

```
In [1]: pwd
```

```
Out[1]: 'C:\\Users\\kranti'
```

```
In [2]: import seaborn as sns
```

```
In [3]: import matplotlib.pyplot as plt
```

```
In [4]: titanic=sns.load_dataset('titanic')
```

```
In [5]: titanic.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 891 entries, 0 to 890
Data columns (total 15 columns):
survived      891 non-null int64
pclass        891 non-null int64
sex           891 non-null object
age           714 non-null float64
sibsp         891 non-null int64
parch         891 non-null int64
fare          891 non-null float64
embarked      889 non-null object
class         891 non-null category
who           891 non-null object
adult_male    891 non-null bool
deck          203 non-null category
embark_town   889 non-null object
alive         891 non-null object
alone         891 non-null bool
dtypes: bool(2), category(2), float64(2), int64(4), object(5)
memory usage: 80.6+ KB
```

```
In [6]: titanic.describe()
```

```
Out[6]:
```

	survived	pclass	age	sibsp	parch	fare
count	891.000000	891.000000	714.000000	891.000000	891.000000	891.000000
mean	0.383838	2.308642	29.699118	0.523008	0.381594	32.204208
std	0.486592	0.836071	14.526497	1.102743	0.806057	49.693429
min	0.000000	1.000000	0.420000	0.000000	0.000000	0.000000
25%	0.000000	2.000000	20.125000	0.000000	0.000000	7.910400
50%	0.000000	3.000000	28.000000	0.000000	0.000000	14.454200
75%	1.000000	3.000000	38.000000	1.000000	0.000000	31.000000
max	1.000000	3.000000	80.000000	8.000000	6.000000	512.329200

```
In [7]: titanic.columns
```

```
Out[7]: Index(['survived', 'pclass', 'sex', 'age', 'sibsp', 'parch', 'fare',  
              'embarked', 'class', 'who', 'adult_male', 'deck', 'embark_town',  
              'alive', 'alone'],  
             dtype='object')
```

```
In [8]: titanic.head()
```

```
Out[8]:
```

	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



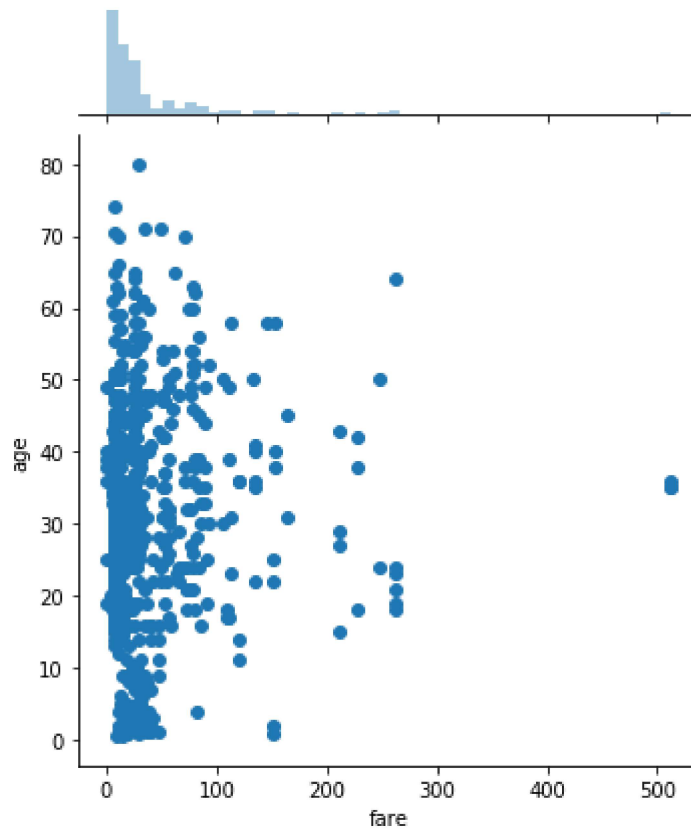
```
In [9]: type(titanic)
```

```
Out[9]: pandas.core.frame.DataFrame
```

```
In [10]: #g4=sns.JointGrid(x='fare',y='age',data = titanic)
#g4.plot(sns.,sns.distplot)

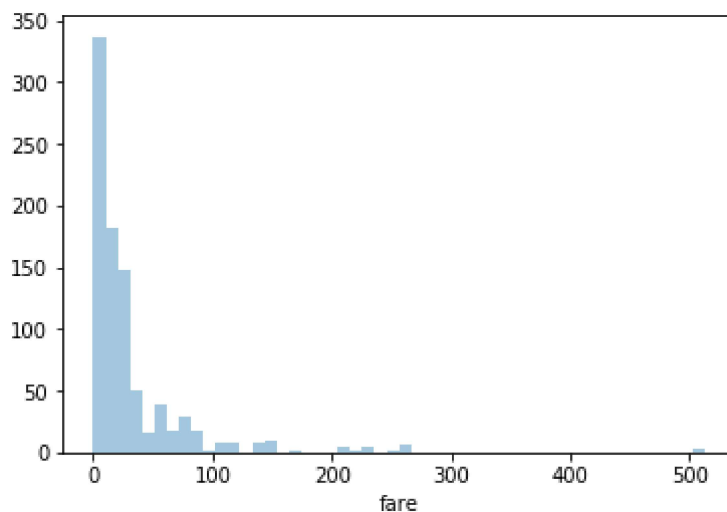
sns.jointplot(x='fare',y='age',data=titanic)
```

