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]:

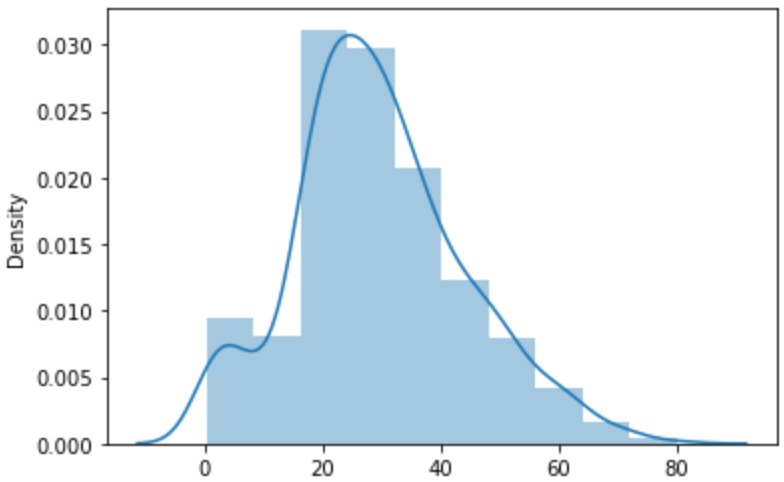
	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	embark_to
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN	Southamp
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	C	Cherbo
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN	Southamp
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C	Southamp
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	Southamp

Distplot

In [3]:
```
sns.distplot(x = dataset['age'], bins = 10)
```

```
C:\ProgramFiles\Anaconda3\lib\site-packages\seaborn\distributions.py:2619: FutureWarnin
g: `distplot` is a deprecated function and will be removed in a future version. Please a
dapt your code to use either `displot` (a figure-level function with similar flexibilit
y) or `histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```

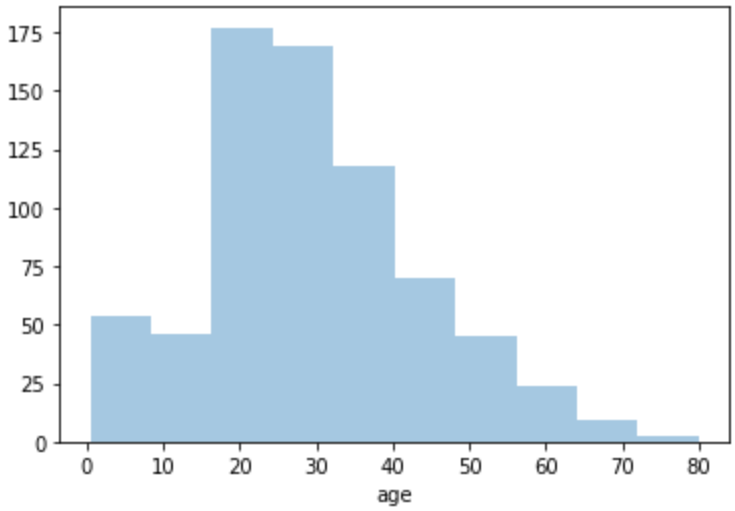
Out[3]:
```
<AxesSubplot:ylabel='Density'>
```



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

```
C:\ProgramFiles\Anaconda3\lib\site-packages\seaborn\distributions.py:2619: FutureWarnin
g: `distplot` is a deprecated function and will be removed in a future version. Please a
dapt your code to use either `displot` (a figure-level function with similar flexibilit
y) or `histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```

