Seaborn Exercises (Worth 70 points) Time to practice your new seaborn skills! Try to recreate the plots below

The Data

We will be working with a famous titanic data set for these exercises. For now, we'll just focus on the visualization of the data with seaborn:

In [18]:
```
import warnings
warnings.filterwarnings('ignore')

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

In [19]:
```
sns.set_style('whitegrid')
```

In [20]:
```
titanic = sns.load_dataset('titanic')
```

In [21]:
```
titanic.head()
```

Out[21]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	de
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	Na
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	Na
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	Na

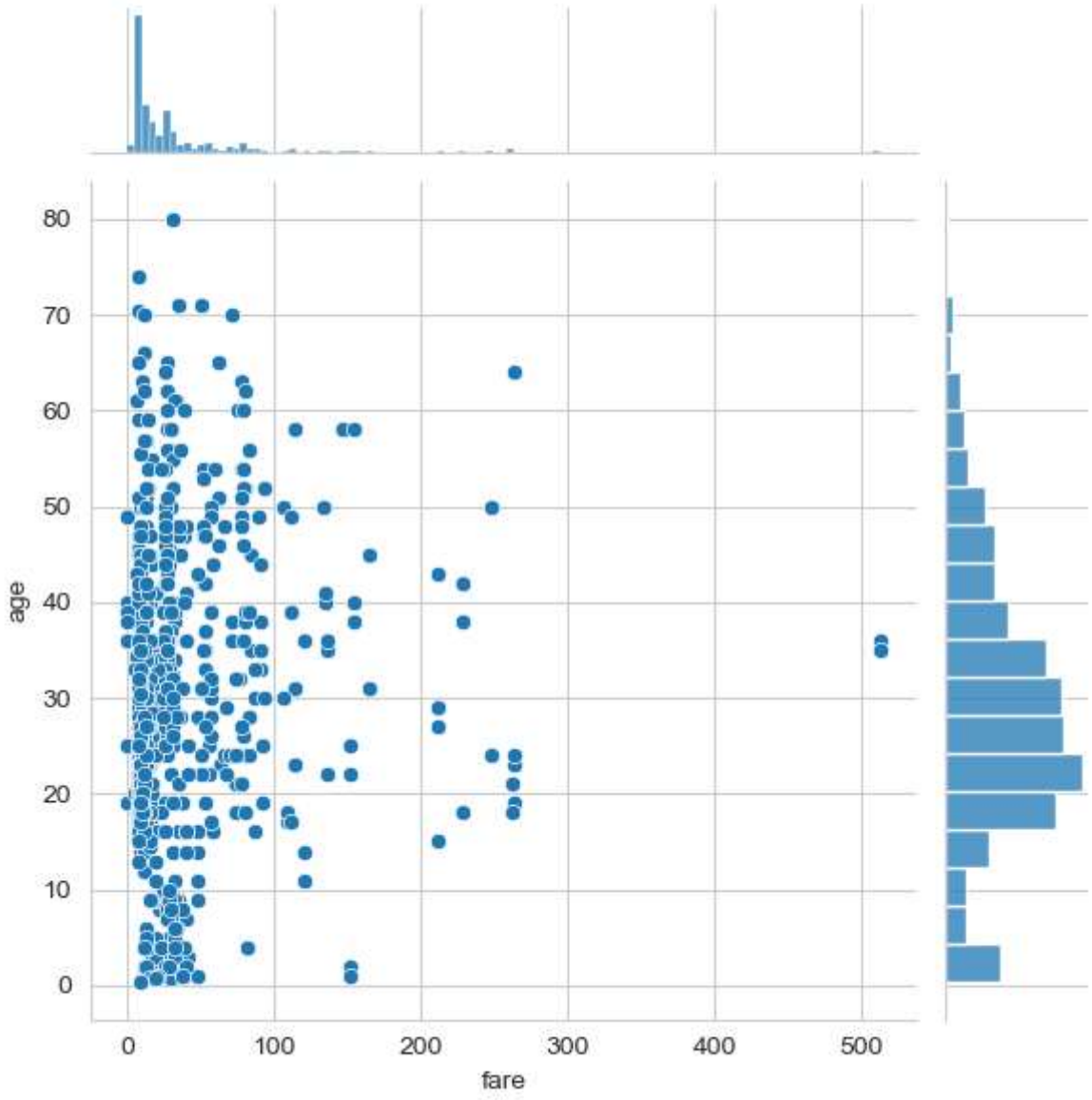
Exercise 1 (worth 10 points)

** 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 [22]:
```
sns.jointplot(x='fare',y='age',data=titanic,kind='scatter')
