Assignment No 8 : Data Visualization 1

Import Required Libraries

In [1]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
%matplotlib inline
import seaborn as sns
```

Reading csv into data frame

In [2]:
```
df = pd.read_csv('train.csv')
df
```

Out[2]:

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	I
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.2500	NaN	
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17599	71.2833	C85	
2	3	1	3	Heikkinen, Miss. Laina	female	26.0	0	0	STON/O2. 3101282	7.9250	NaN	
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803	53.1000	C123	
4	5	0	3	Allen, Mr. William Henry	male	35.0	0	0	373450	8.0500	NaN	
...	...	...	...	...	...	...	...	...	...	...	...	...

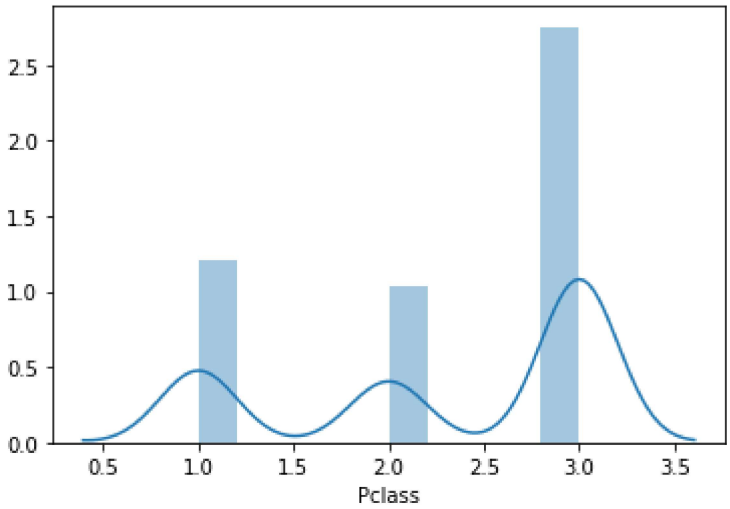
	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	I
886	887	0	2	Montvila, Rev. Juozas	male	27.0	0	0	211536	13.0000	NaN	
887	888	1	1	Graham, Miss. Margaret Edith	female	19.0	0	0	112053	30.0000	B42	
888	889	0	3	Johnston, Miss. Catherine Helen "Carrie"	female	NaN	1	2	W./C. 6607	23.4500	NaN	
889	890	1	1	Behr, Mr. Karl Howell	male	26.0	0	0	111369	30.0000	C148	
890	891	0	3	Dooley, Mr. Patrick	male	32.0	0	0	370376	7.7500	NaN	

891 rows × 12 columns

Data Visualization

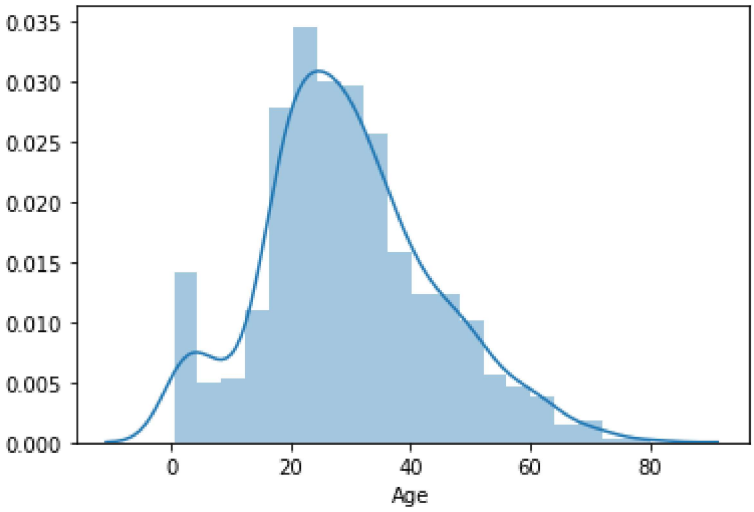
In [3]:
```
import seaborn as sns
sns.distplot(df['Pclass'])
```

Out[3]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x4f90eff688>
```