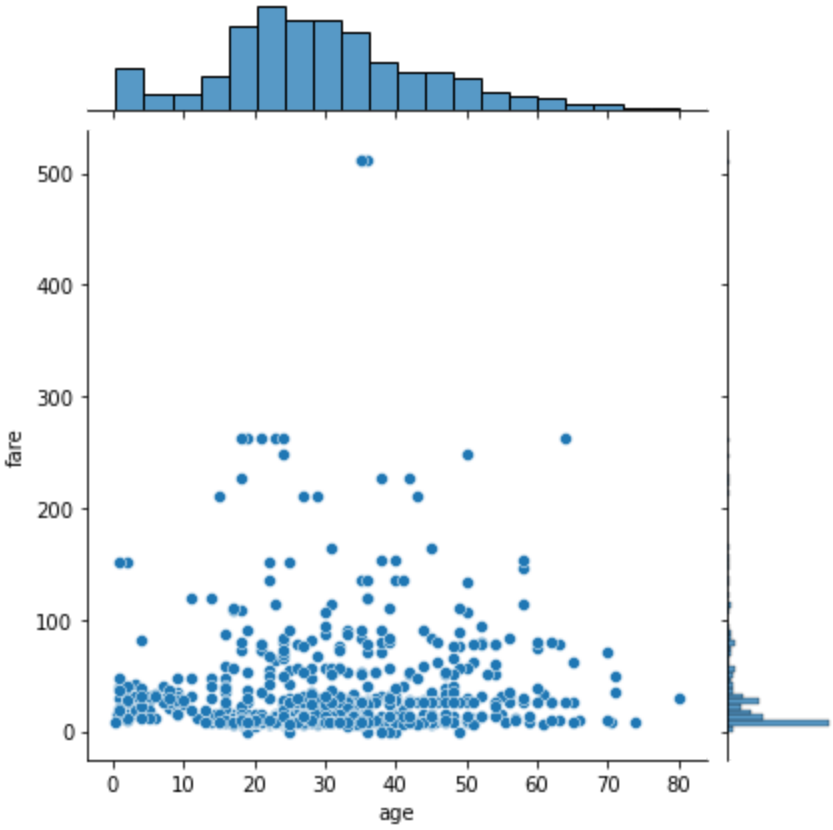
Out[4]:
```
<AxesSubplot:xlabel='age'>
```



Joint Plot

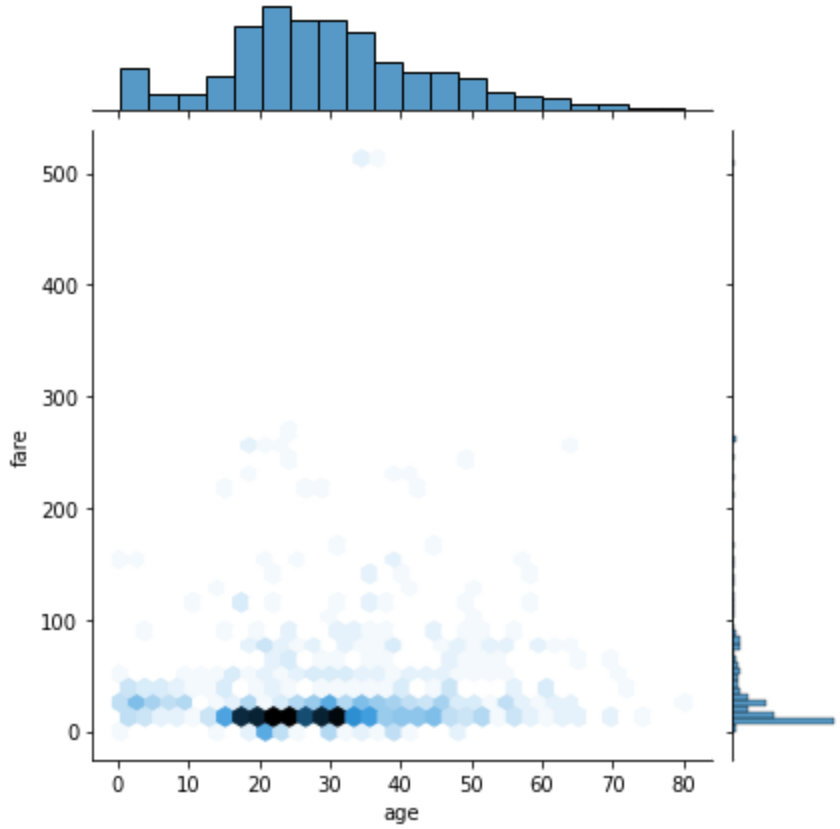
In [5]:
```
sns.jointplot(x = dataset['age'], y = dataset['fare'], kind ='scatter')
```

