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()
```

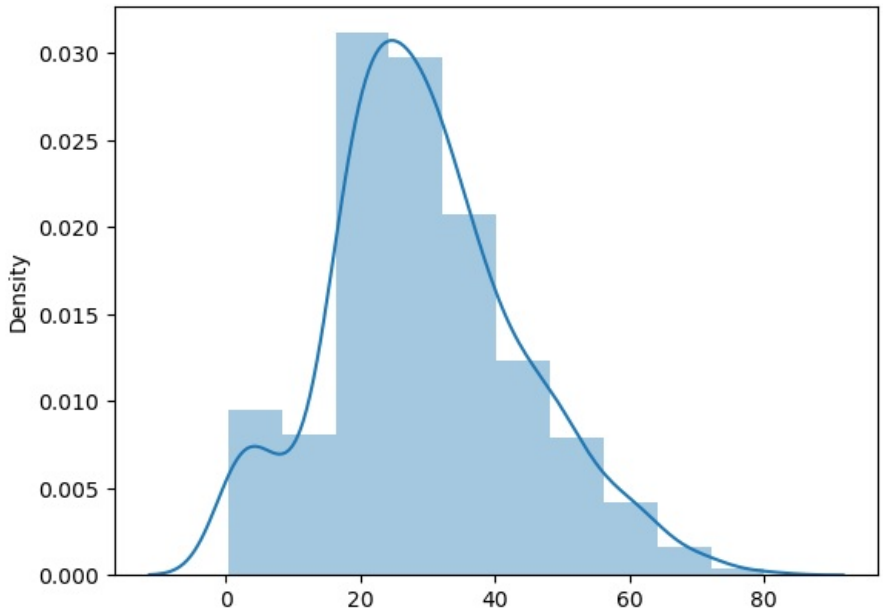
Out[2]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	embark_town	alive	alone
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN	Southampton	no	False
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	C	Cherbourg	yes	False
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN	Southampton	yes	True
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C	Southampton	yes	False