# REPLICATE EXERCISE PLOT IMAGE BELOW
# BE CAREFUL NOT TO OVERWRITE CELL BELOW
# THAT WOULD REMOVE THE EXERCISE PLOT IMAGE!
```

Out[22]: <seaborn.axisgrid.JointGrid at 0x2740b05a0d0>

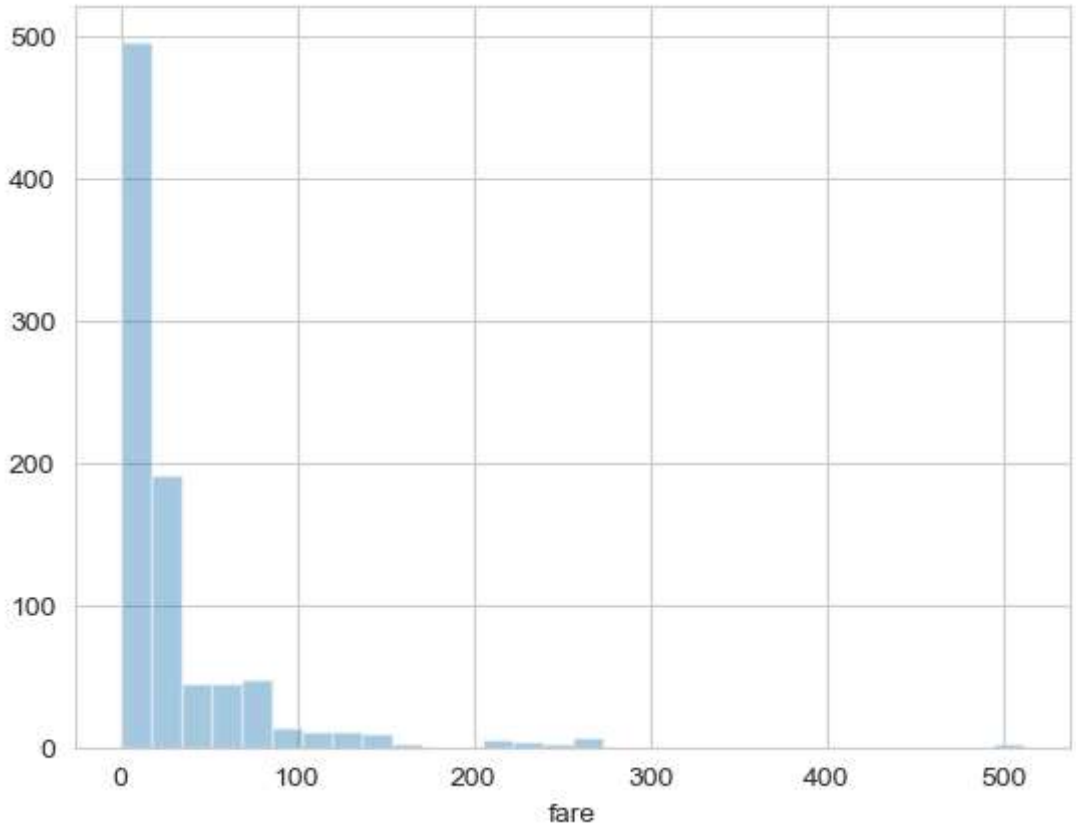


In [ ]:

Exercise 2 (Worth 10 points)

In [23]:
```
sns.distplot(titanic['fare'],kde=False, bins=30)
# REPLICATE EXERCISE PLOT IMAGE BELOW
# BE CAREFUL NOT TO OVERWRITE CELL BELOW
# THAT WOULD REMOVE THE EXERCISE PLOT IMAGE!
```

Out[23]: <AxesSubplot:xlabel='fare'>



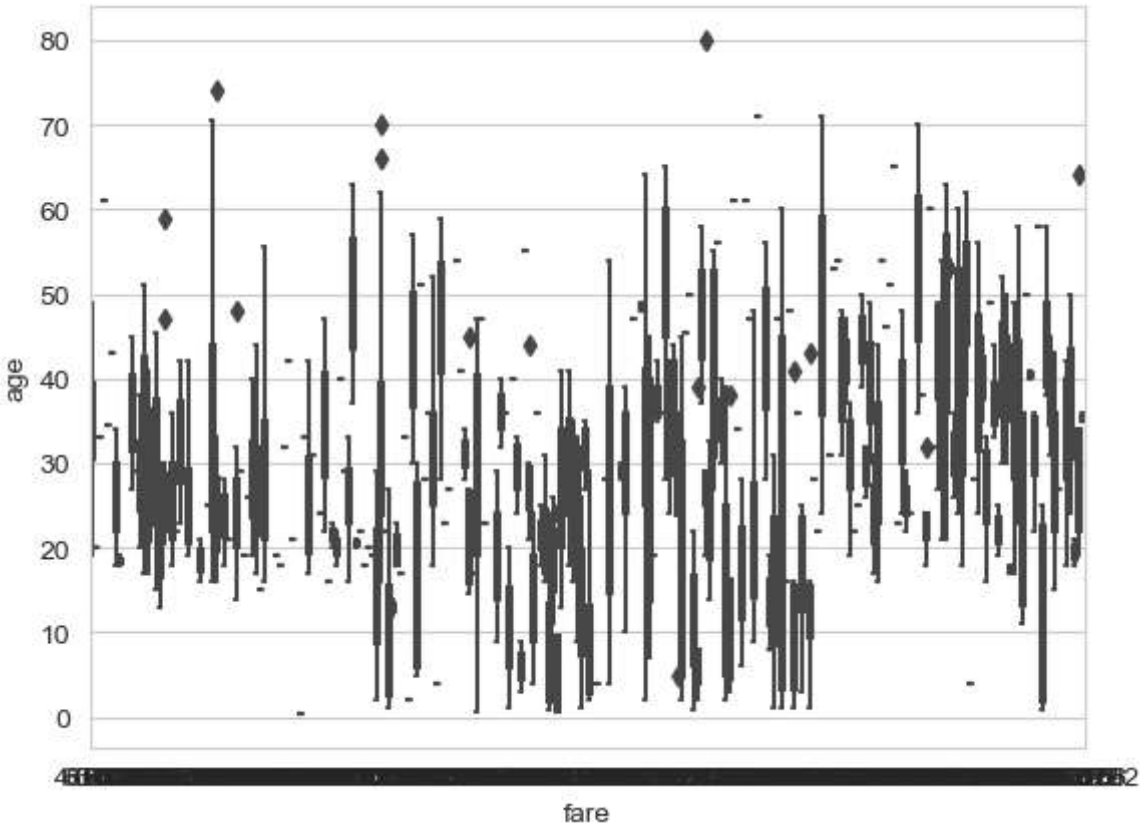
In [ ]:
```

```

Exercise 3 (Worth 10 points)

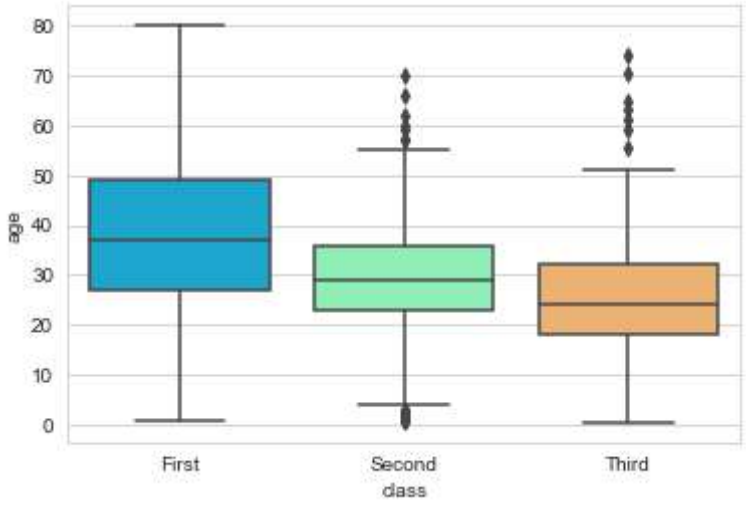
In [24]:
```
sns.boxplot(x="fare", y="age", data=titanic,palette='rainbow')
# REPLICATE EXERCISE PLOT IMAGE BELOW
# BE CAREFUL NOT TO OVERWRITE CELL BELOW
# THAT WOULD REMOVE THE EXERCISE PLOT IMAGE!
#for some reason this is what I got, I think anaconda has bugs and I can't fix th
#for some reason it isn't working
```

Out[24]: <AxesSubplot:xlabel='fare', ylabel='age'>



In [17]:

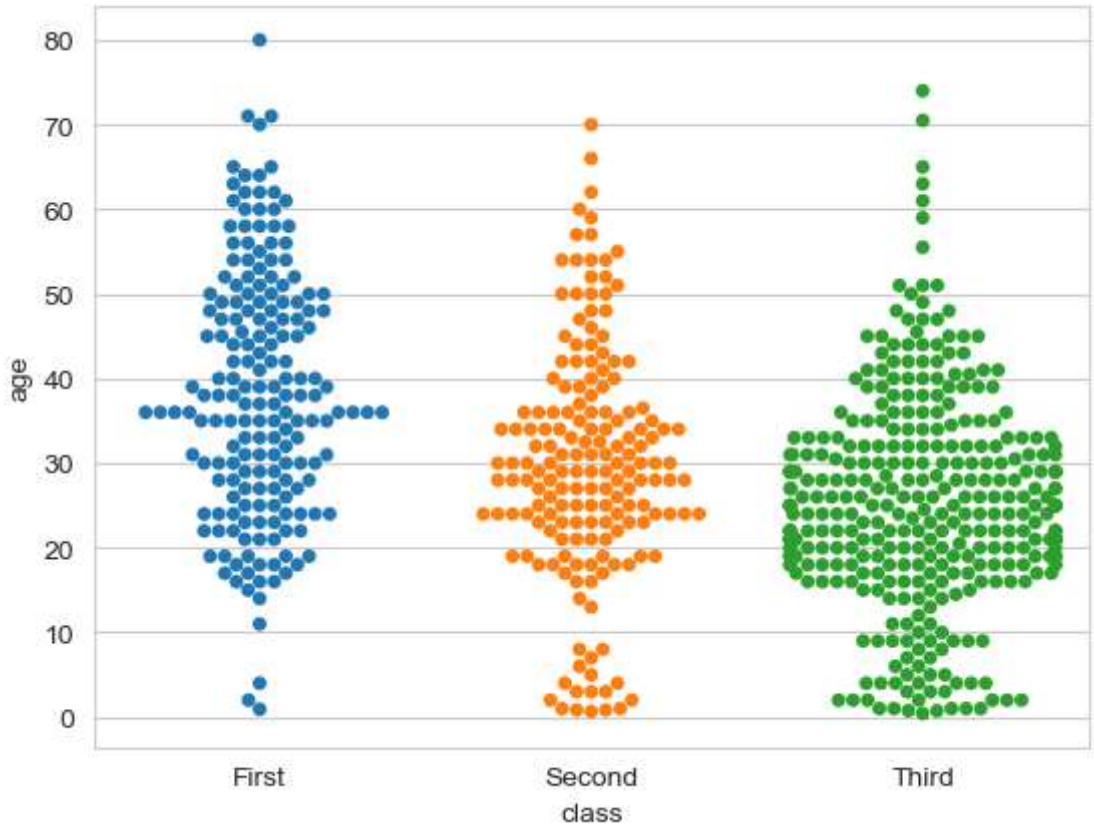
Out[17]: <matplotlib.axes._subplots.AxesSubplot at 0x14f52885b00>



Exercise 4 (Worth 10 points)

In [35]:
```
sns.swarmplot(x="class", y="age", data=titanic)
# REPLICATE EXERCISE PLOT IMAGE BELOW
# BE CAREFUL NOT TO OVERWRITE CELL BELOW
# THAT WOULD REMOVE THE EXERCISE PLOT IMAGE!
```

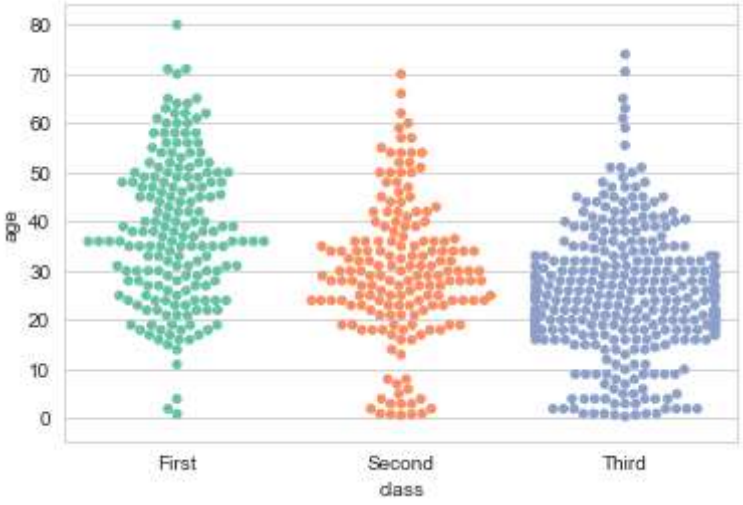
Out[35]:
```
<AxesSubplot:xlabel='class', ylabel='age'>
```



In [18]:
```

```

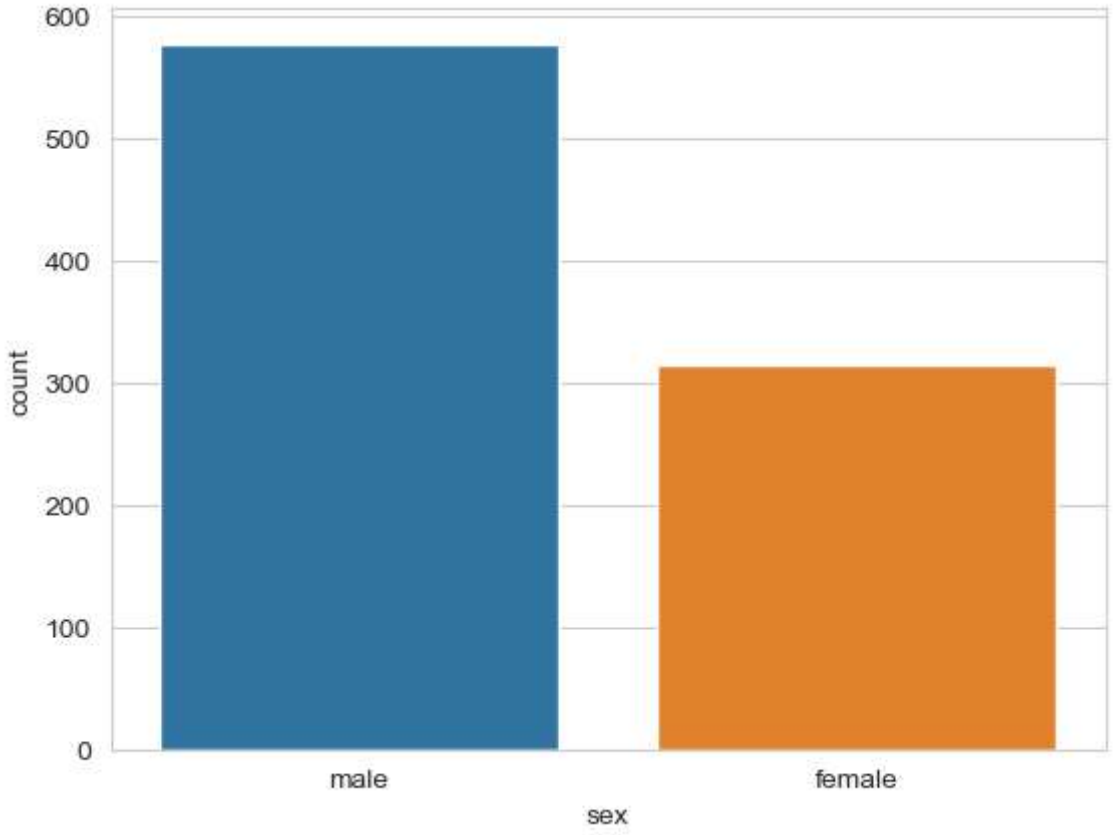
Out[18]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x14f54052a58>
```



Exercise 5 (Worth 10 points)

In [27]:
```
sns.countplot(x='sex', data=titanic)
# REPLICATE EXERCISE PLOT IMAGE BELOW
# BE CAREFUL NOT TO OVERWRITE CELL BELOW
# THAT WOULD REMOVE THE EXERCISE PLOT IMAGE!
```

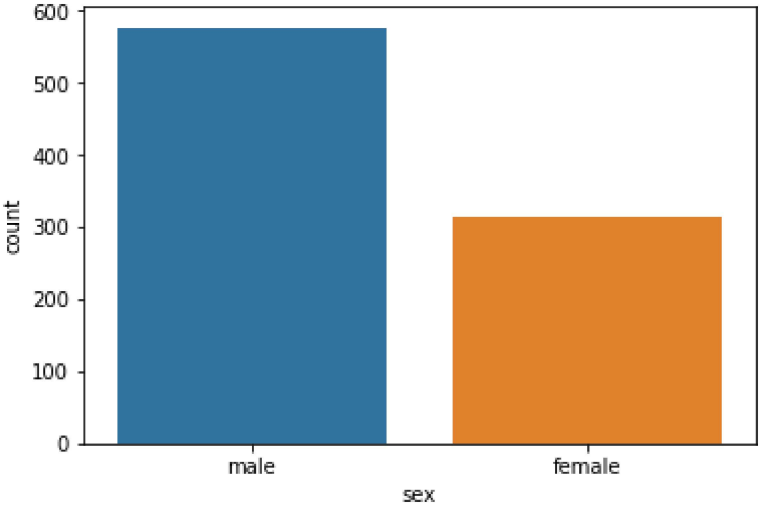
Out[27]: <AxesSubplot:xlabel='sex', ylabel='count'>



In [9]:
```

```

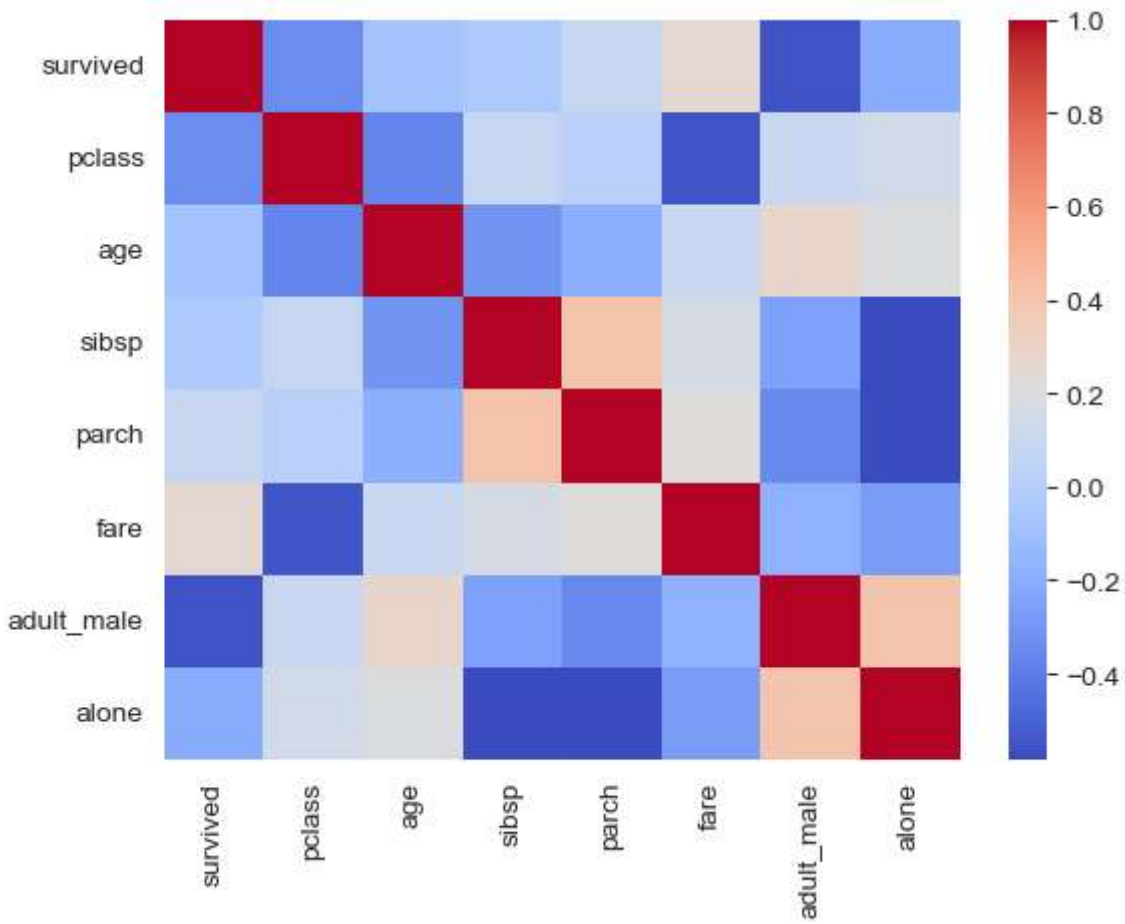
Out[9]: <matplotlib.axes._subplots.AxesSubplot at 0x27f29401dd8>



Exercise 6 (Worth 10 points)

