```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns


df=sns.load_dataset('titanic')


df
```

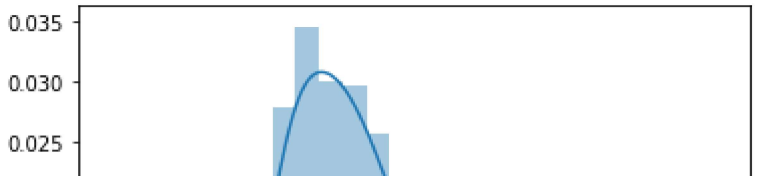
	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adu
0	0	3	male	22.0	1	0	7.2500	S	Third	man	
1	1	1	female	38.0	1	0	71.2833	C	First	woman	
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	
3	1	1	female	35.0	1	0	53.1000	S	First	woman	
4	0	3	male	35.0	0	0	8.0500	S	Third	man	
...	...	...	...	...	...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

891 rows × 15 columns

distribution graphs

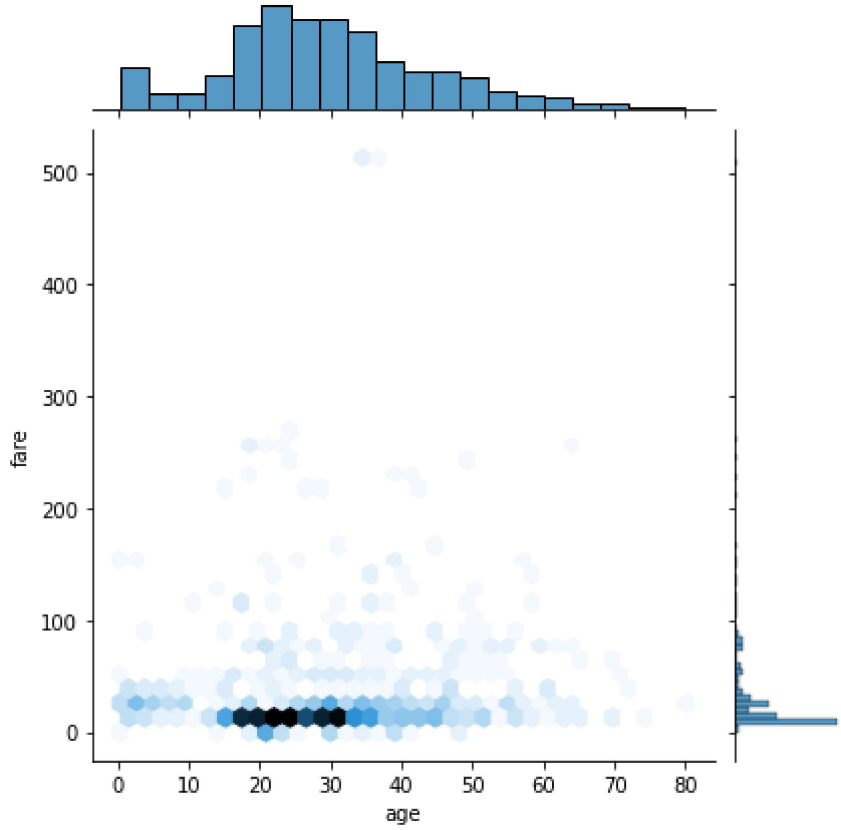
```
#dist plot
sns.distplot(df['age'])
```

```
/usr/local/lib/python3.7/dist-packages/seaborn/distributions.py:2619: FutureWarning: `di
  warnings.warn(msg, FutureWarning)
<matplotlib.axes._subplots.AxesSubplot at 0x7f2baafe8bd0>
```




```
#joint plot
sns.jointplot(df['age'],df['fare'],kind='hex')
```

```
/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43: FutureWarning: Pass th
  FutureWarning
<seaborn.axisgrid.JointGrid at 0x7f2baaf40a50>
```



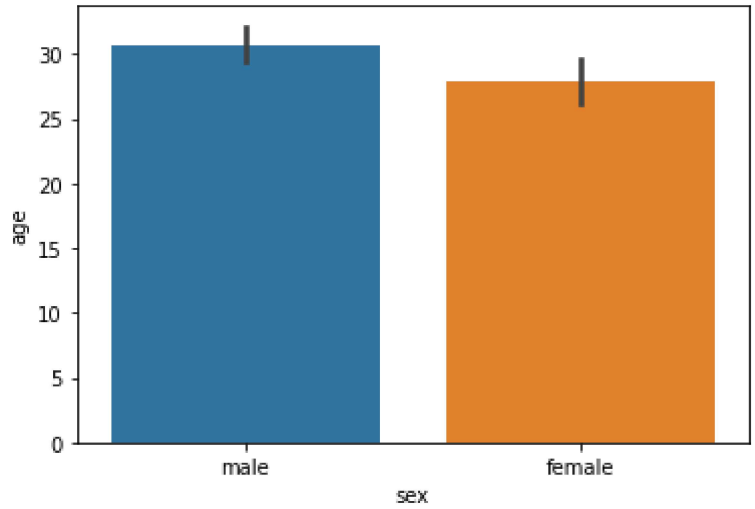

```
#rug plot
sns.rugplot(df['fare'])
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f2baacdf650>
```