Out[5]:
```
<seaborn.axisgrid.JointGrid at 0x23e64f9fb80>
```



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

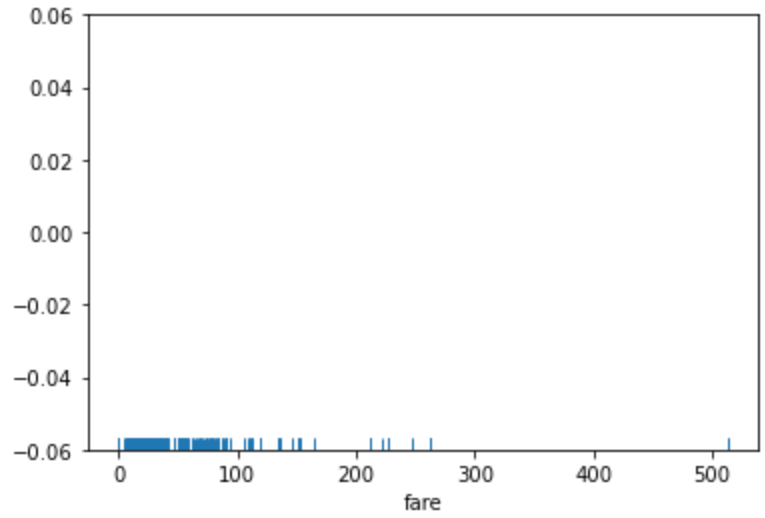
Out[6]:
```
<seaborn.axisgrid.JointGrid at 0x23e651e4310>
```



Rug Plot

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

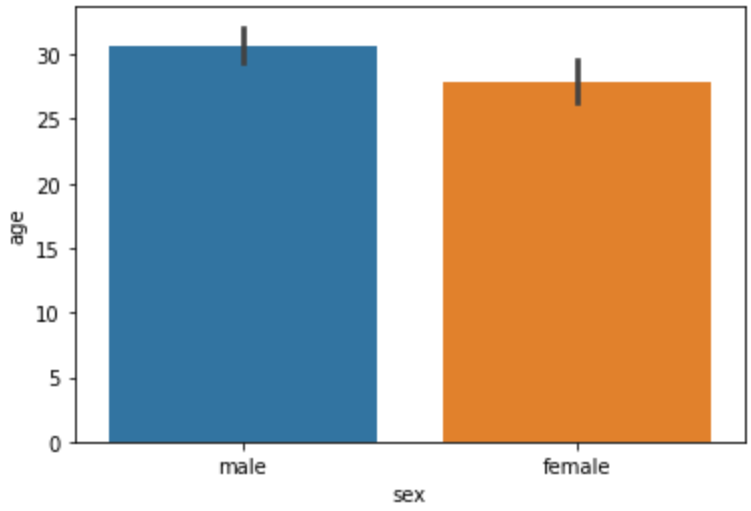
Out[7]:
```
<AxesSubplot:xlabel='fare'>
```



Bar Plot

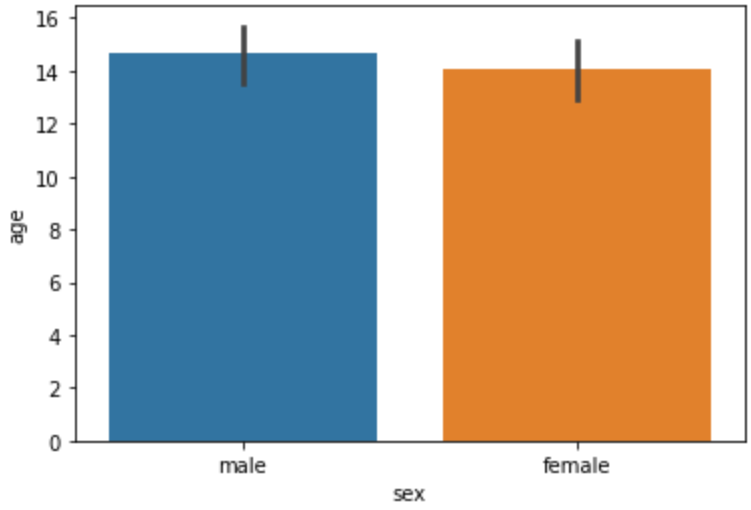
In [8]:
```
sns.barplot(x='sex', y='age', data=dataset)
```

