In [2]:
```
pip install seaborn
```

```
Requirement already satisfied: seaborn in /home/csl2/notebook/jupyterenv/lib/python3.
8/site-packages (0.11.2)
Requirement already satisfied: matplotlib>=2.2 in /home/csl2/notebook/jupyterenv/lib/
python3.8/site-packages (from seaborn) (3.5.2)
Requirement already satisfied: numpy>=1.15 in /home/csl2/notebook/jupyterenv/lib/pyth
on3.8/site-packages (from seaborn) (1.22.3)
Requirement already satisfied: pandas>=0.23 in /home/csl2/notebook/jupyterenv/lib/pyt
hon3.8/site-packages (from seaborn) (1.4.2)
Requirement already satisfied: scipy>=1.0 in /home/csl2/notebook/jupyterenv/lib/pytho
n3.8/site-packages (from seaborn) (1.8.0)
Requirement already satisfied: pyparsing>=2.2.1 in /home/csl2/notebook/jupyterenv/li
b/python3.8/site-packages (from matplotlib>=2.2->seaborn) (3.0.7)
Requirement already satisfied: fonttools>=4.22.0 in /home/csl2/notebook/jupyterenv/li
b/python3.8/site-packages (from matplotlib>=2.2->seaborn) (4.33.3)
Requirement already satisfied: pillow>=6.2.0 in /home/csl2/notebook/jupyterenv/lib/py
thon3.8/site-packages (from matplotlib>=2.2->seaborn) (9.1.0)
Requirement already satisfied: python-dateutil>=2.7 in /home/csl2/notebook/jupyteren
v/lib/python3.8/site-packages (from matplotlib>=2.2->seaborn) (2.8.2)
Requirement already satisfied: packaging>=20.0 in /home/csl2/notebook/jupyterenv/lib/
python3.8/site-packages (from matplotlib>=2.2->seaborn) (21.3)
Requirement already satisfied: kiwisolver>=1.0.1 in /home/csl2/notebook/jupyterenv/li
b/python3.8/site-packages (from matplotlib>=2.2->seaborn) (1.4.2)
Requirement already satisfied: cycler>=0.10 in /home/csl2/notebook/jupyterenv/lib/pyt
hon3.8/site-packages (from matplotlib>=2.2->seaborn) (0.11.0)
Requirement already satisfied: pytz>=2020.1 in /home/csl2/notebook/jupyterenv/lib/pyt
hon3.8/site-packages (from pandas>=0.23->seaborn) (2022.1)
Requirement already satisfied: six>=1.5 in /home/csl2/notebook/jupyterenv/lib/python
3.8/site-packages (from python-dateutil>=2.7->matplotlib>=2.2->seaborn) (1.16.0)
Note: you may need to restart the kernel to use updated packages.
```

In [3]:
```
#Dataset
import pandas as pd
import numpy as np

import matplotlib.pyplot as plt
import seaborn as sns

dataset = sns.load_dataset('titanic')

dataset.head(30)
```

Out[3]:

	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
5	0	3	male	NaN	0	0	8.4583	Q	Third	man	True
6	0	1	male	54.0	0	0	51.8625	S	First	man	True
7	0	3	male	2.0	3	1	21.0750	S	Third	child	False
8	1	3	female	27.0	0	2	11.1333	S	Third	woman	False
9	1	2	female	14.0	1	0	30.0708	C	Second	child	False
10	1	3	female	4.0	1	1	16.7000	S	Third	child	False
11	1	1	female	58.0	0	0	26.5500	S	First	woman	False
12	0	3	male	20.0	0	0	8.0500	S	Third	man	True
13	0	3	male	39.0	1	5	31.2750	S	Third	man	True
14	0	3	female	14.0	0	0	7.8542	S	Third	child	False
15	1	2	female	55.0	0	0	16.0000	S	Second	woman	False
16	0	3	male	2.0	4	1	29.1250	Q	Third	child	False
17	1	2	male	NaN	0	0	13.0000	S	Second	man	True
18	0	3	female	31.0	1	0	18.0000	S	Third	woman	False
19	1	3	female	NaN	0	0	7.2250	C	Third	woman	False
20	0	2	male	35.0	0	0	26.0000	S	Second	man	True
21	1	2	male	34.0	0	0	13.0000	S	Second	man	True
22	1	3	female	15.0	0	0	8.0292	Q	Third	child	False
23	1	1	male	28.0	0	0	35.5000	S	First	man	True
24	0	3	female	8.0	3	1	21.0750	S	Third	child	False
25	1	3	female	38.0	1	5	31.3875	S	Third	woman	False
26	0	3	male	NaN	0	0	7.2250	C	Third	man	True
27	0	1	male	19.0	3	2	263.0000	S	First	man	True
28	1	3	female	NaN	0	0	7.8792	Q	Third	woman	False
29	0	3	male	NaN	0	0	7.8958	S	Third	man	True

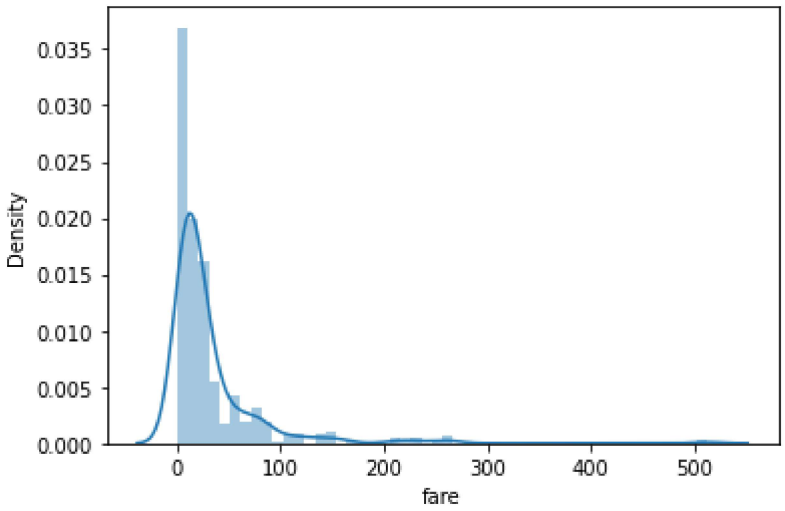
In [4]:
```
#Distributional Plots
```

In [5]:
```
# 1.The Dist Plot
```

In [6]:
```
sns.distplot(dataset['fare'])
```

```
/home/csl2/notebook/jupyterenv/lib/python3.8/site-packages/seaborn/distributions.py:2619: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```

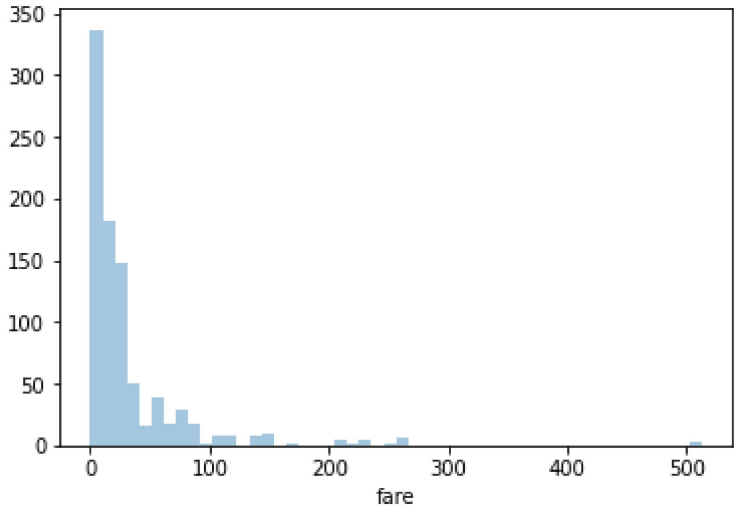
Out[6]:
```
<AxesSubplot:xlabel='fare', ylabel='Density'>
```



In [7]:
```
sns.distplot(dataset['fare'], kde=False)
```

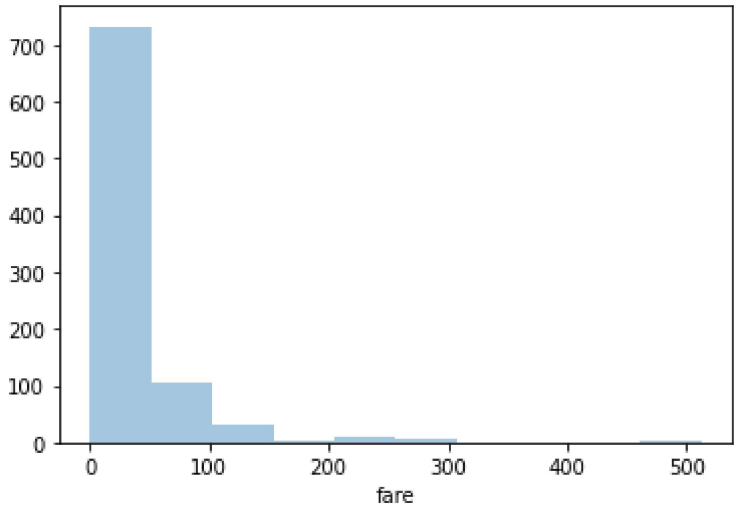
```