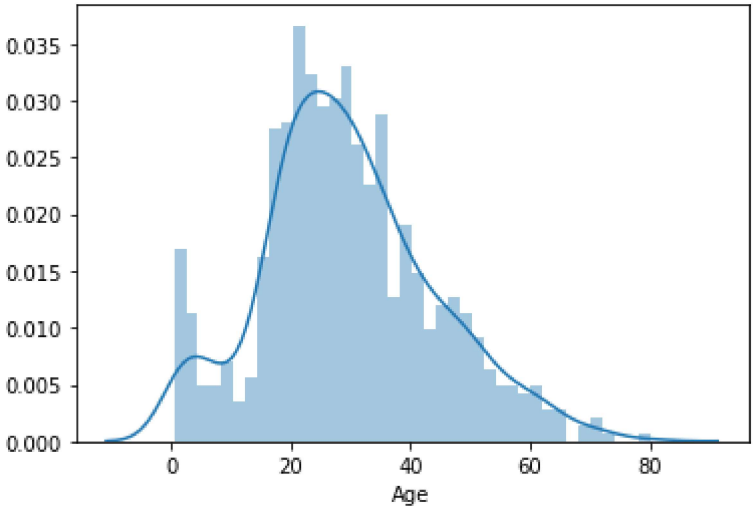
In [4]:
```
sns.distplot(df['Age'])
```

Out[4]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x4f914a8b08>
```



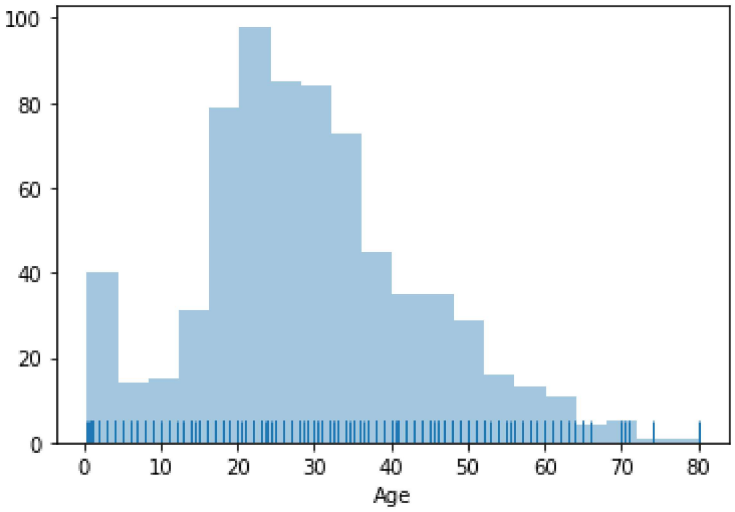
In [5]:
```
sns.distplot(df['Age'], bins=40)
```

Out[5]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x4f91918cc8>
```



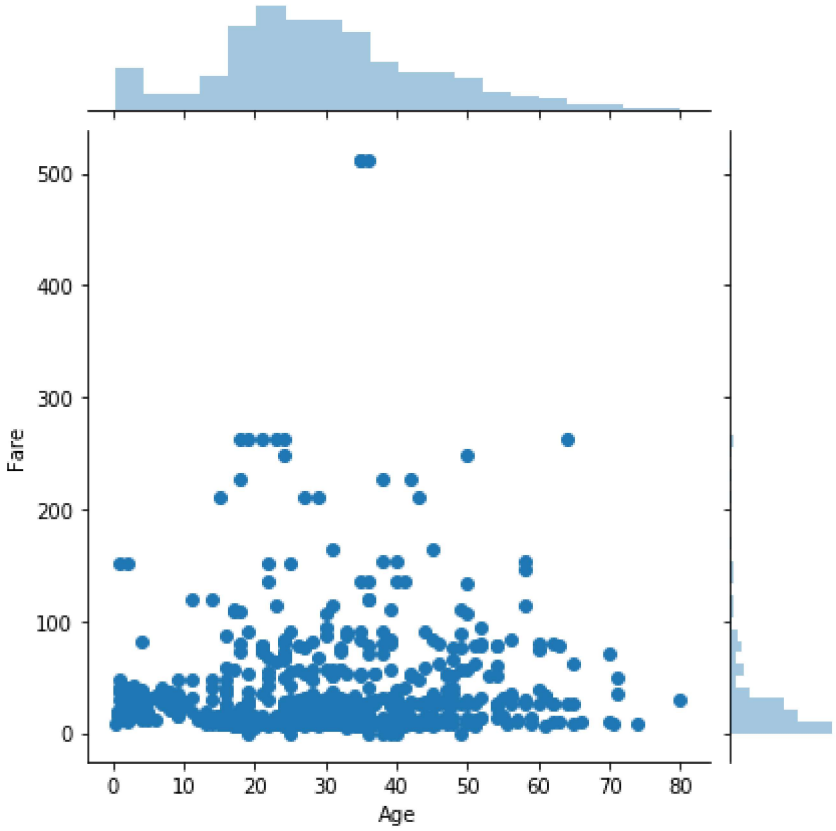
In [6]:
```
sns.distplot(df['Age'], bins=20, kde=False, rug=True)
```