Out[10]: <seaborn.axisgrid.JointGrid at 0x218009ddcc8>



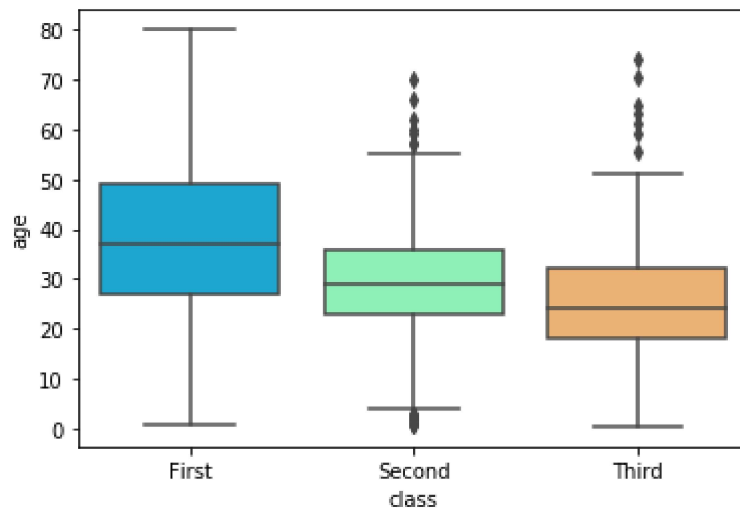
```
In [11]: sns.distplot(titanic['fare'],kde=False)
```

Out[11]: <matplotlib.axes.\_subplots.AxesSubplot at 0x2180262be08>



```
In [12]: sns.boxplot(x='class',y='age',data=titanic,palette='rainbow')
```

```
Out[12]: <matplotlib.axes._subplots.AxesSubplot at 0x21802741248>
```



```
In [13]: sns.swarmplot(x='class',y='age',data=titanic,palette='Set2')
```

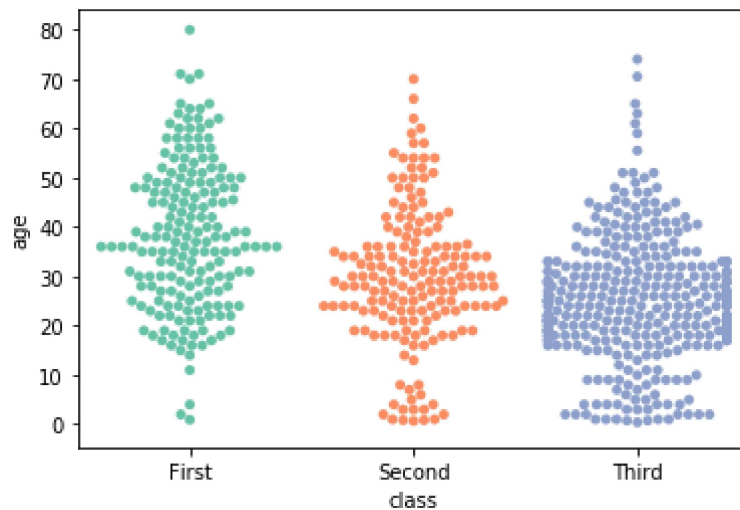
C:\Users\kranti\Anaconda3\lib\site-packages\seaborn\categorical.py:1324: RuntimeWarning: invalid value encountered in less

off\_low = points < low\_gutter

C:\Users\kranti\Anaconda3\lib\site-packages\seaborn\categorical.py:1328: RuntimeWarning: invalid value encountered in greater

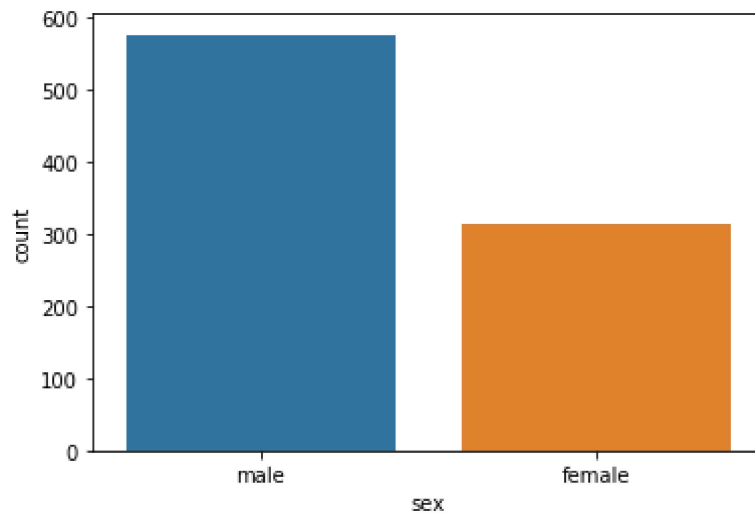
off\_high = points > high\_gutter

```
Out[13]: <matplotlib.axes._subplots.AxesSubplot at 0x218027d2248>
```



```
In [14]: sns.countplot(x='sex',data=titanic)
```

```
Out[14]: <matplotlib.axes._subplots.AxesSubplot at 0x2180282a508>
```



```
In [15]: data = titanic
data.corr()
```

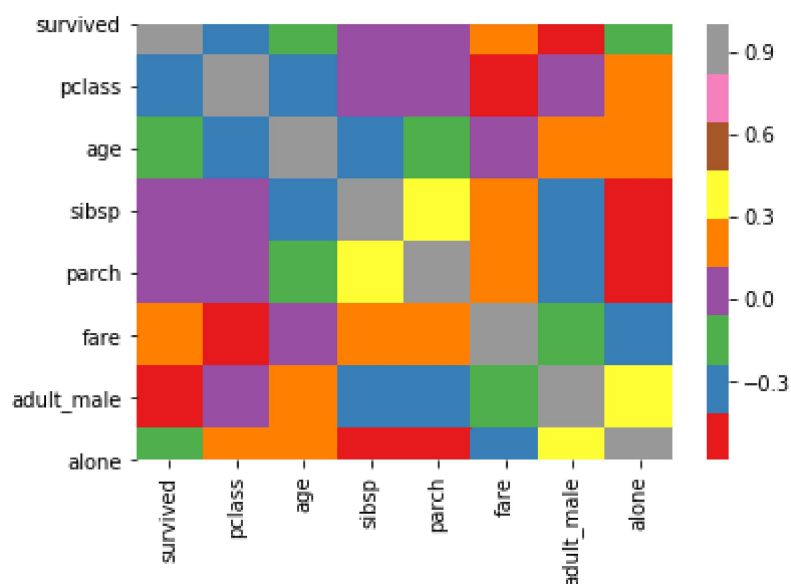
```
Out[15]:
```

	survived	pclass	age	sibsp	parch	fare	adult_male	alone
survived	1.000000	-0.338481	-0.077221	-0.035322	0.081629	0.257307	-0.557080	-0.203367
pclass	-0.338481	1.000000	-0.369226	0.083081	0.018443	-0.549500	0.094035	0.135207
age	-0.077221	-0.369226	1.000000	-0.308247	-0.189119	0.096067	0.280328	0.198270
sibsp	-0.035322	0.083081	-0.308247	1.000000	0.414838	0.159651	-0.253586	-0.584471
parch	0.081629	0.018443	-0.189119	0.414838	1.000000	0.216225	-0.349943	-0.583398
fare	0.257307	-0.549500	0.096067	0.159651	0.216225	1.000000	-0.182024	-0.271832
adult_male	-0.557080	0.094035	0.280328	-0.253586	-0.349943	-0.182024	1.000000	0.404744
alone	-0.203367	0.135207	0.198270	-0.584471	-0.583398	-0.271832	0.404744	1.000000



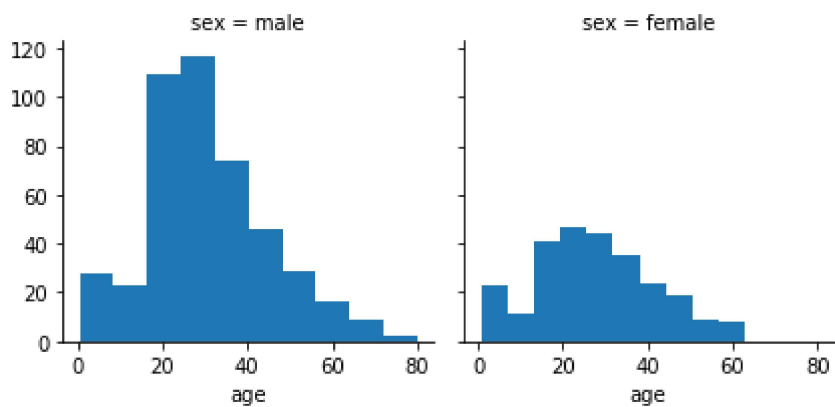
```
In [31]: sns.heatmap(data.corr(),cmap='Set',annot=False)
```

```
Out[31]: <matplotlib.axes._subplots.AxesSubplot at 0x2180aa92f08>
```



```
In [24]: g3 =sns.FacetGrid(titanic,col="sex")
g3.map(plt.hist,"age")
```

```
Out[24]: <seaborn.axisgrid.FacetGrid at 0x218060b1748>
```



```
In [ ]:
```