Seaborn example

August 19, 2021

[4]:
```
import seaborn as sns
import matplotlib.pyplot as plt

%matplotlib inline
```

[5]:
```
titanic = sns.load_dataset('titanic')
```

[6]:
```
titanic
```

[6]:
```
     survived  pclass     sex   age  sibsp  parch     fare embarked   class  \
0           0       3    male  22.0      1      0   7.2500        S   Third
1           1       1  female  38.0      1      0  71.2833        C   First
2           1       3  female  26.0      0      0   7.9250        S   Third
3           1       1  female  35.0      1      0  53.1000        S   First
4           0       3    male  35.0      0      0   8.0500        S   Third
..        ...     ...     ...   ...    ...    ...      ...      ...     ...
886         0       2    male  27.0      0      0  13.0000        S  Second
887         1       1  female  19.0      0      0  30.0000        S   First
888         0       3  female   NaN      1      2  23.4500        S   Third
889         1       1    male  26.0      0      0  30.0000        C   First
890         0       3    male  32.0      0      0   7.7500        Q   Third

       who  adult_male deck  embark_town alive  alone
0      man        True  NaN  Southampton    no  False
1    woman       False    C    Cherbourg   yes  False
2    woman       False  NaN  Southampton   yes   True
3    woman       False    C  Southampton   yes  False
4      man        True  NaN  Southampton    no   True
..     ...         ...  ...          ...   ...    ...
886    man        True  NaN  Southampton    no   True
887  woman       False    B  Southampton   yes   True
888  woman       False  NaN  Southampton    no  False
889    man        True    C    Cherbourg   yes   True
890    man        True  NaN   Queenstown    no   True

[891 rows x 15 columns]
```