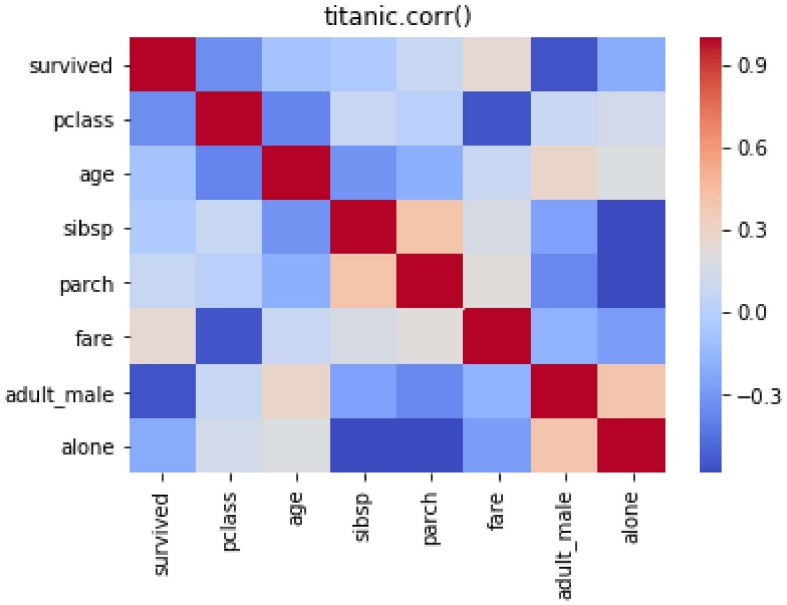
In [37]:
```
sns.heatmap(titanic.corr(),cmap='coolwarm')
# REPLICATE EXERCISE PLOT IMAGE BELOW
# BE CAREFUL NOT TO OVERWRITE CELL BELOW
# THAT WOULD REMOVE THE EXERCISE PLOT IMAGE!
```

Out[37]: <AxesSubplot:>



In [11]:

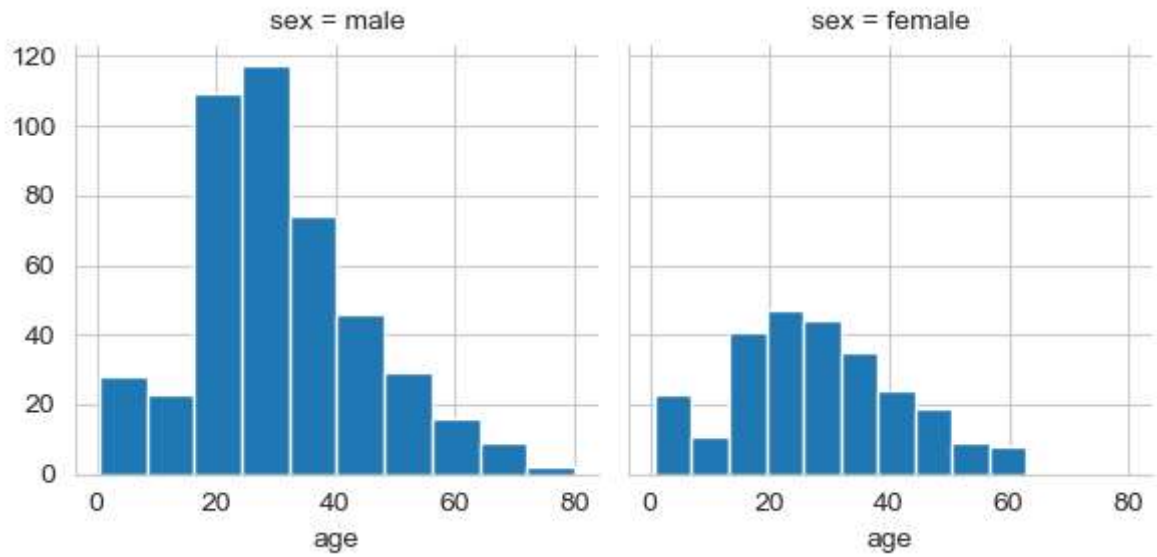
Out[11]: Text(0.5,1,'titanic.corr()')



Exercise 7 (Worth 10 points)

In [39]:
```
g=sns.FacetGrid(data=titanic,col='sex')
g.map(plt.hist,'age')
# REPLICATE EXERCISE PLOT IMAGE BELOW
# BE CAREFUL NOT TO OVERWRITE CELL BELOW
# THAT WOULD REMOVE THE EXERCISE PLOT IMAGE!
```

Out[39]: <seaborn.axisgrid.FacetGrid at 0x274141793a0>



In [12]:

Out[12]: <seaborn.axisgrid.FacetGrid at 0x27f2907f8d0>