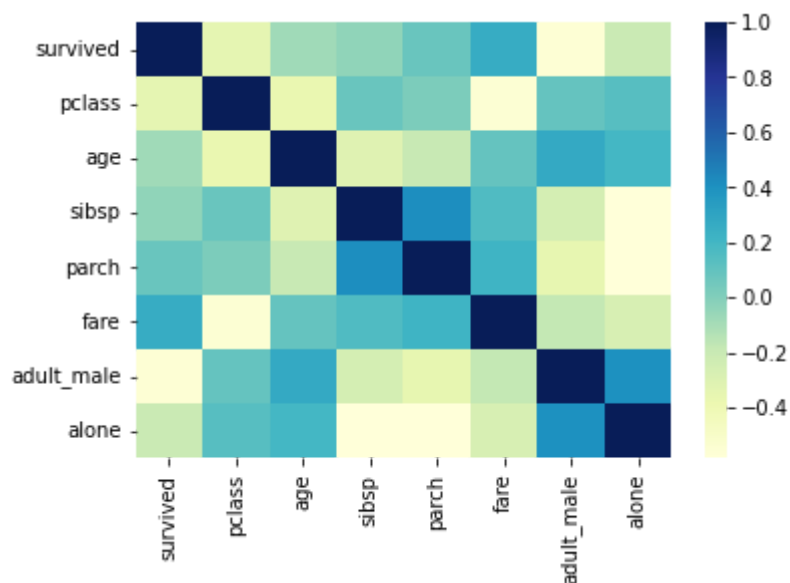


In [24]:

```
corr = dataset.corr()  
sns.heatmap(corr, cmap="YlGnBu")
```

Out[24]:

<Axes: >



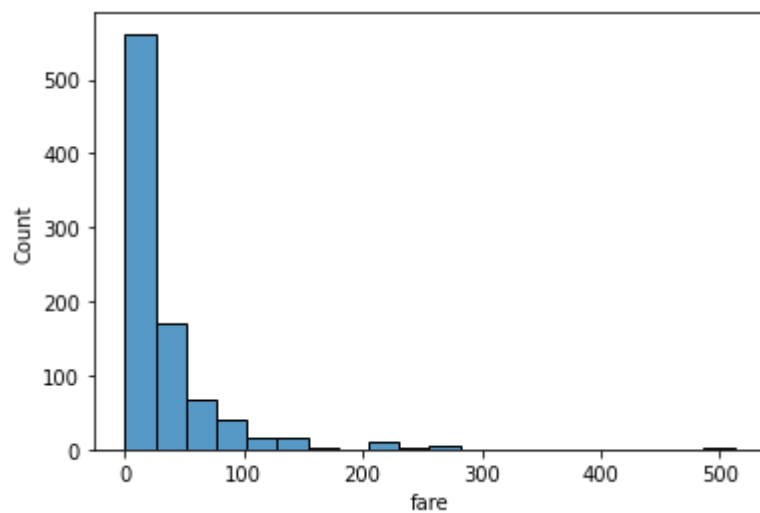


In [25]:

```
dataset = sns.load_dataset('titanic')  
sns.histplot(dataset['fare'], kde=False, bins=20)
```

Out[25]:

<Axes: xlabel='fare', ylabel='Count'>



In [ ]: