

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

```
Requirement already satisfied: seaborn in c:\users\hp\anaconda3\lib\site-packages (0.9.0)
Requirement already satisfied: matplotlib>=1.4.3 in c:\users\hp\anaconda3\lib\site-packages (from seaborn) (3.1.1)
Requirement already satisfied: numpy>=1.9.3 in c:\users\hp\anaconda3\lib\site-packages (from seaborn) (1.16.5)
Requirement already satisfied: scipy>=0.14.0 in c:\users\hp\anaconda3\lib\site-packages (from seaborn) (1.3.1)
Requirement already satisfied: pandas>=0.15.2 in c:\users\hp\anaconda3\lib\site-packages (from seaborn) (0.25.1)
Requirement already satisfied: cycler>=0.10 in c:\users\hp\anaconda3\lib\site-packages (from matplotlib>=1.4.3->seaborn) (0.10.0)
Requirement already satisfied: kiwisolver>=1.0.1 in c:\users\hp\anaconda3\lib\site-packages (from matplotlib>=1.4.3->seaborn) (1.1.0)
Requirement already satisfied: pyparsing!=2.0.4,!=2.1.2,!=2.1.6,>=2.0.1 in c:\users\hp\anaconda3\lib\site-packages (from matplotlib>=1.4.3->seaborn) (2.4.2)
Requirement already satisfied: python-dateutil>=2.1 in c:\users\hp\anaconda3\lib\site-packages (from matplotlib>=1.4.3->seaborn) (2.8.0)
Requirement already satisfied: pytz>=2017.2 in c:\users\hp\anaconda3\lib\site-packages (from pandas>=0.15.2->seaborn) (2019.3)
Requirement already satisfied: six in c:\users\hp\anaconda3\lib\site-packages (from cycler>=0.10->matplotlib>=1.4.3->seaborn) (1.12.0)
Requirement already satisfied: setuptools in c:\users\hp\anaconda3\lib\site-packages (from kiwisolver>=1.0.1->matplotlib>=1.4.3->seaborn) (41.4.0)
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

dataset = sns.load_dataset('titanic')

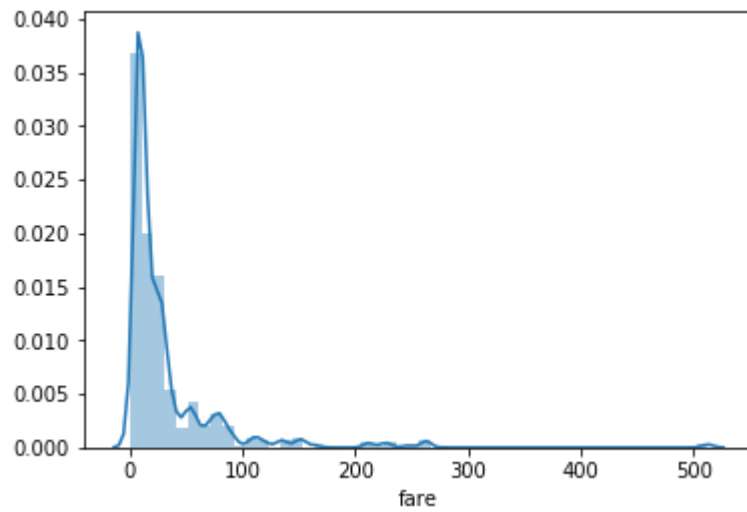
dataset.head()
```

Out[2]:

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

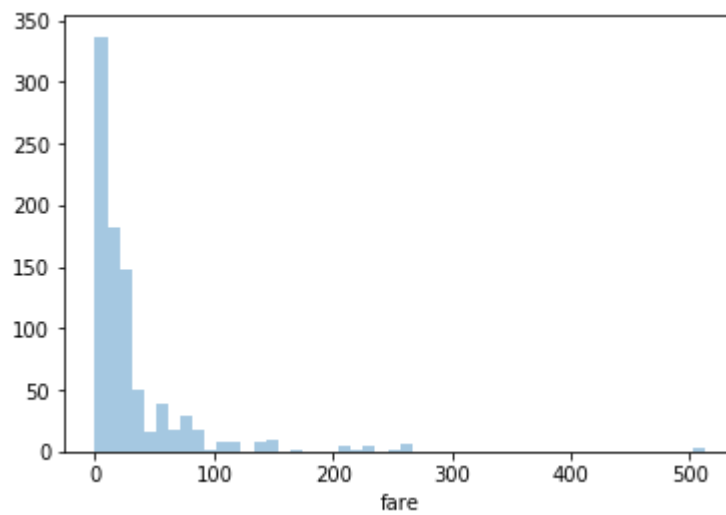
```
In [3]: sns.distplot(dataset['fare'])
```

```
Out[3]: <matplotlib.axes._subplots.AxesSubplot at 0x2367329efc8>
```



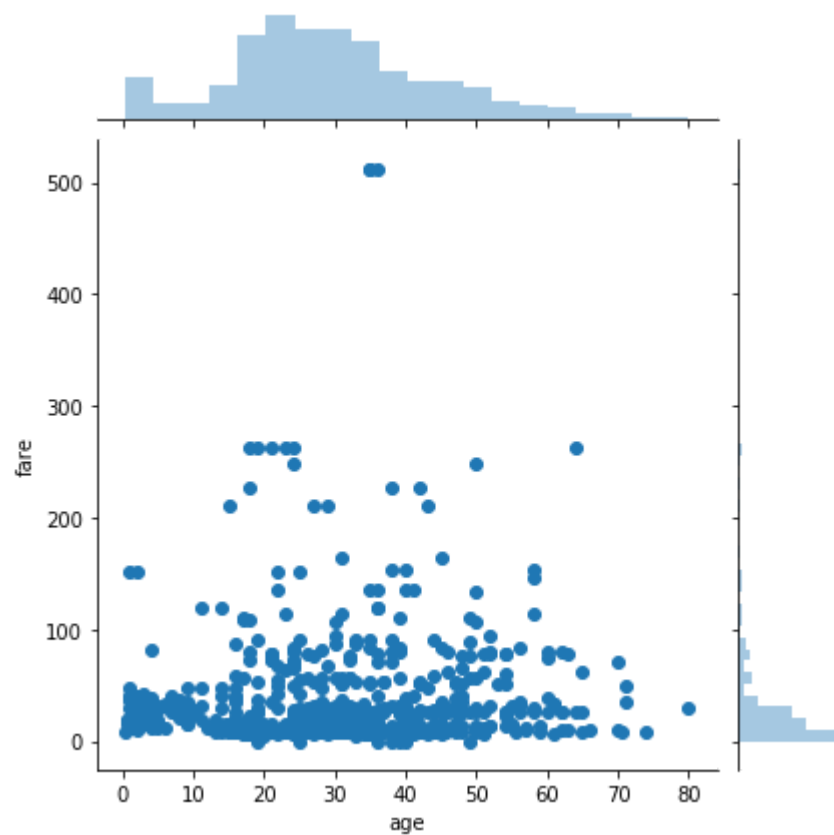
```
In [4]: sns.distplot(dataset['fare'], kde=False)
```

```
Out[4]: <matplotlib.axes._subplots.AxesSubplot at 0x236736415c8>
```



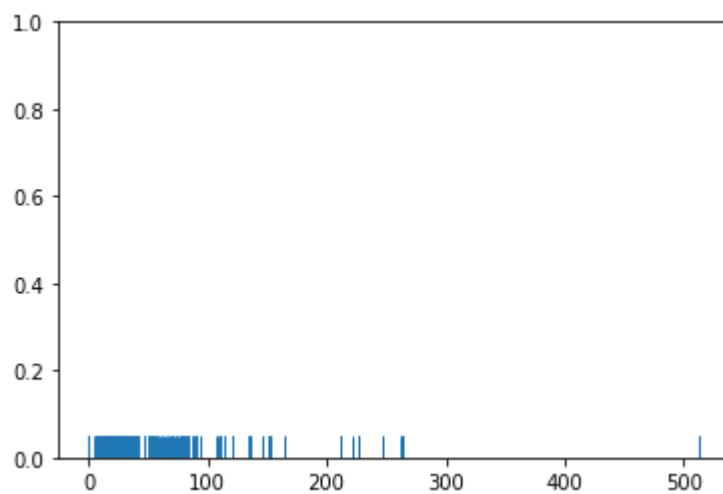
```
In [5]: sns.jointplot(x='age', y='fare', data=dataset)
```

```
Out[5]: <seaborn.axisgrid.JointGrid at 0x23673741888>
```