categorical plots

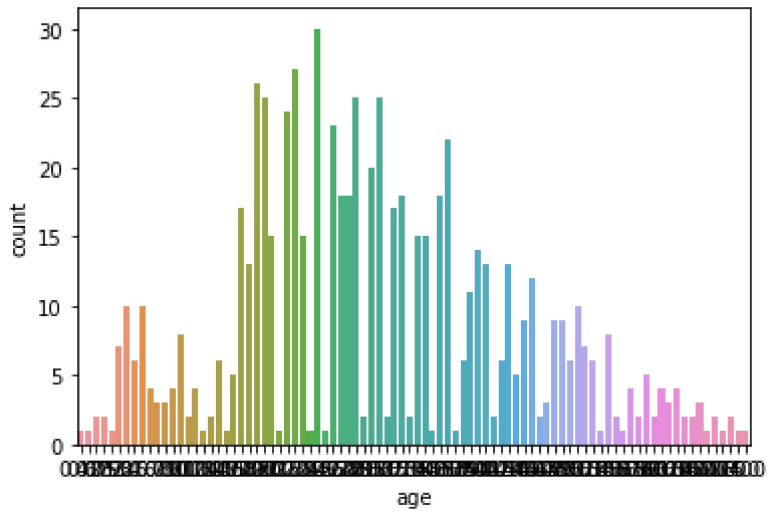
```
#bar plot
sns.barplot(x='sex',y='age',data=df)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f2baabcfa90>
```



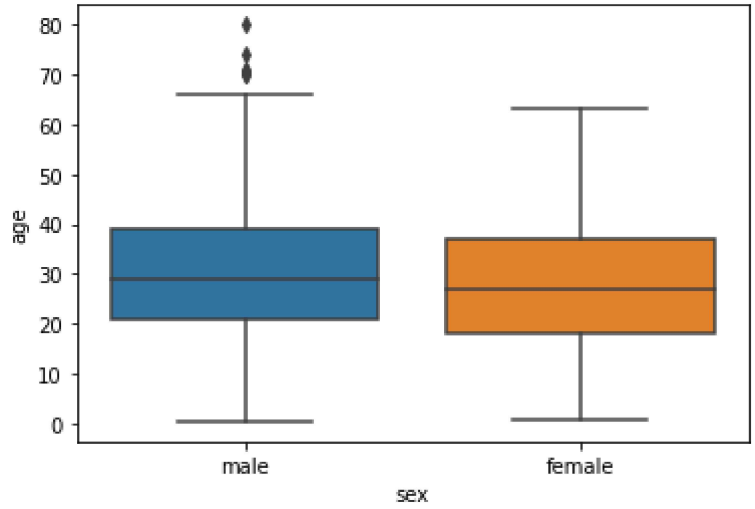

```
#count plot
sns.countplot(x='age',data=df)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f2baa865190>
```



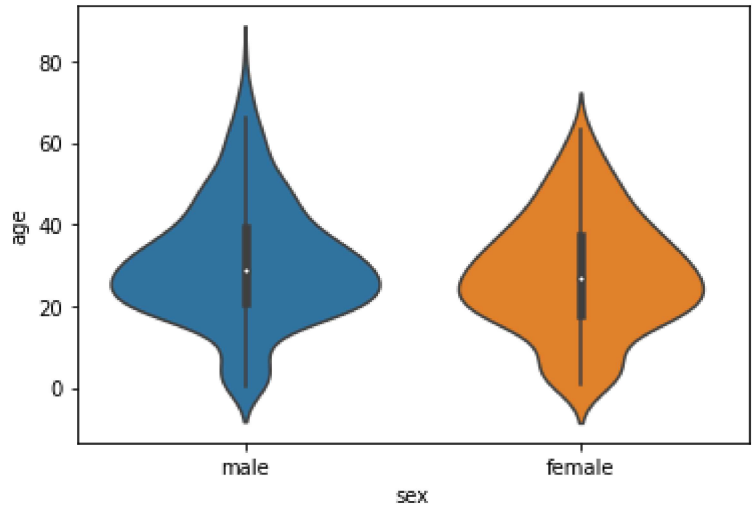

```
#boxplot
sns.boxplot(x='sex',y='age',data=df)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f2baa659b50>
```




```
#violin plot
sns.violinplot(x='sex',y='age',data=df)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f2bab4d6590>
```