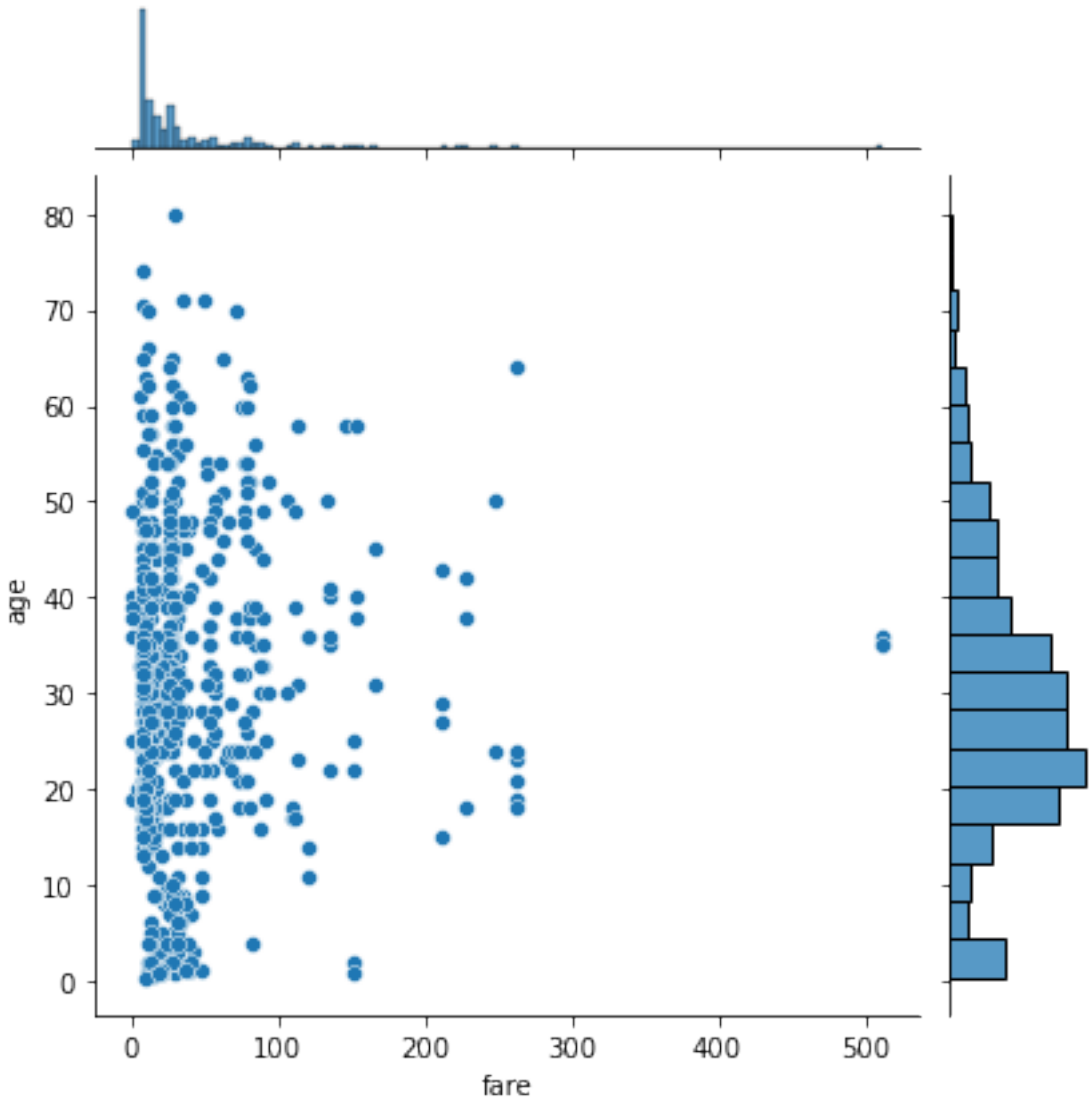
[7]:
```
titanic.head()
```

[7]:
```
   survived  pclass     sex   age  sibsp  parch     fare embarked  class  \
0         0       3    male  22.0      1      0   7.2500        S  Third
1         1       1  female  38.0      1      0  71.2833        C  First
2         1       3  female  26.0      0      0   7.9250        S  Third
3         1       1  female  35.0      1      0  53.1000        S  First
4         0       3    male  35.0      0      0   8.0500        S  Third

     who  adult_male deck  embark_town alive  alone
0    man        True  NaN  Southampton    no  False
1  woman       False    C    Cherbourg   yes  False
2  woman       False  NaN  Southampton   yes   True
3  woman       False    C  Southampton   yes  False
4    man        True  NaN  Southampton    no   True
```

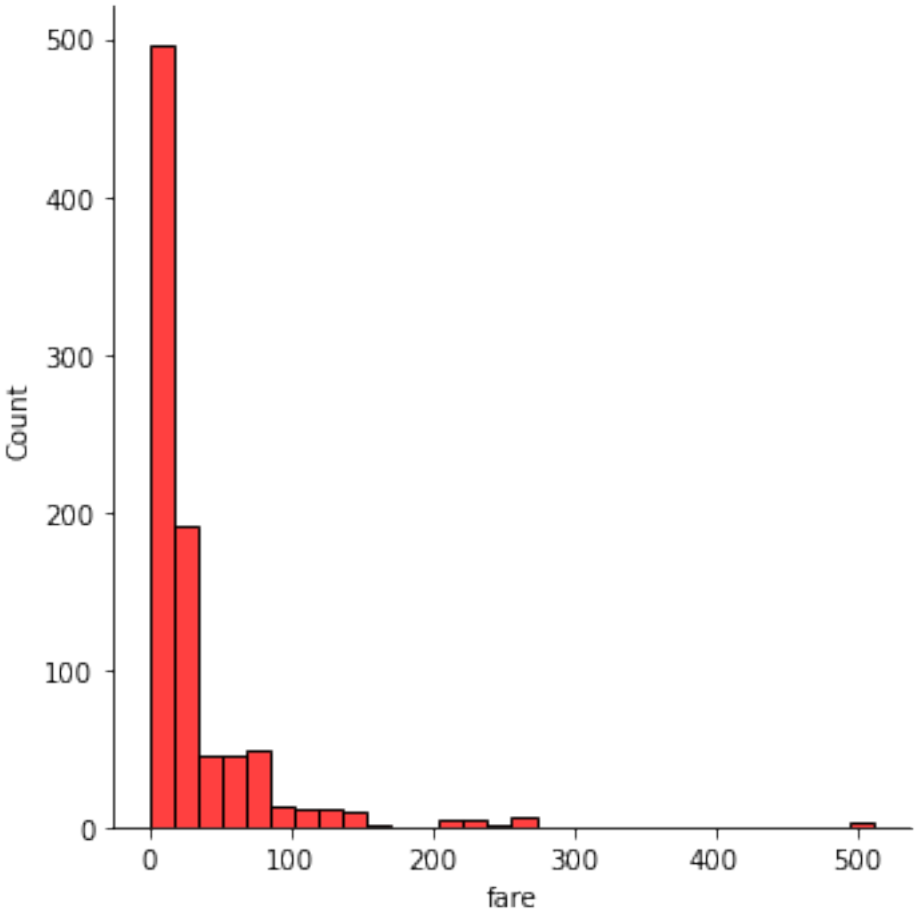
[9]:
```
sns.jointplot(x = 'fare', y = 'age', data = titanic)
```