/home/csl2/notebook/jupyterenv/lib/python3.8/site-packages/seaborn/distributions.py:2619: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).
  warnings.warn(msg, FutureWarning)
```

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



In [8]:
```
sns.distplot(dataset['fare'], kde=False, bins=10)
```

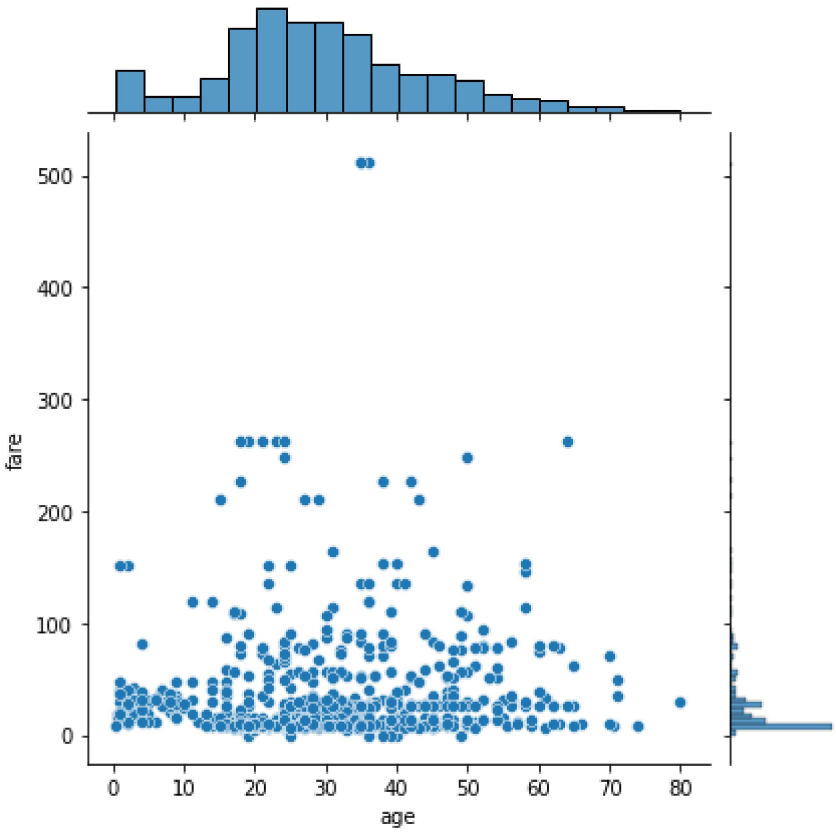
Out[8]:
```
<AxesSubplot:xlabel='fare'>
```



In [9]:
```
# 2.The Joint Plot
```

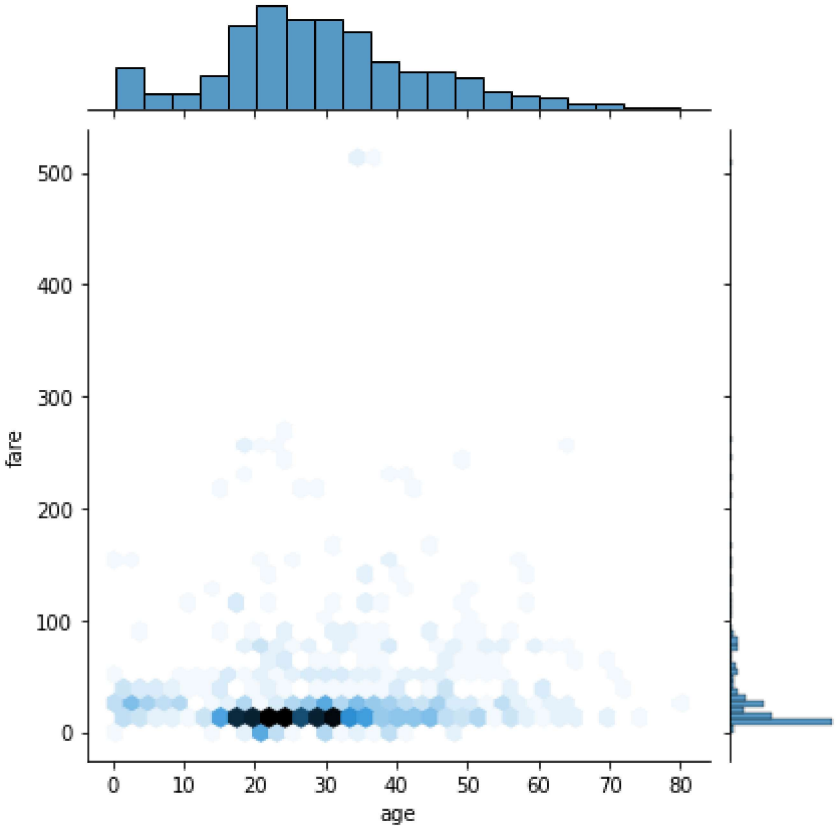
In [10]:
```
sns.jointplot(x='age', y='fare', data=dataset)