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



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

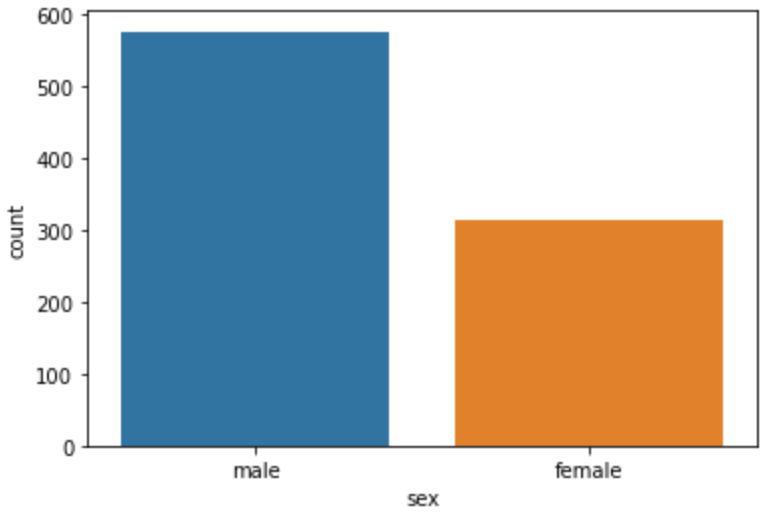
Out[9]:
```
<AxesSubplot:xlabel='sex', ylabel='age'>
```



Count Plot

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

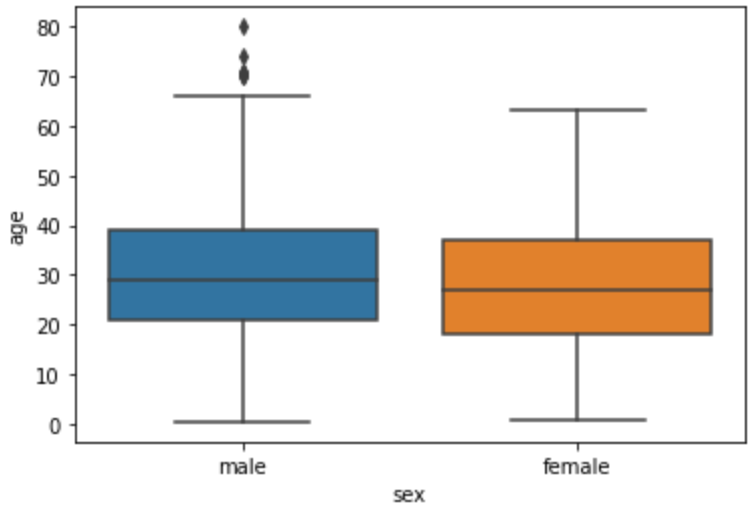
Out[10]:
```
<AxesSubplot:xlabel='sex', ylabel='count'>
```



Box Plot

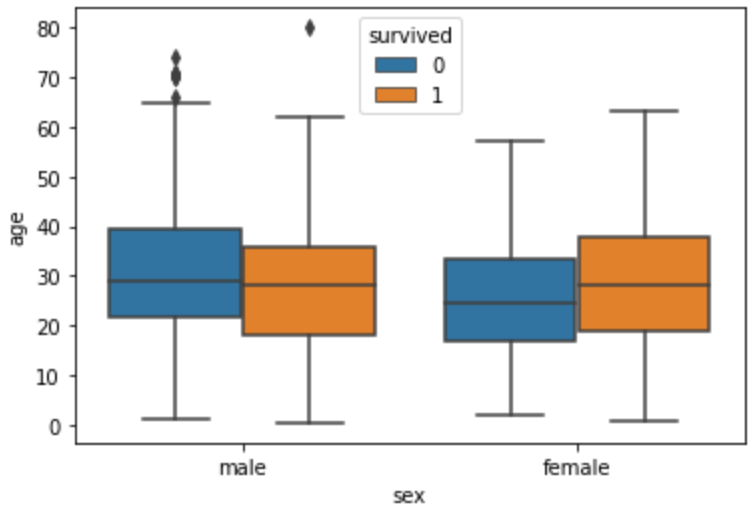
In [11]:
```
sns.boxplot(x='sex', y='age', data=dataset)
```