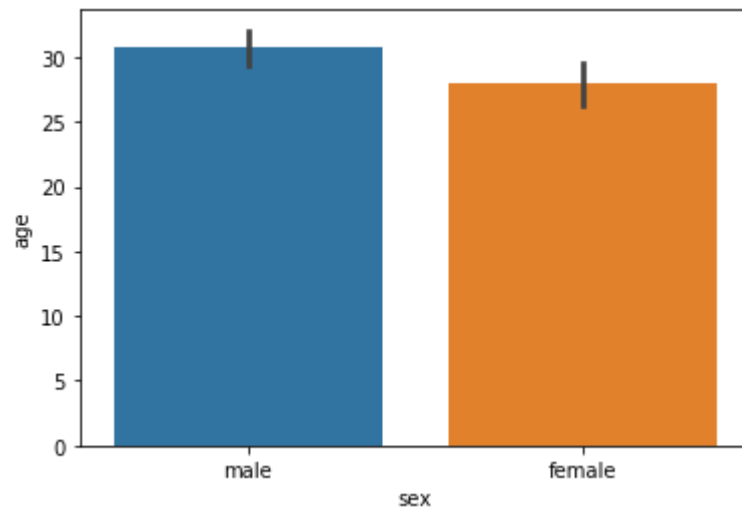
```
In [6]: sns.rugplot(dataset['fare'])
```

```
Out[6]: <matplotlib.axes._subplots.AxesSubplot at 0x23673972c08>
```



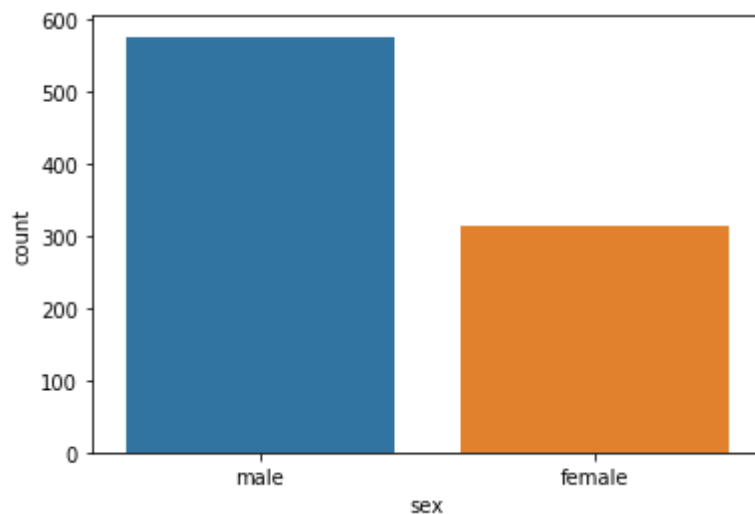
```
In [7]: sns.barplot(x='sex', y='age', data=dataset)
```

```
Out[7]: <matplotlib.axes._subplots.AxesSubplot at 0x23673a2f648>
```



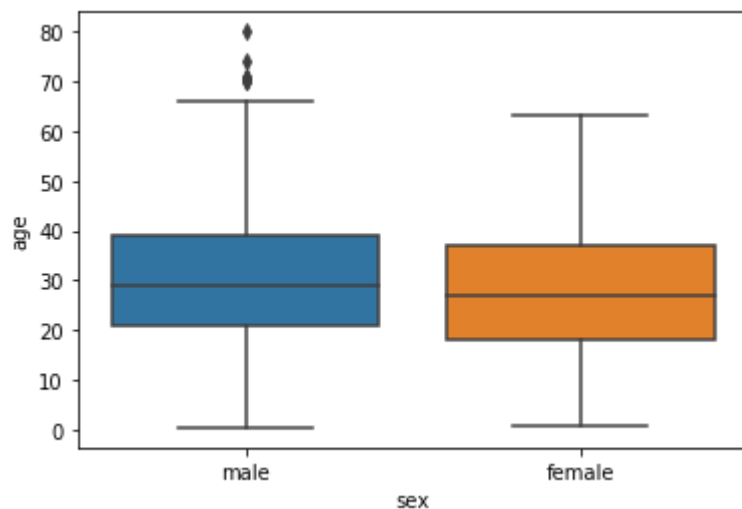
```
In [8]: sns.countplot(x='sex', data=dataset)
```

```
Out[8]: <matplotlib.axes._subplots.AxesSubplot at 0x2366d724a48>
```



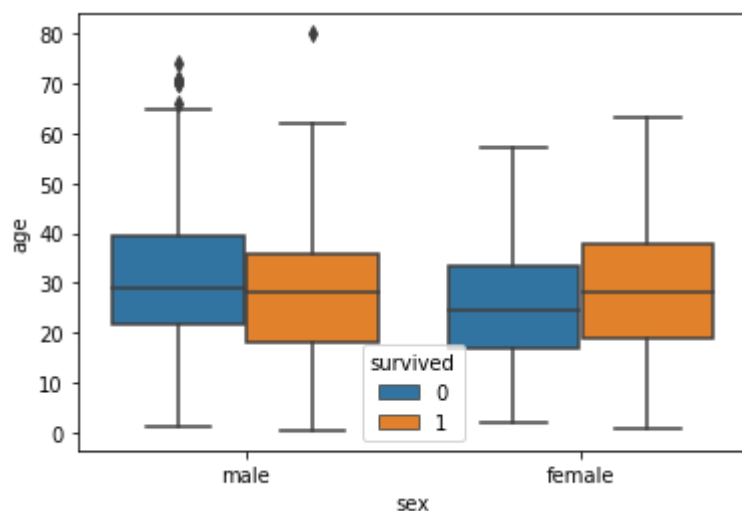
```
In [9]: sns.boxplot(x='sex', y='age', data=dataset)
```

```
Out[9]: <matplotlib.axes._subplots.AxesSubplot at 0x23673afc208>
```



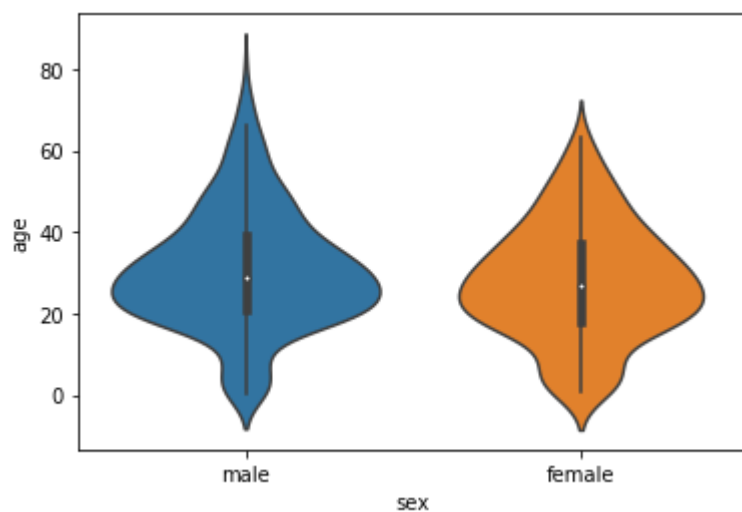
```
In [10]: sns.boxplot(x='sex', y='age', data=dataset, hue="survived")
```

```
Out[10]: <matplotlib.axes._subplots.AxesSubplot at 0x23673b80508>
```



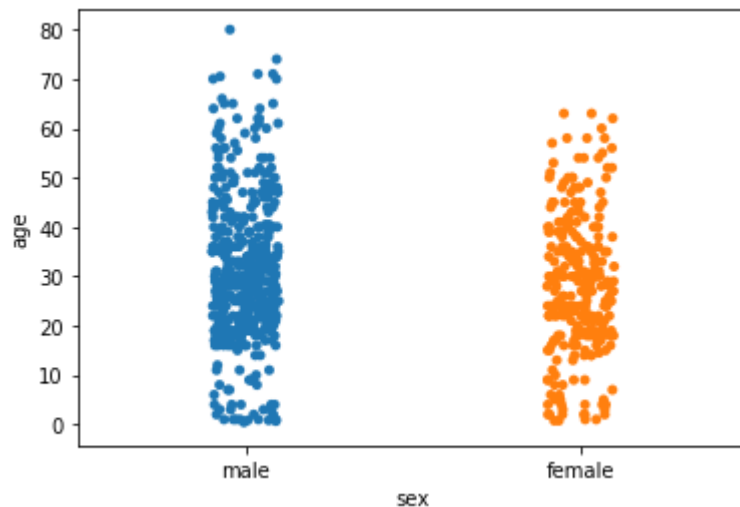
```
In [11]: sns.violinplot(x='sex', y='age', data=dataset)
```

```
Out[11]: <matplotlib.axes._subplots.AxesSubplot at 0x23673c46e48>
```



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

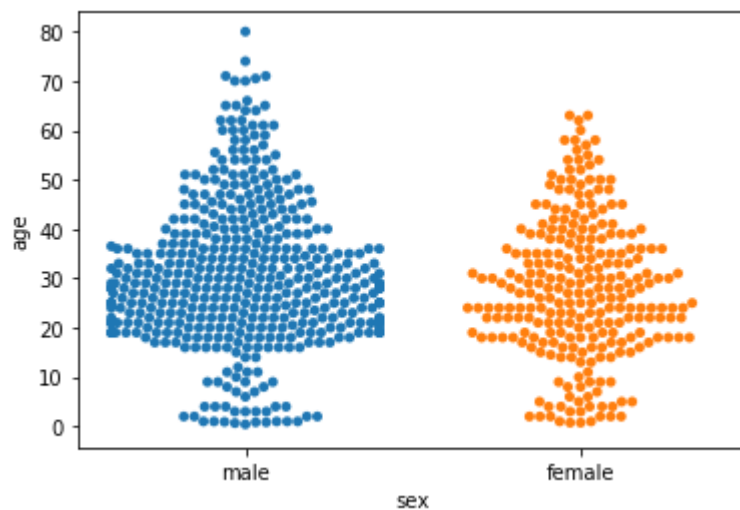
```
Out[12]: <matplotlib.axes._subplots.AxesSubplot at 0x23673ca1888>
```



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

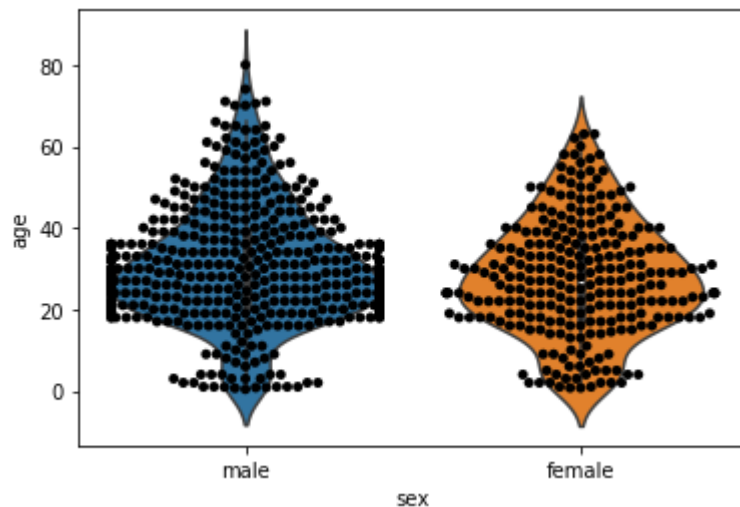
```
C:\Users\HP\Anaconda3\lib\site-packages\seaborn\categorical.py:1324: RuntimeWarning: invalid value encountered in less  
  off_low = points < low_gutter  
C:\Users\HP\Anaconda3\lib\site-packages\seaborn\categorical.py:1328: RuntimeWarning: invalid value encountered in greater  
  off_high = points > high_gutter
```

```
Out[13]: <matplotlib.axes._subplots.AxesSubplot at 0x23673d17488>
```