Out[6]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x4f914b4b88>
```



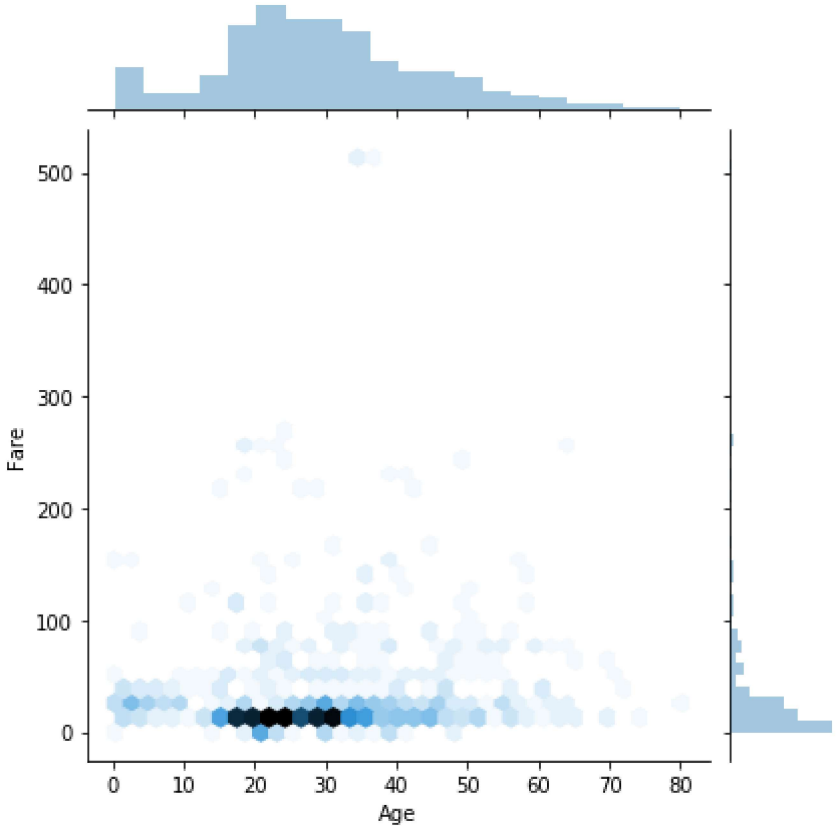
In [7]:
```
sns.jointplot(x = df['Age'], y = df['Fare'], kind = 'scatter')
```

Out[7]:
```
<seaborn.axisgrid.JointGrid at 0x4f91b27388>
```



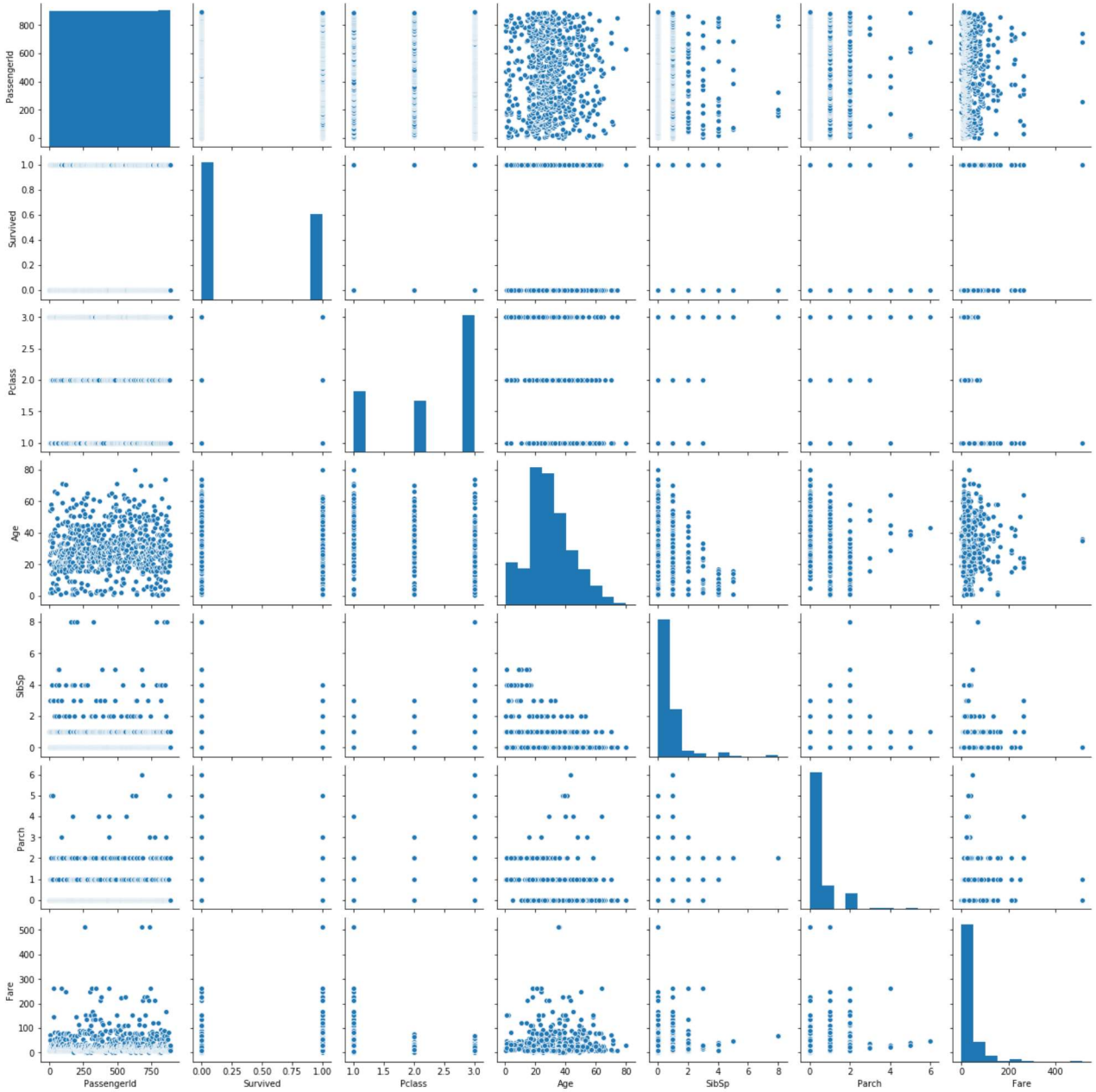
In [8]:
```
sns.jointplot(x = df['Age'], y = df['Fare'], kind = 'hex')
```

Out[8]:
```
<seaborn.axisgrid.JointGrid at 0x4f91cca788>
```



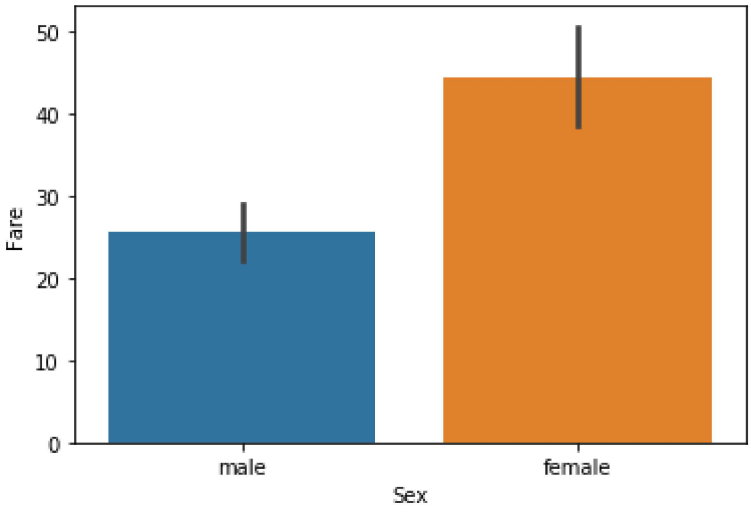
In [9]:
```
sns.pairplot(df)