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	Southampton	no	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: 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)
```

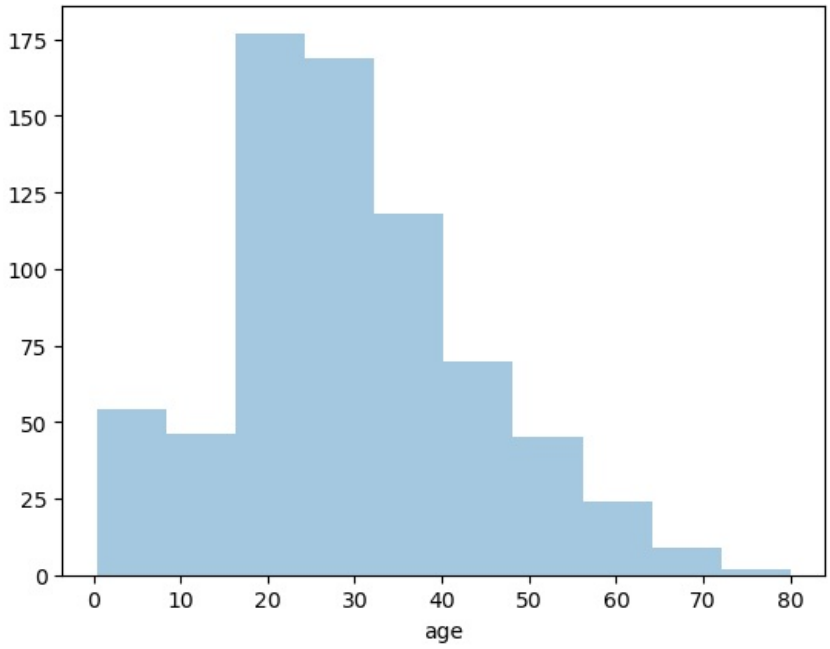
Out[3]:
```
<Axes: ylabel='Density'>
```



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

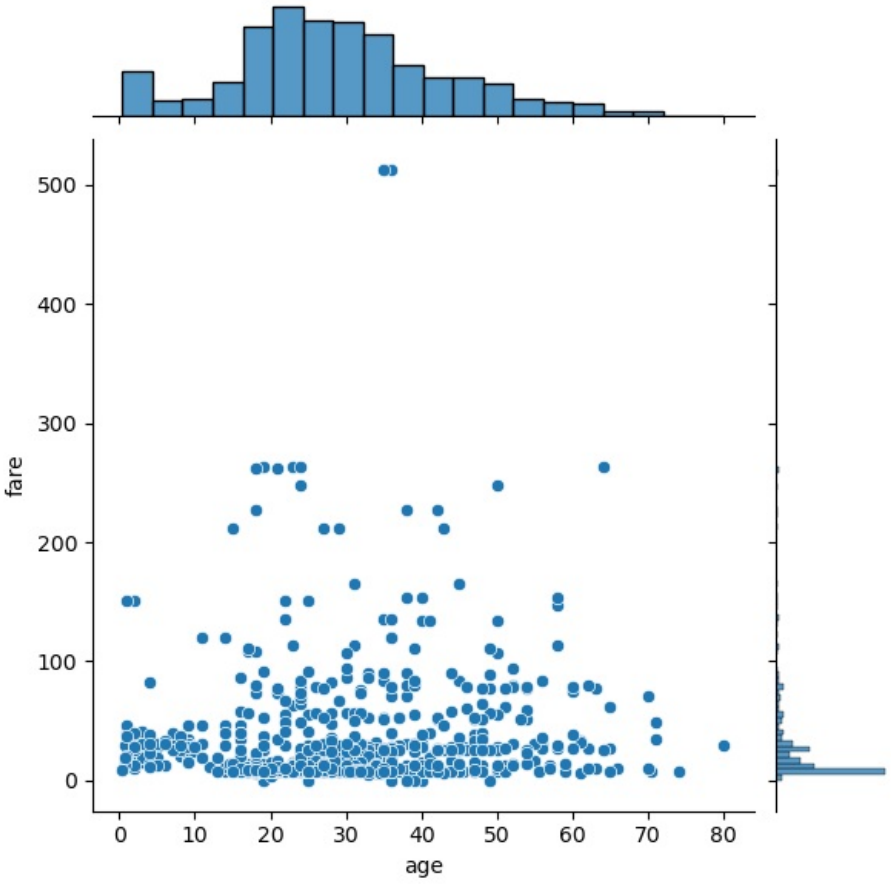
```
C:\Users\Ayush\AppData\Local\Temp\ipykernel_11720\2845277532.py:1: UserWarning:

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



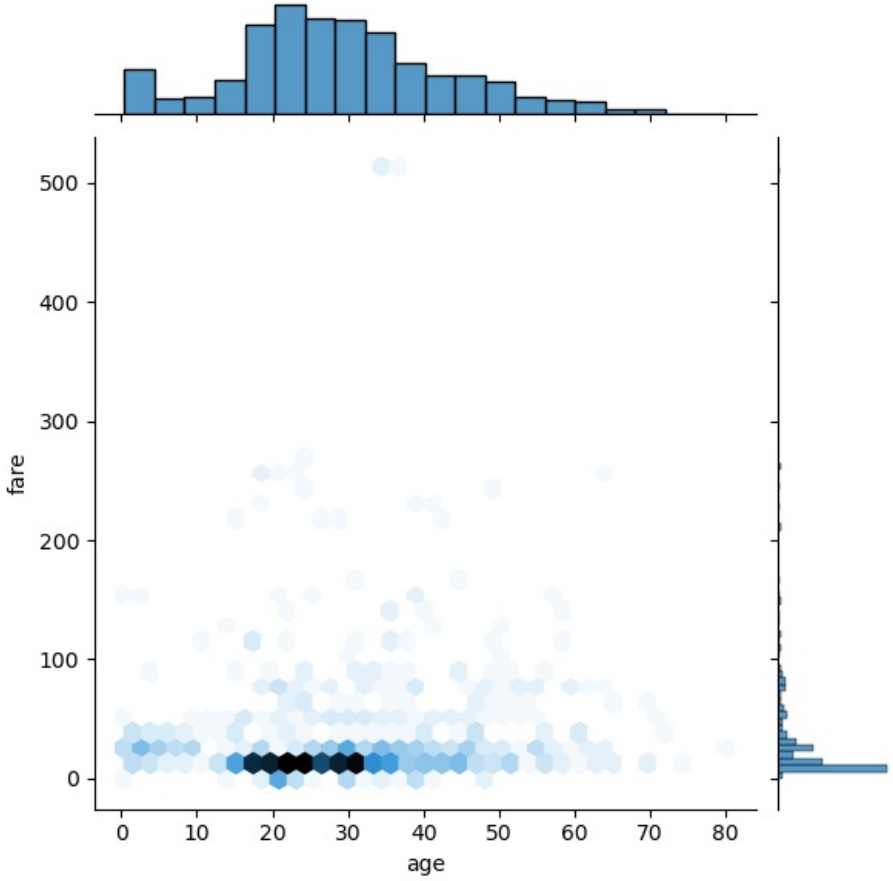
In [5]:
```
sns.jointplot(x = dataset['age'], y = dataset['fare'], kind ='scatter')