```

Out[10]:
```
<seaborn.axisgrid.JointGrid at 0x7ff329beefa0>
```



In [11]:
```
sns.jointplot(x='age', y='fare', data=dataset, kind='hex')
```

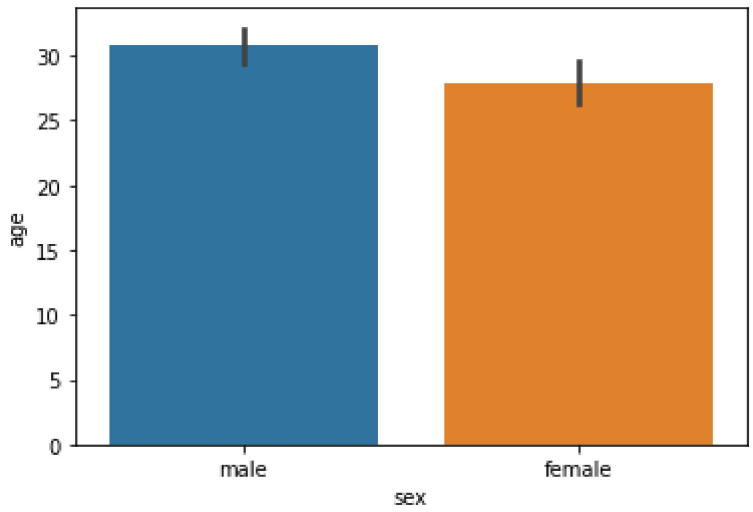
Out[11]:
```
<seaborn.axisgrid.JointGrid at 0x7ff364322730>
```



In [12]:
```
# 3.Categorical Plots
```

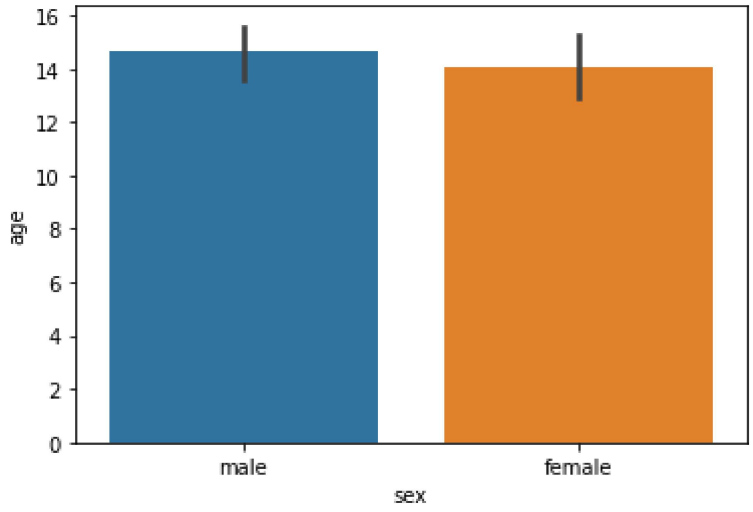
In [13]:
```
sns.barplot(x='sex', y='age', data=dataset)
```

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



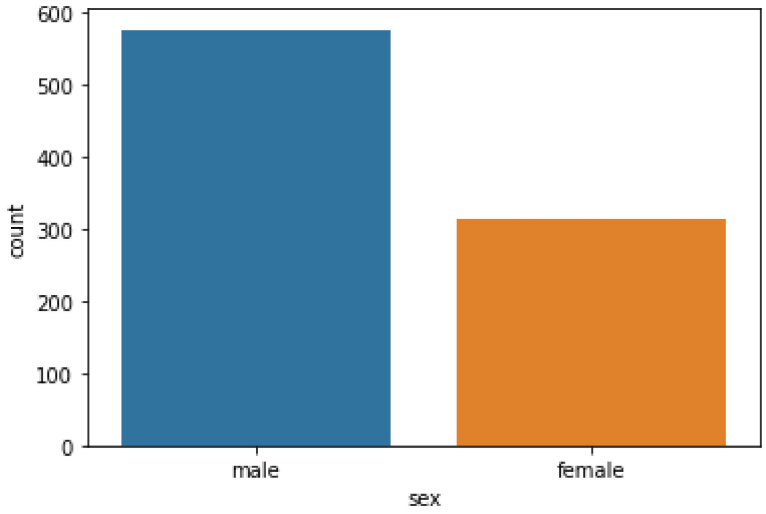
In [14]:
```
import numpy as np