```

Out[9]:
```
<seaborn.axisgrid.PairGrid at 0x4f91ccff88>
```



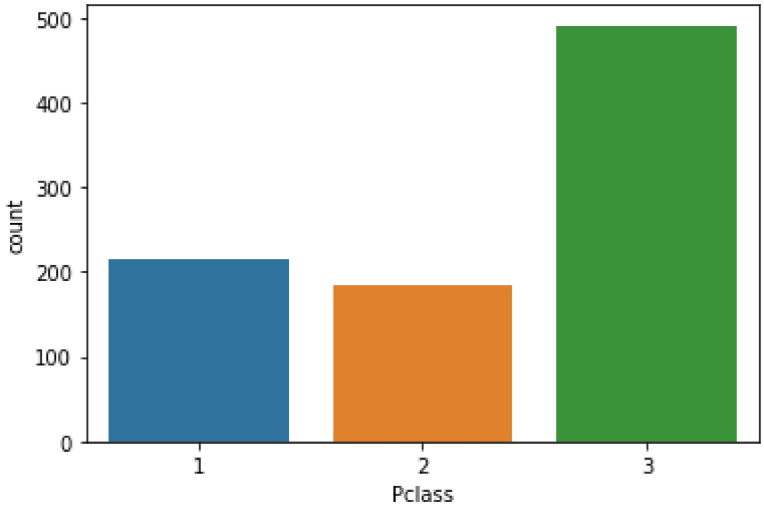
In [10]:
```
sns.barplot(x = df['Sex'], y = df['Fare'])
```

Out[10]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x4f94808a48>
```



In [11]:
```
sns.countplot(df['Pclass'])
```

Out[11]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x4f91514648>
```



In [24]:
```
sns.distplot(df['Fare'], hist = True)
```

Out[24]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x4f955c6a48>
```