```

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



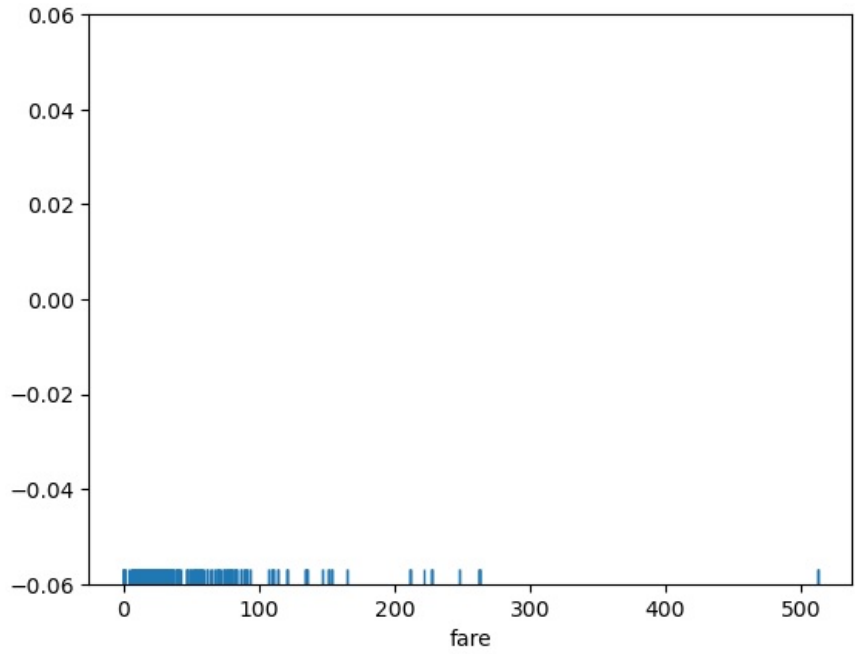
In [6]:
```
sns.jointplot(x = dataset['age'], y = dataset['fare'], kind = 'hex')
```

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



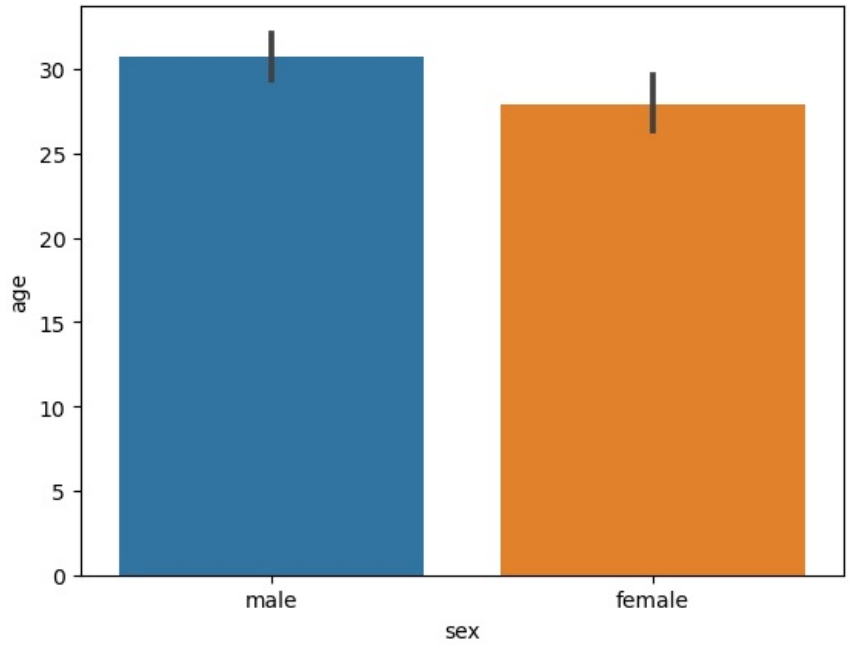
In [7]:
```
sns.rugplot(dataset['fare'])
```

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



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

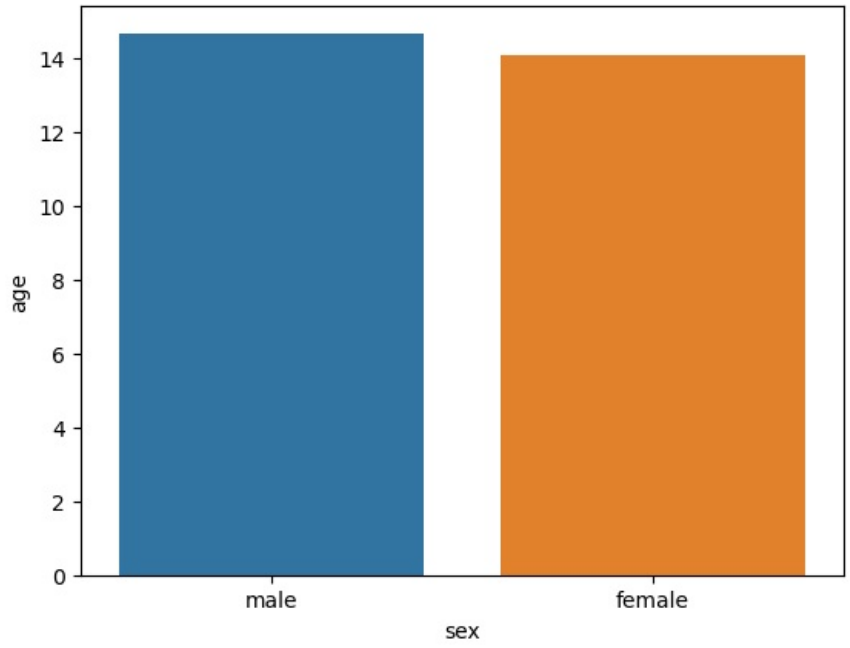
Out[8]:
```
<Axes: xlabel='sex', ylabel='age'>
```



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

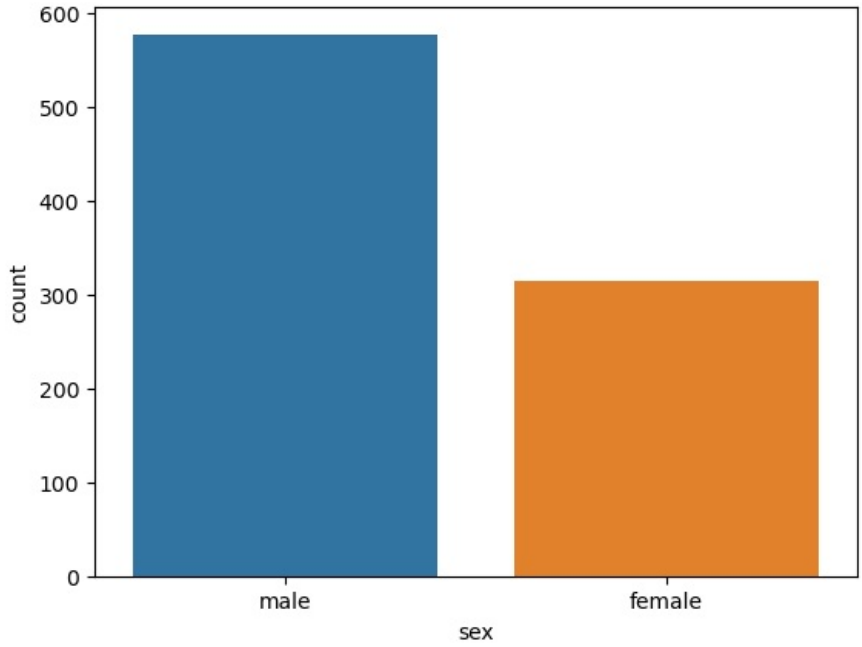
```
C:\ProgramData\anaconda3\Lib\site-packages\numpy\lib\nanfunctions.py:1556: RuntimeWarning: All-NaN slice encoun
tered
  return function_base._ureduce(a,
```

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



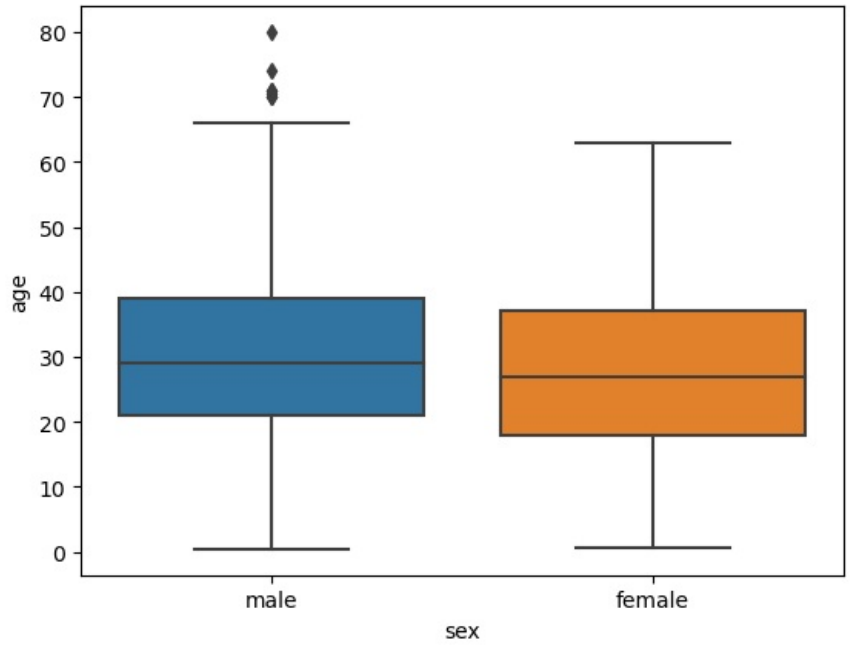
In [10]:
```
sns.countplot(x='sex', data=dataset)
```

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



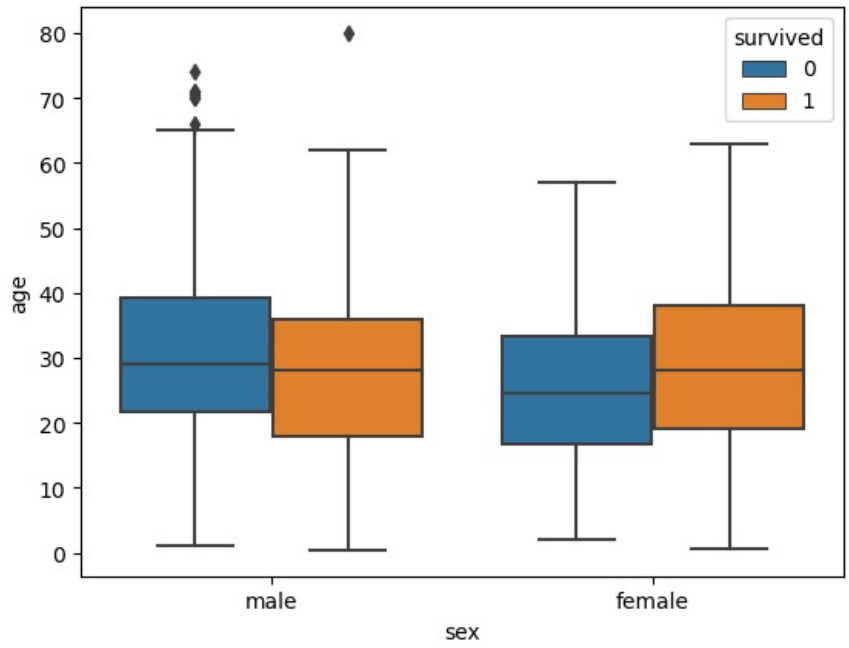
In [11]:
```