[9]:
```
<seaborn.axisgrid.JointGrid at 0x1bd0b3cb1c0>
```



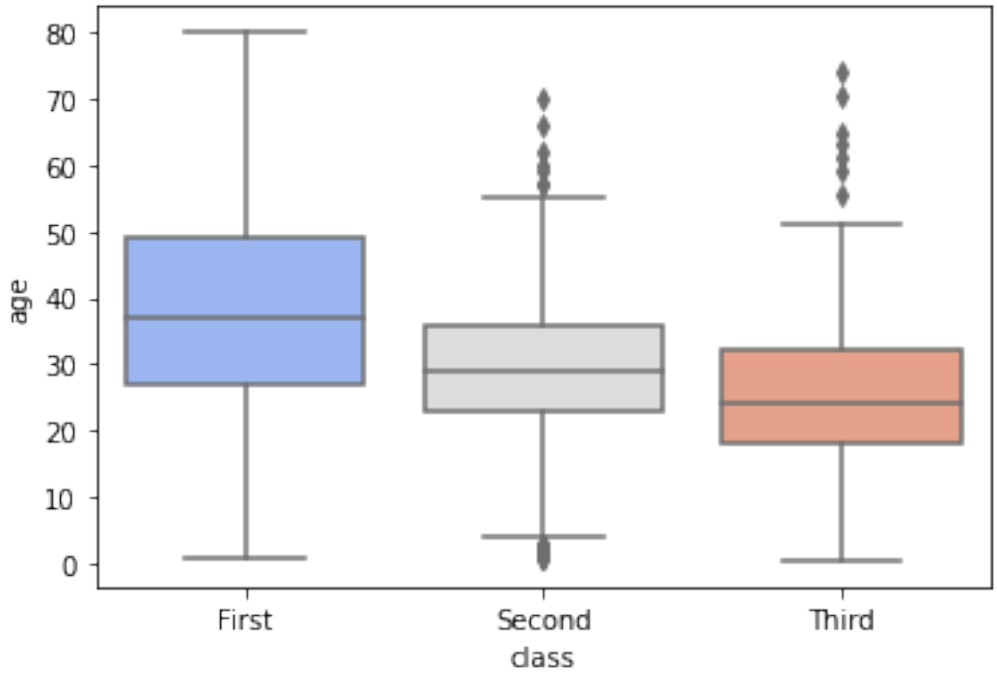
[14]:
```
sns.displot(titanic['fare'], bins = 30, color = 'red')
```

[14]: <seaborn.axisgrid.FacetGrid at 0x1bd0be0dd00>



[17]:
```
sns.boxplot(x = 'class', y = 'age', data = titanic, palette = 'coolwarm')
```

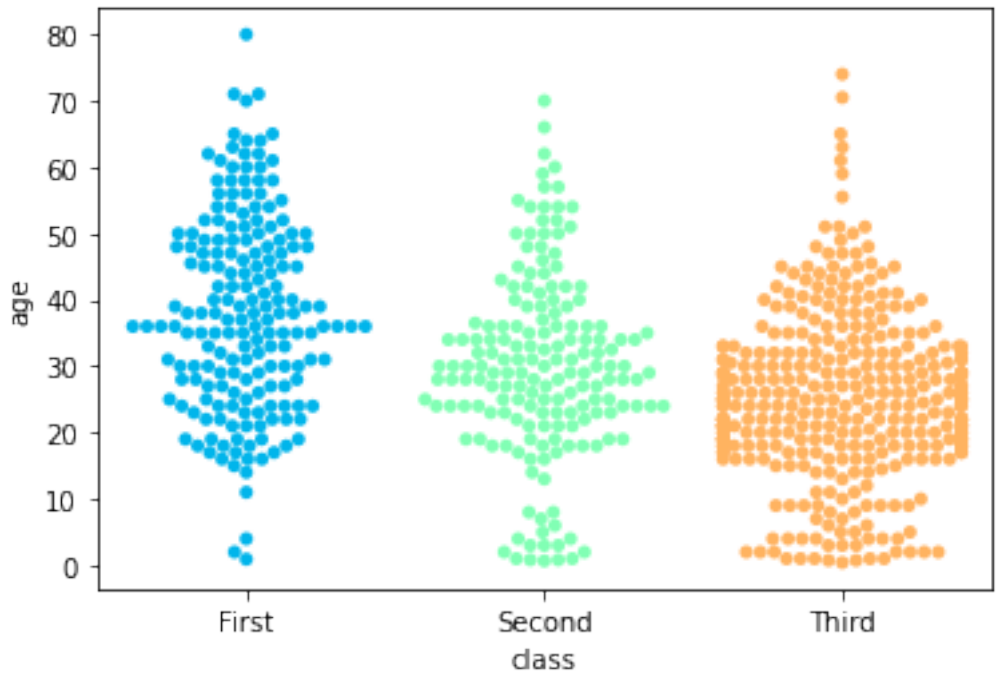
[17]:
```
<AxesSubplot:xlabel='class', ylabel='age'>
```