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



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

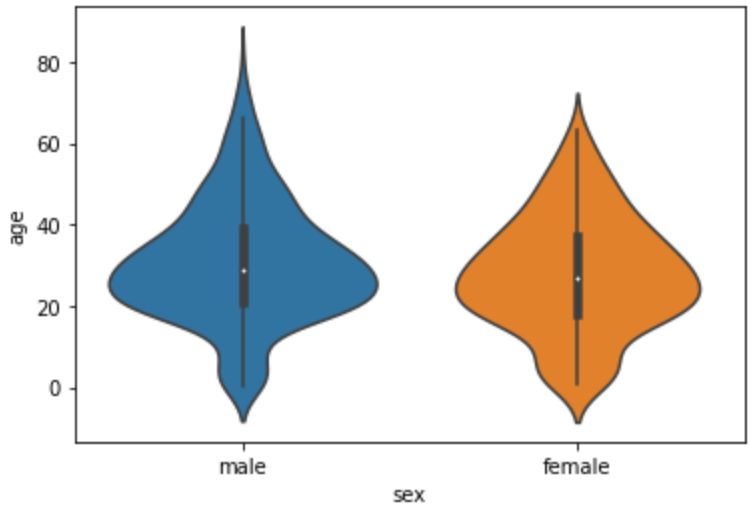
Out[12]:
```
<AxesSubplot:xlabel='sex', ylabel='age'>
```



Violin Plot

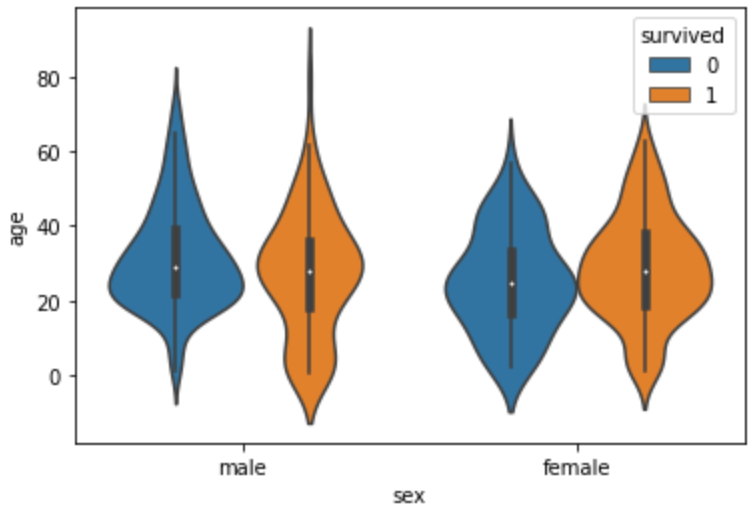
In [13]:
```
sns.violinplot(x='sex', y='age', data=dataset)
```