sns.boxplot(x='sex', y='age', data=dataset)
```

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



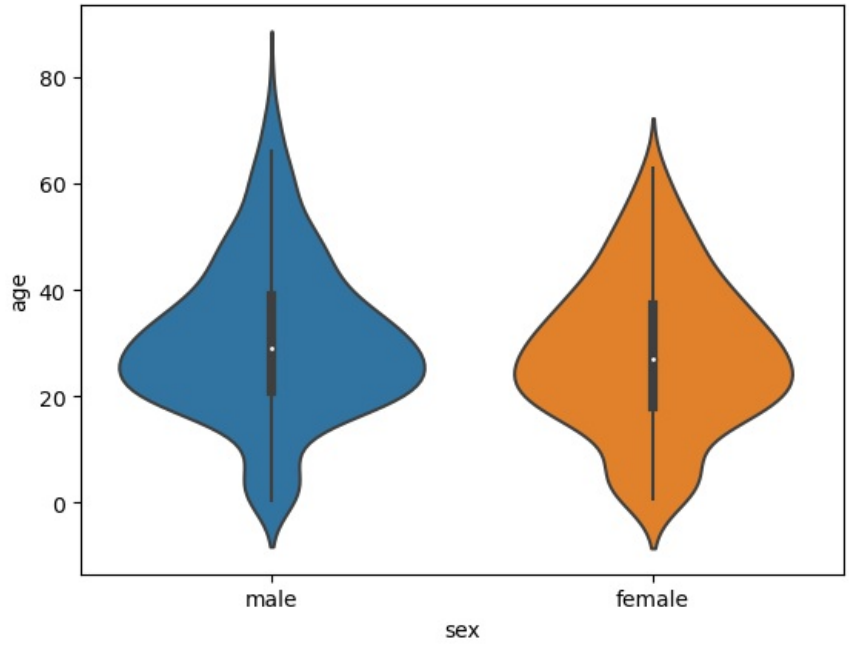
In [12]:
```
sns.boxplot(x='sex', y='age', data=dataset, hue="survived")
```

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



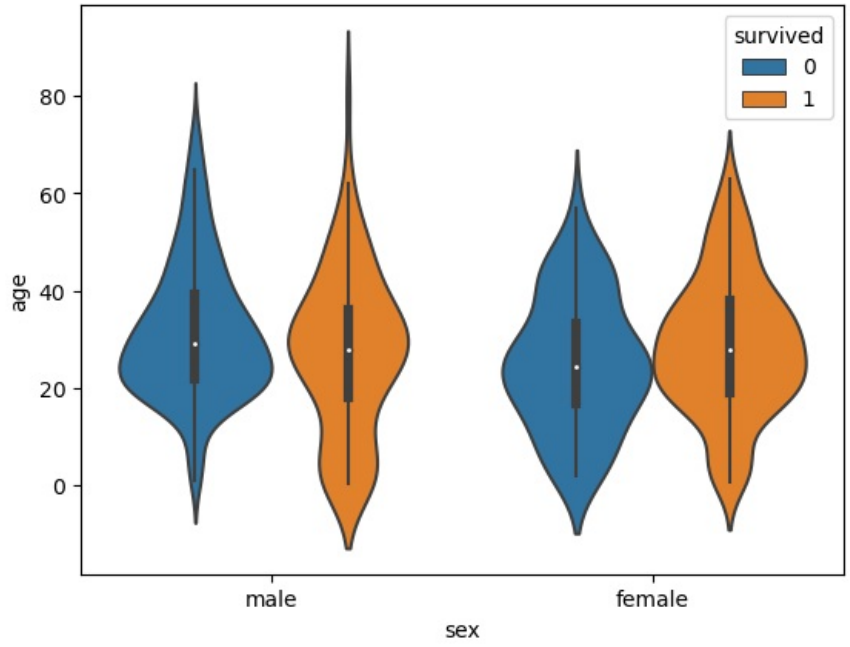
In [13]:
```
sns.violinplot(x='sex', y='age', data=dataset)
```

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



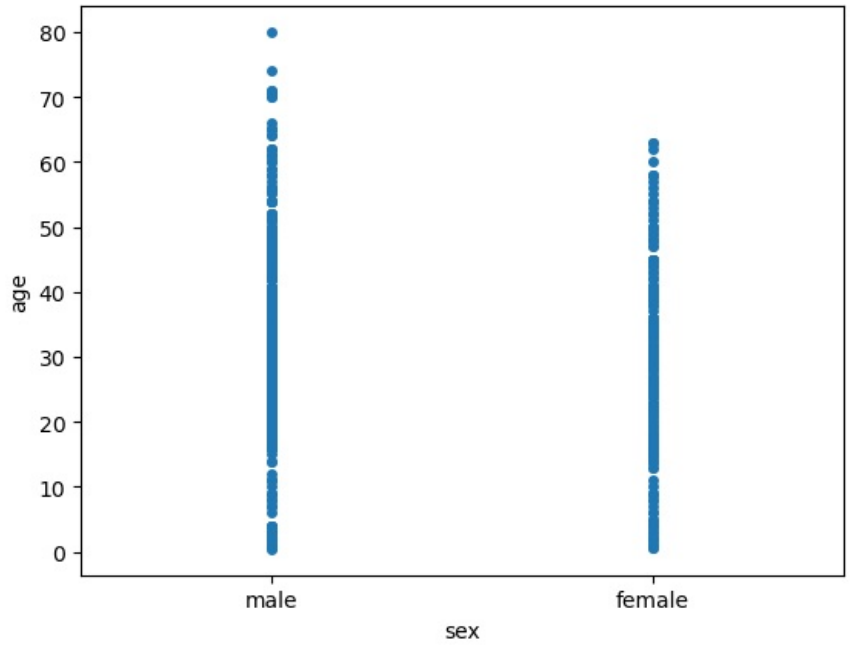
In [14]:
```
sns.violinplot(x='sex', y='age', data=dataset, hue="survived")
```

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



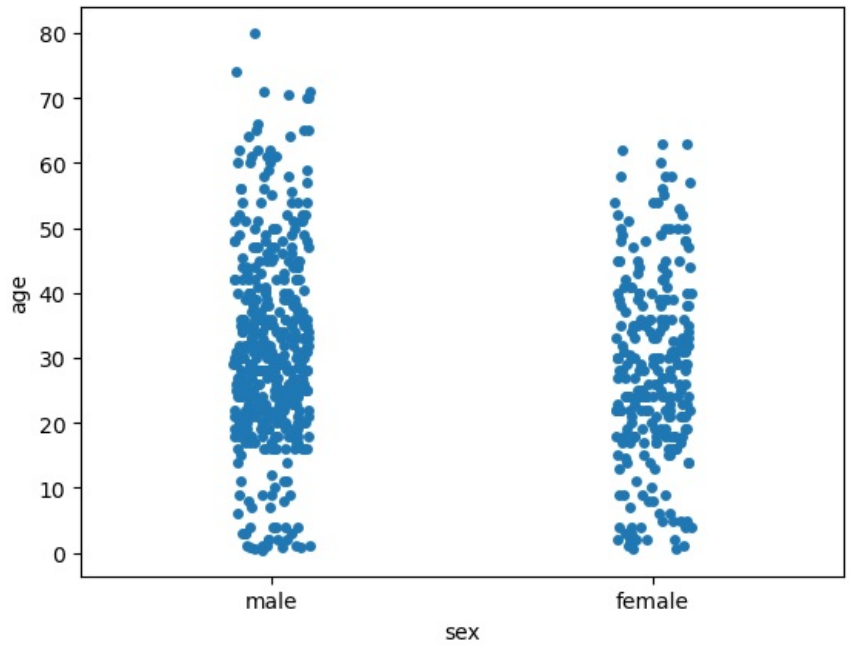
In [15]:
```
sns.stripplot(x='sex', y='age', data=dataset, jitter=False)
```

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



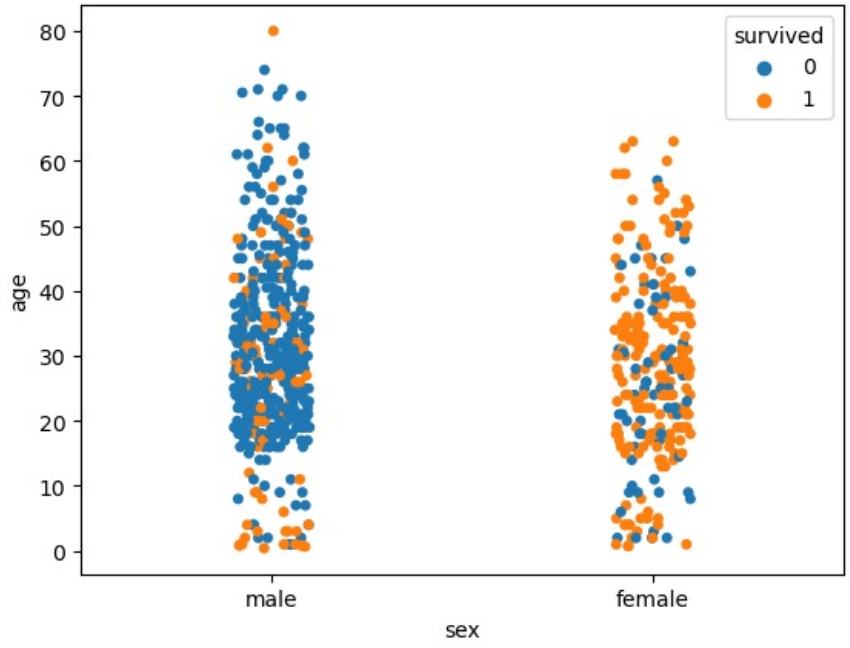
In [16]:
```
sns.stripplot(x='sex', y='age', data=dataset, jitter=True)
```

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



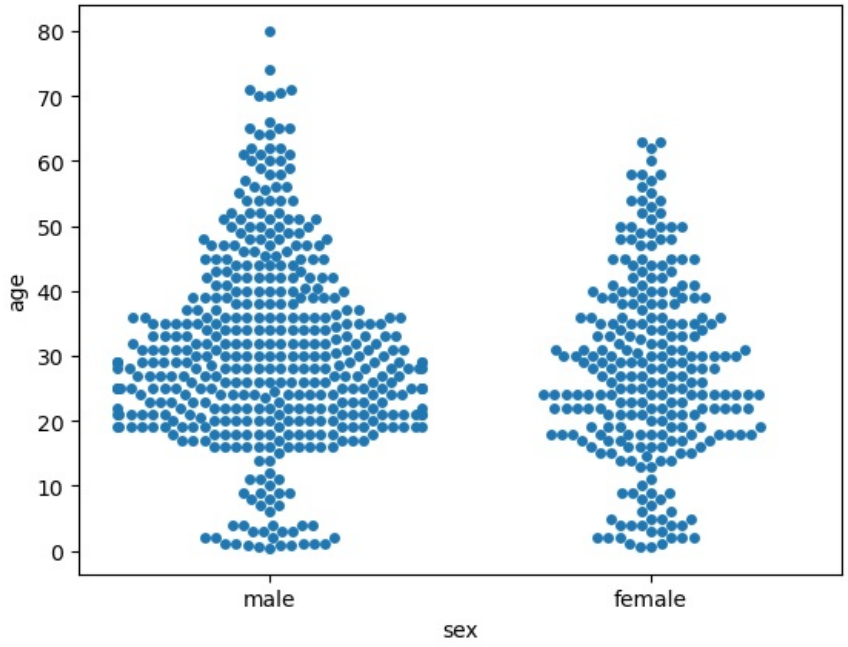
In [17]:
```
sns.stripplot(x='sex', y='age', data=dataset, jitter=True, hue="survived")
```

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



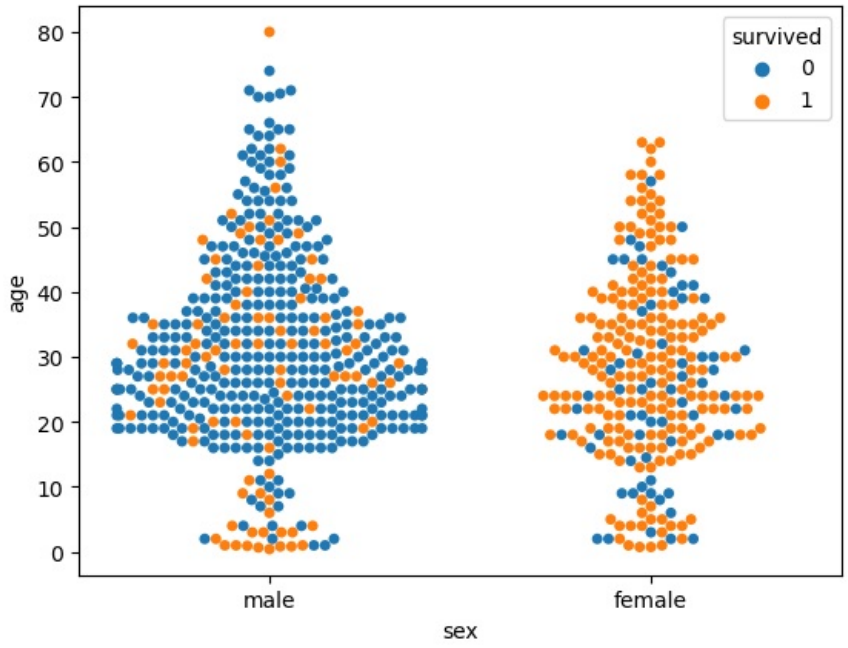
In [18]:
```
sns.swarmplot(x='sex', y='age', data=dataset)
```

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



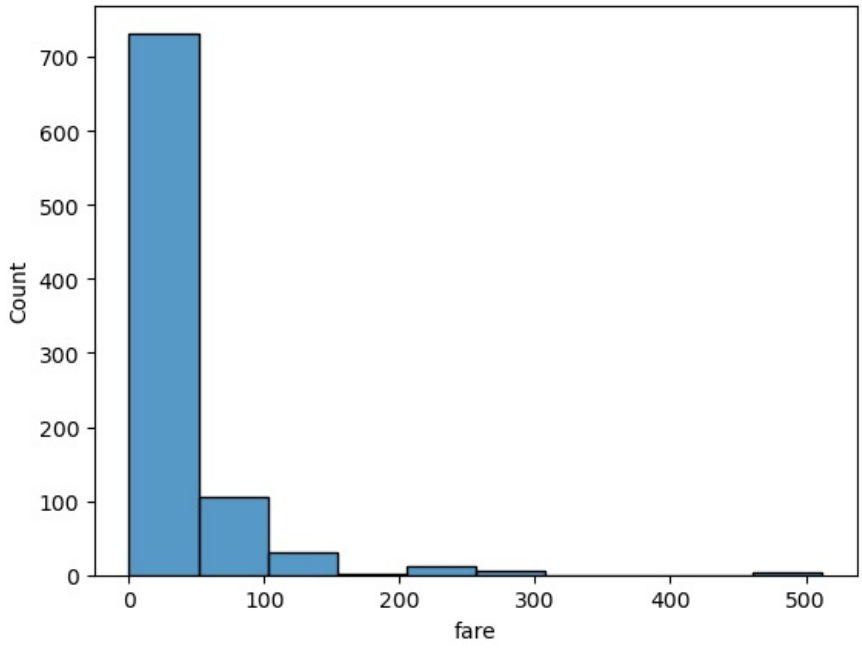
In [19]:
```
sns.swarmplot(x='sex', y='age', data=dataset, hue="survived")
```

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



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'>
```



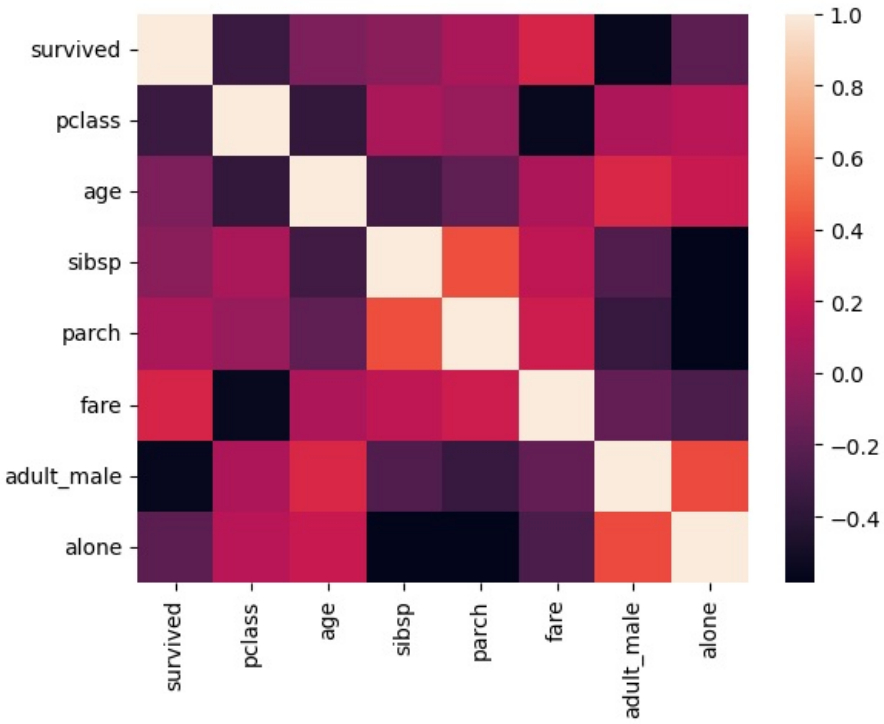
In [21]:
```
dataset.corr(numeric_only = True)
```

