The Data ¶

We will be working with a famous titanic data set for these exercises. Later on in the Machine Learning section of the course, we will revisit this data, and use it to predict survival rates of passengers. For now, we'll just focus on the visualization of the data with seaborn:

In [1]:

```
import seaborn as sns
import matplotlib.pyplot as plt
%matplotlib inline
```

In [2]:

```
sns.set_style('whitegrid')
```

In [3]:

```
titanic = sns.load_dataset('titanic')
```

Exercises

Recreate the plots below using the titanic dataframe. There are very few hints since most of the plots can be done with just one or two lines of code and a hint would basically give away the solution. Keep careful attention to the x and y labels for hints.

Note: In order to not lose the plot image, make sure you don't code in the cell that is directly above the plot, there is an extra cell above that one which won't overwrite that plot!

In [4]:

```
titanic.head()
```

Out[4]:

	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

Exercise 1

In [5]:

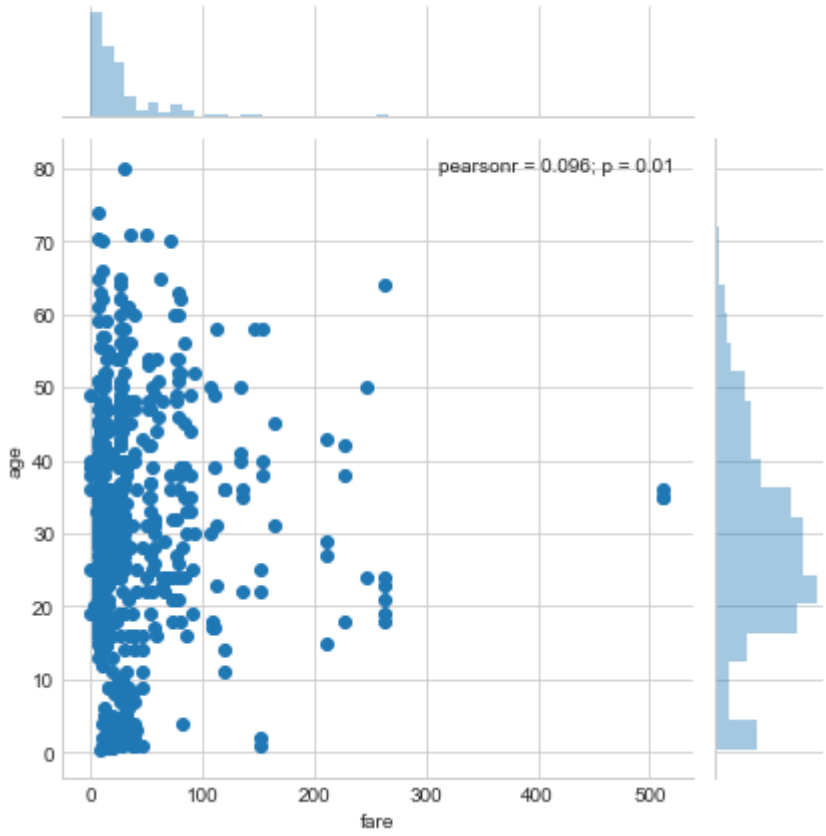
```
# CODE HERE
# REPLICATE EXERCISE PLOT IMAGE BELOW
# BE CAREFUL NOT TO OVERWRITE CELL BELOW
# THAT WOULD REMOVE THE EXERCISE PLOT IMAGE!
```

In [6]:

```
sns.jointplot(x='fare',y='age',data=titanic)
```

Out[6]:

```
<seaborn.axisgrid.JointGrid at 0x10d4f6cc0>
```



Exercise 2

In [7]:

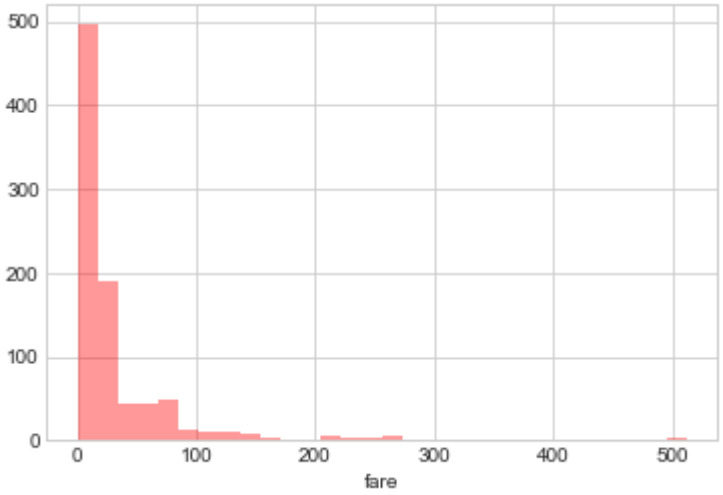
```
# CODE HERE
# REPLICATE EXERCISE PLOT IMAGE BELOW
# BE CAREFUL NOT TO OVERWRITE CELL BELOW
# THAT WOULD REMOVE THE EXERCISE PLOT IMAGE!
```