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



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

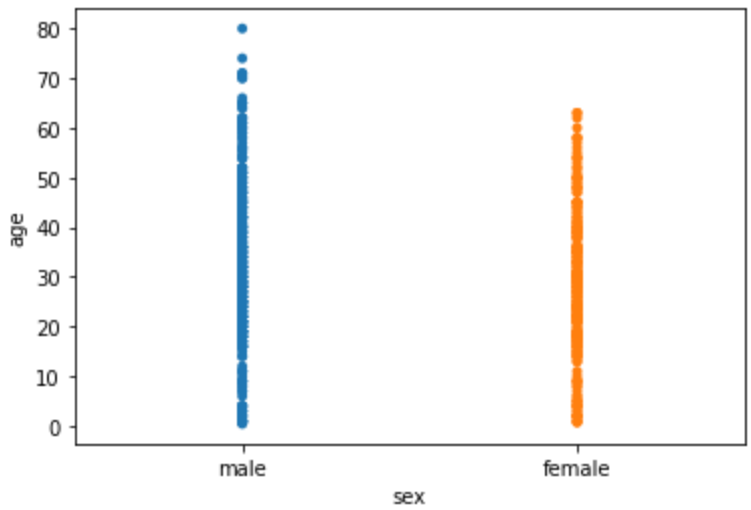
Out[14]:
```
<AxesSubplot:xlabel='sex', ylabel='age'>
```



Strip Plot

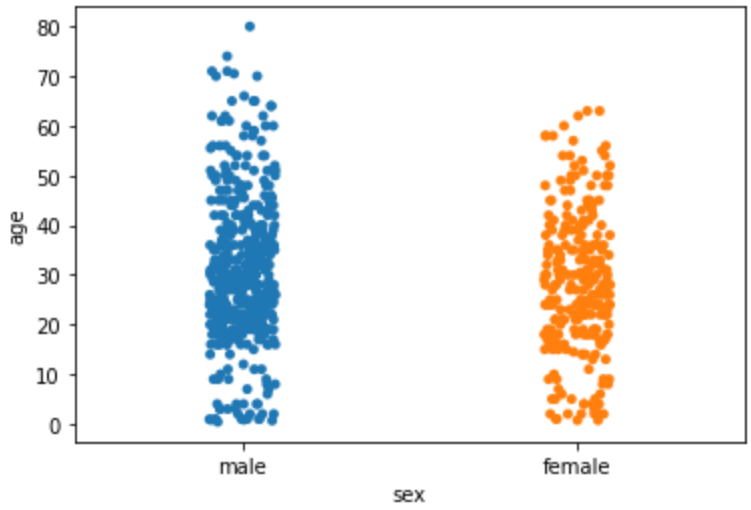
In [15]:
```
sns.stripplot(x='sex', y='age', data=dataset, jitter=False)
```

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



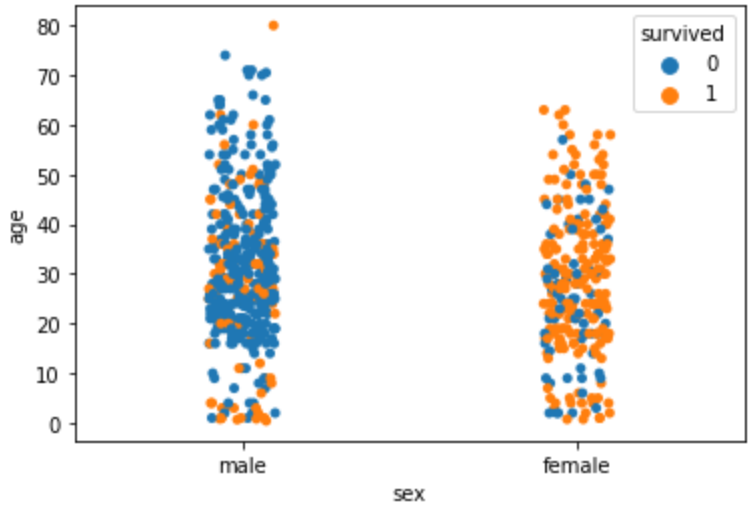
In [16]:
```
sns.stripplot(x='sex', y='age', data=dataset, jitter=True)
```