Out[21]:

	survived	pclass	age	sibsp	parch	fare	adult_male	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

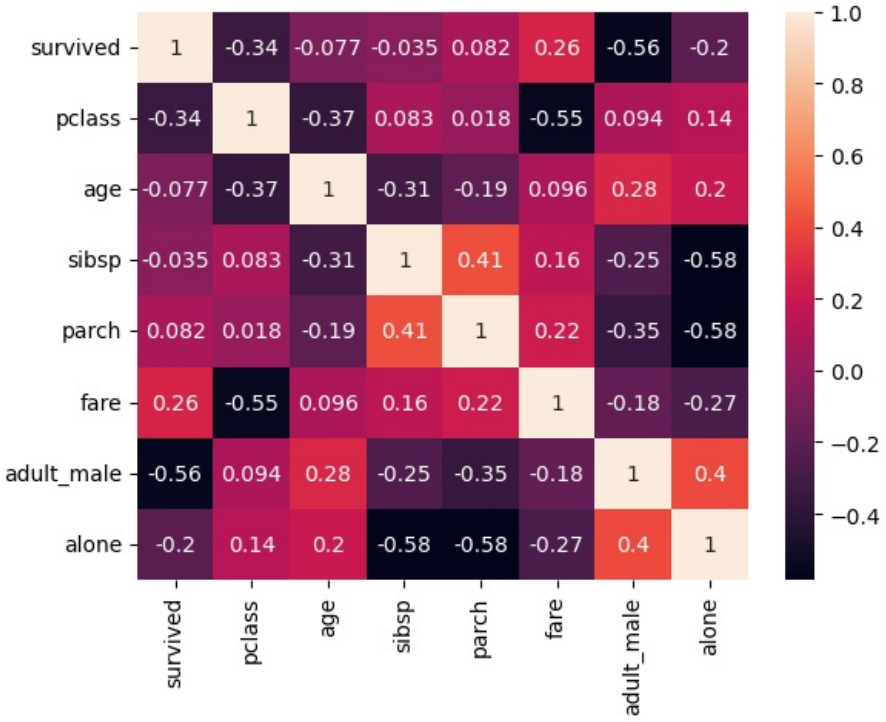
In [22]:
```
corr= dataset.corr(numeric_only = True)
sns.heatmap(corr)
```

Out[22]:
```
<Axes: >
```



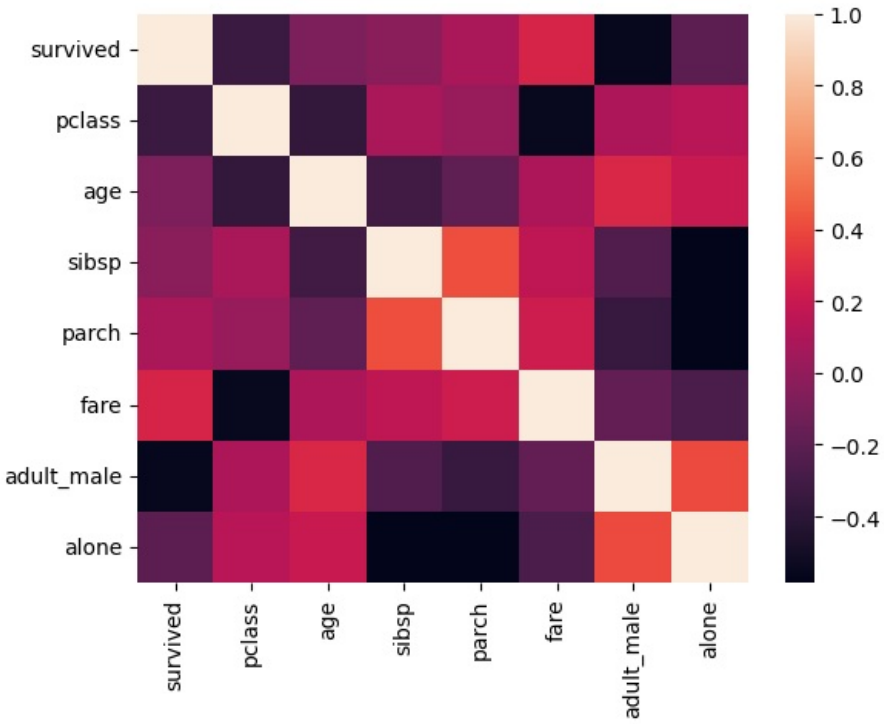
In [23]:
```
corr = dataset.corr(numeric_only = True)
sns.heatmap(corr, annot=True)
```

Out[23]:
```
<Axes: >
```



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

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



Mahesh Kale TE 13209