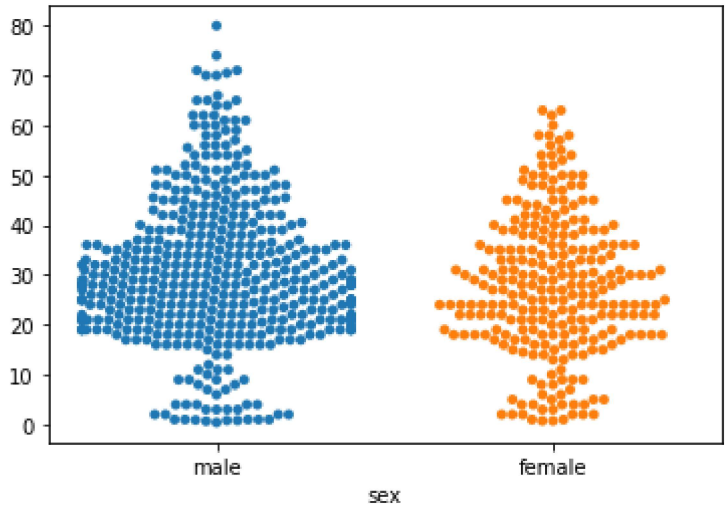
Advanced Plots

```
#strip plot
sns.stripplot(x='sex',y='age',data=df,jitter=False)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f2baa583790>
```


```
#swarm plot
sns.swarmplot(x='sex',y='age',data=df)
```

```
sr/local/lib/python3.7/dist-packages/seaborn/categorical.py:1296: UserWarning: 5.9% of th
warnings.warn(msg, UserWarning)
atplotlib.axes._subplots.AxesSubplot at 0x7f2bab4cca10>
```



Matrix Plot

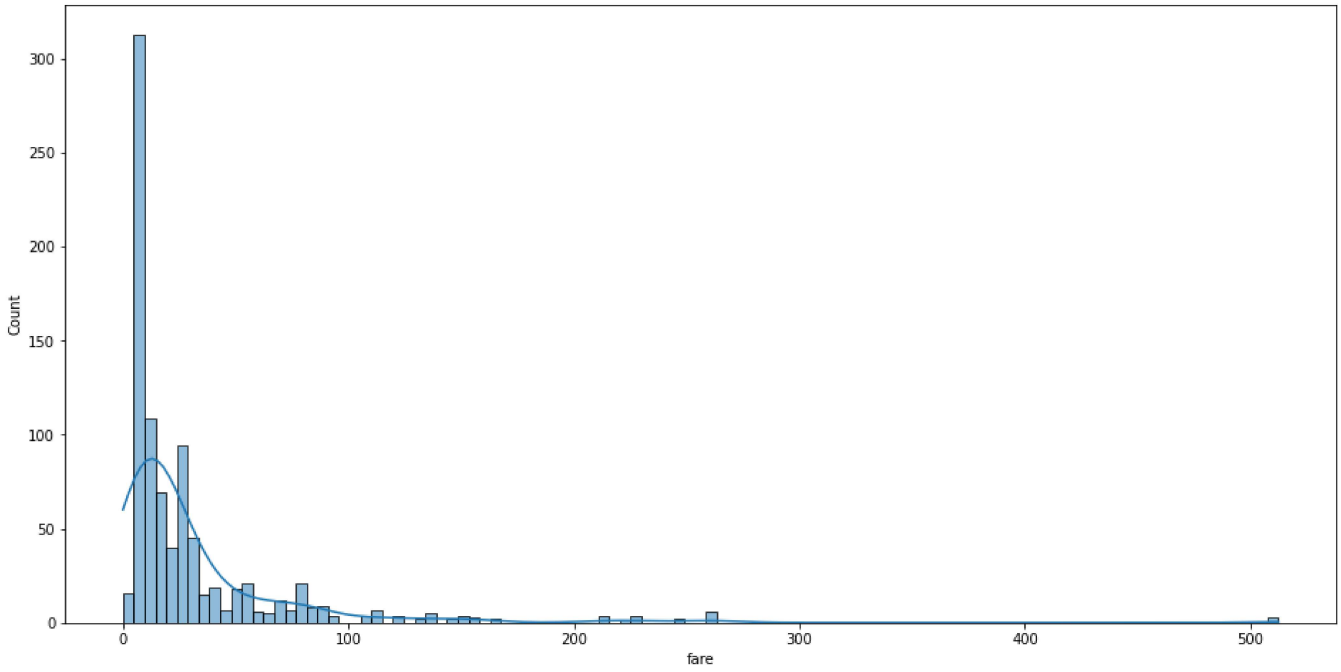
```
#heat map
corr=df.corr()
sns.heatmap(corr)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f2baa4ac310>
```

part 2


```
#histogram
plt.figure(figsize=(16,8))
sns.histplot(df['fare'],kde=True)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f2ba88fcd50>
```



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