In [8]:

```
sns.distplot(titanic['fare'],bins=30,kde=False,color='red')
```

Out[8]:

```
<matplotlib.axes._subplots.AxesSubplot at 0x1077749b0>
```



Exercise 3

In [9]:

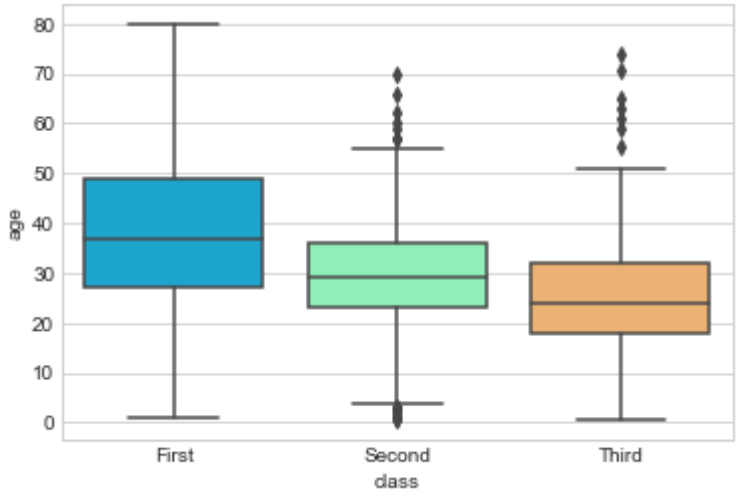
```
# CODE HERE
# REPLICATE EXERCISE PLOT IMAGE BELOW
# BE CAREFUL NOT TO OVERWRITE CELL BELOW
# THAT WOULD REMOVE THE EXERCISE PLOT IMAGE!
```

In [10]:

```
sns.boxplot(x='class',y='age',data=titanic,palette='rainbow')
```

Out[10]:

```
<matplotlib.axes._subplots.AxesSubplot at 0x1120d9128>
```



Exercise 4

In [13]:

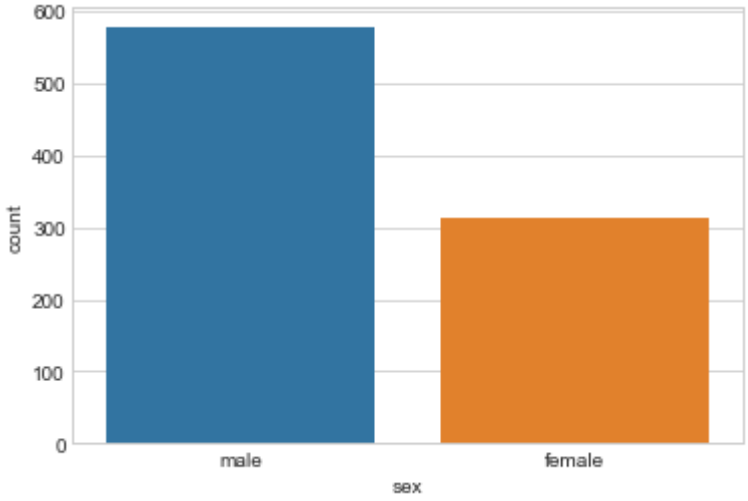
```
# CODE HERE
# REPLICATE EXERCISE PLOT IMAGE BELOW
# BE CAREFUL NOT TO OVERWRITE CELL BELOW
# THAT WOULD REMOVE THE EXERCISE PLOT IMAGE!
```

In [14]:

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

Out[14]:

```
<matplotlib.axes._subplots.AxesSubplot at 0x11225bb38>
```



Exercise 5

In [15]:

```
# CODE HERE
# REPLICATE EXERCISE PLOT IMAGE BELOW
# BE CAREFUL NOT TO OVERWRITE CELL BELOW
# THAT WOULD REMOVE THE EXERCISE PLOT IMAGE!
```

In [16]:

```
sns.heatmap(titanic.corr(),cmap='coolwarm')
plt.title('titanic.corr()')
```

Out[16]:

```
Text(0.5,1,'titanic.corr()')
```