[20]:
```
sns.swarmplot(x = 'class', y = 'age', data = titanic, palette = 'rainbow')
```

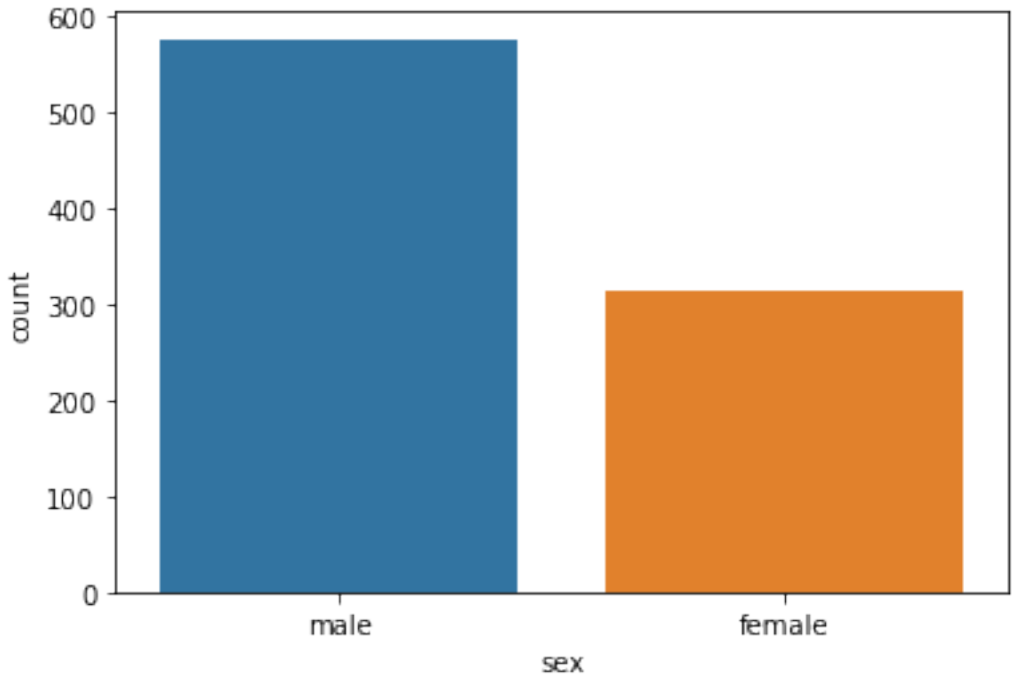
```
C:\Users\Bhagya\anaconda3\lib\site-packages\seaborn\categorical.py:1296:
UserWarning: 15.9% of the points cannot be placed; you may want to decrease the
size of the markers or use stripplot.
  warnings.warn(msg, UserWarning)
```