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



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

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

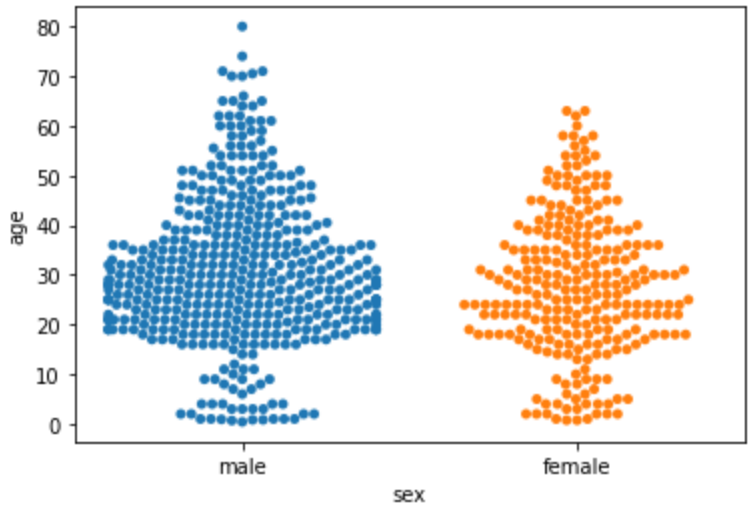


Swarm Plot

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

```
C:\ProgramFiles\Anaconda3\lib\site-packages\seaborn\categorical.py:1296: UserWarning: 5.
9% of the points cannot be placed; you may want to decrease the size of the markers or u
se stripplot.
  warnings.warn(msg, UserWarning)
```

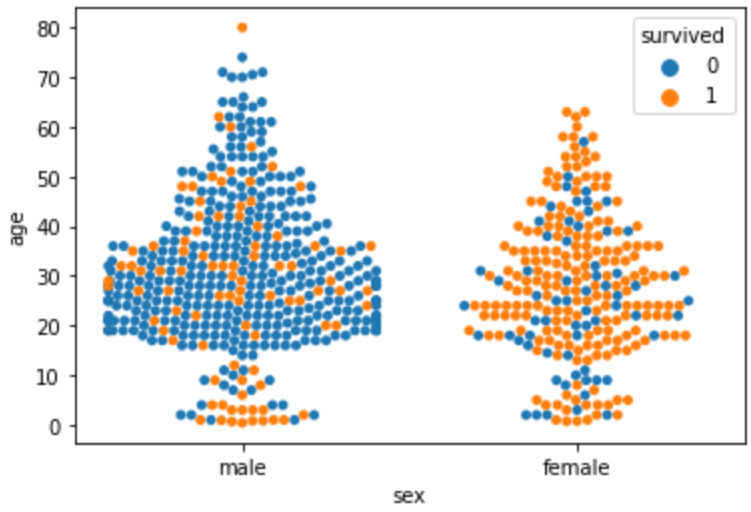
Out[18]:
```
<AxesSubplot:xlabel='sex', ylabel='age'>
```



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

```
C:\ProgramFiles\Anaconda3\lib\site-packages\seaborn\categorical.py:1296: UserWarning: 5.
9% of the points cannot be placed; you may want to decrease the size of the markers or u
se stripplot.
  warnings.warn(msg, UserWarning)
```

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



Heat Map

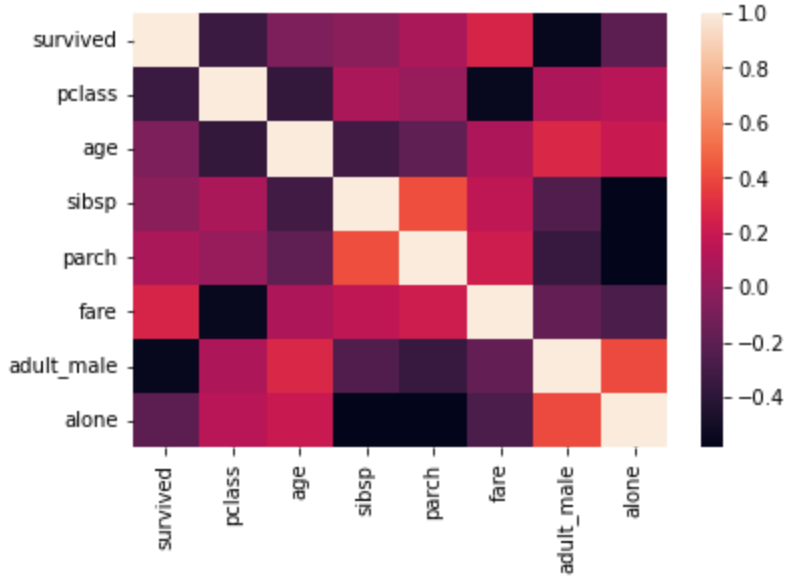
In [20]:
```
dataset.corr()
```

Out[20]:

	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

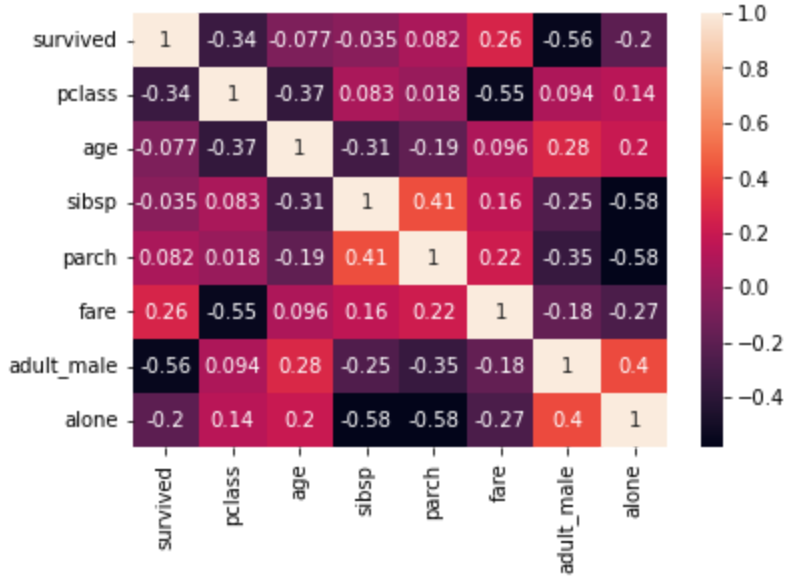
In [21]:
```
corr = dataset.corr()
sns.heatmap(corr)
```

Out[21]:
```
<AxesSubplot:>
```



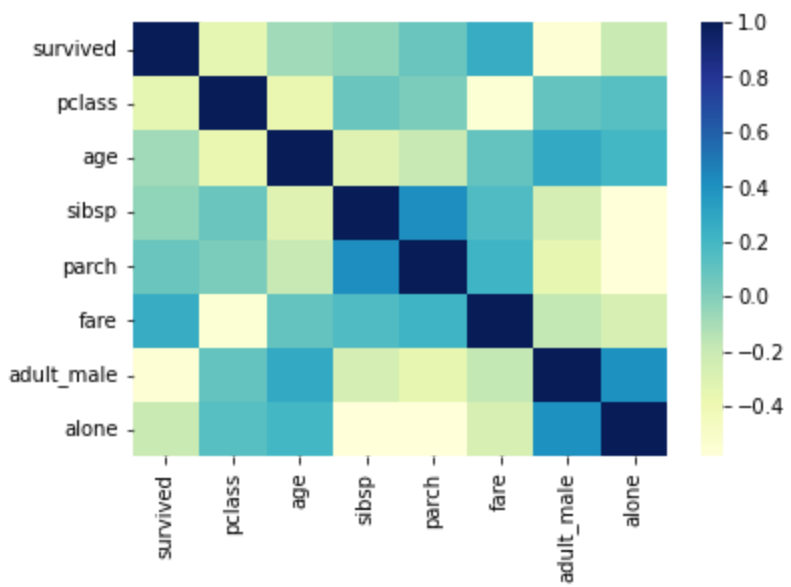
In [23]:
```
corr = dataset.corr()
sns.heatmap(corr,annot=True)
```

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



In [29]:
```
corr = dataset.corr()
sns.heatmap(corr,cmap="YlGnBu")
```

Out[29]:
```
<AxesSubplot:>
```



In [26]:

```
# Checking how the price of the ticket (column name: 'fare') for each
passenger isdistributed by plotting a histogram.
sns.histplot(dataset['fare'],kde=False, bins=10)
```

Out[26]:

```
<AxesSubplot:xlabel='fare', ylabel='Count'>
```