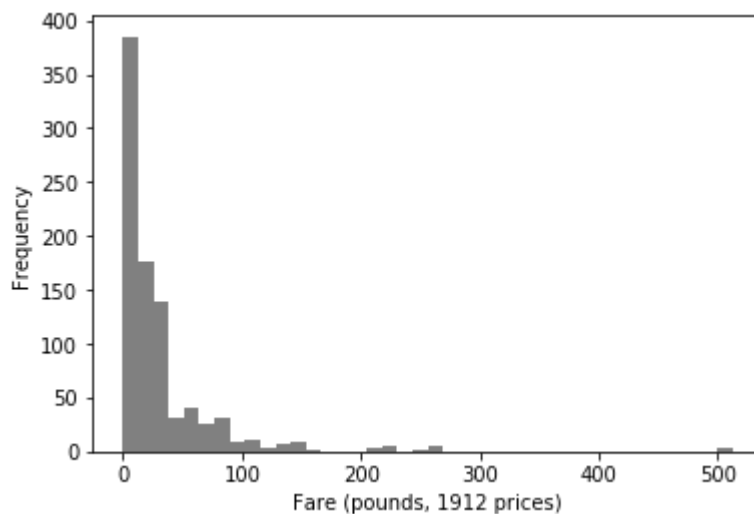
```
In [14]: sns.violinplot(x='sex', y='age', data=dataset)
sns.swarmplot(x='sex', y='age', data=dataset, color='black')
```

Out[14]: <matplotlib.axes._subplots.AxesSubplot at 0x23673dc5e48>



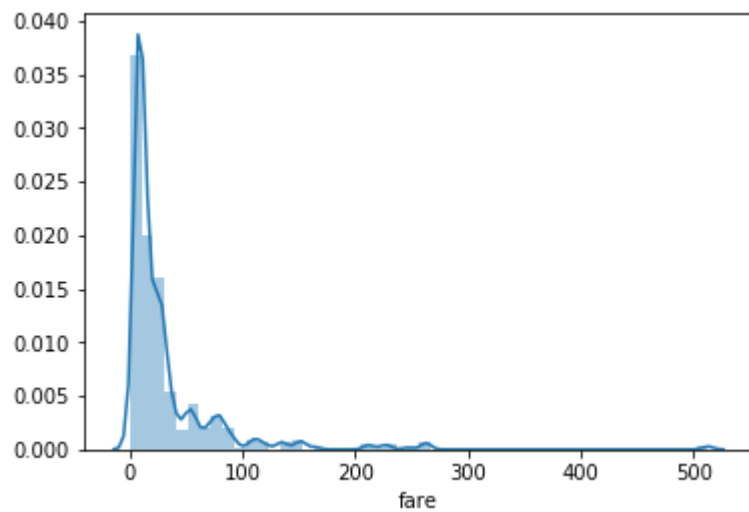
```
In [15]: #Expt. No. 8 Part-2
# histogram of fare
titanic_hist = dataset.fare.plot.hist(bins = 40, color = 'grey')
plt.xlabel('Fare (pounds, 1912 prices)')

plt.show(titanic_hist)
```



```
In [16]: sns.distplot(dataset['fare'])
```

```
Out[16]: <matplotlib.axes._subplots.AxesSubplot at 0x23673c28d48>
```



```
In [ ]:
```