import matplotlib.pyplot as plt
import seaborn as sns

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

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



In [15]:
```
sns.countplot(x='sex', data=dataset)
```

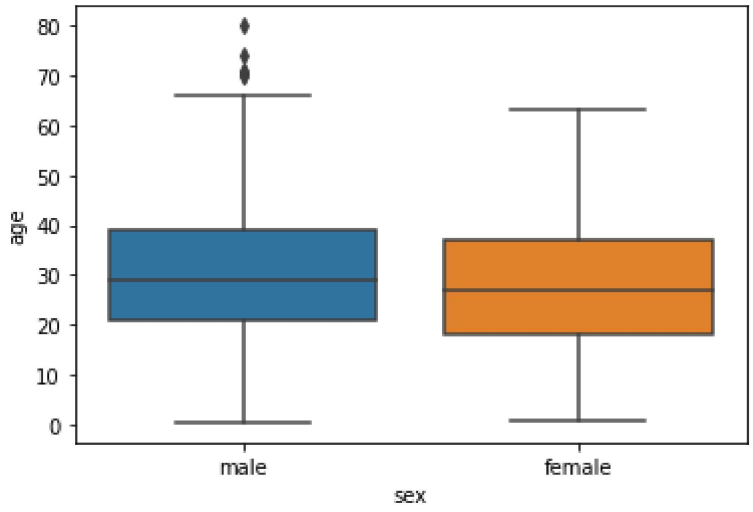
Out[15]:
```
<AxesSubplot:xlabel='sex', ylabel='count'>
```



In [16]:
```
# 4.The Box Plot
```

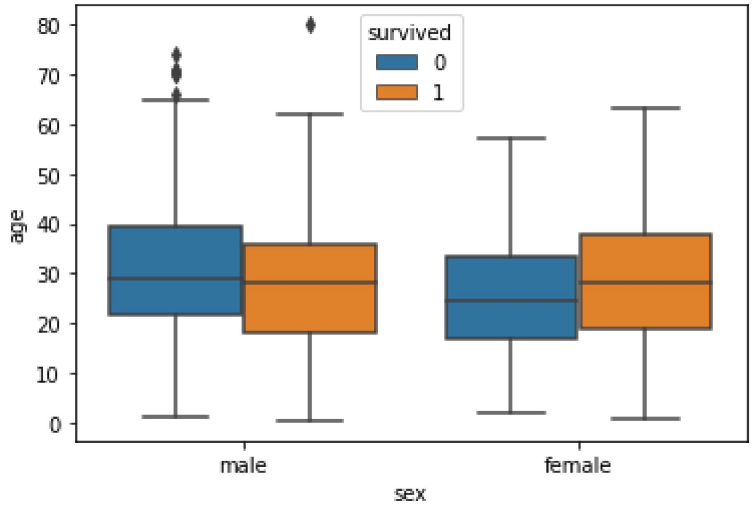
In [17]:
```
sns.boxplot(x='sex', y='age', data=dataset)
```

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



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

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



In [ ]:
```

```