[20]:
```
<AxesSubplot:xlabel='class', ylabel='age'>
```



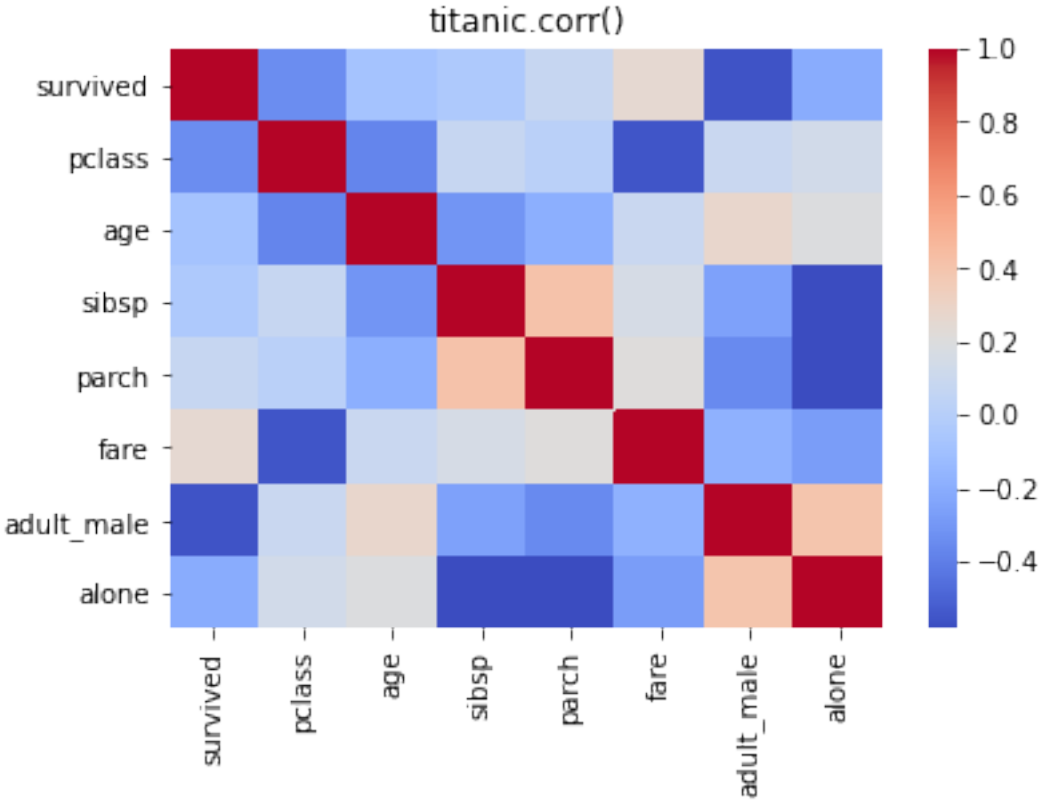
[22]:
```
sns.countplot(x = 'sex', data = titanic)
```

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



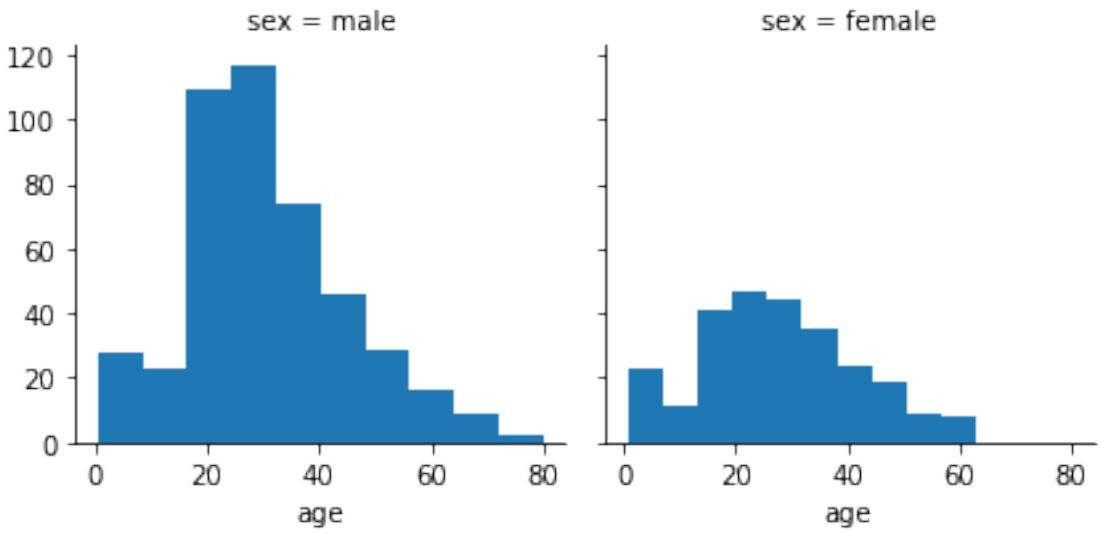
[24]:
```
sns.heatmap( titanic.corr(), cmap = 'coolwarm')
plt.title('titanic.corr()')
```

[24]:
```
Text(0.5, 1.0, 'titanic.corr()')
```



[29]:
```
f = sns.FacetGrid(data = titanic, col = 'sex')
f.map(plt.hist, 'age')
```

[29]:
```
<seaborn.axisgrid.FacetGrid at 0x1bd0d61cac0>
```


sex = male
sex = female
120
100
80
60
40
20
0
0
20
40
60
80
age
age

[ ]: