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

```
In [2]:  data1 = pd.read_csv("train.csv")
```

```
In [3]:  data1.head()
```

Out[3]:

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

```
In [4]:  data1.tail()
```

Out[4]:

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
886	887	0	2	Montvila, Rev. Juozas	male	27.0	0	0	211536	13.00	NaN	S
887	888	1	1	Graham, Miss. Margaret Edith	female	19.0	0	0	112053	30.00	B42	S
888	889	0	3	Johnston, Miss. Catherine Helen "Carrie"	female	NaN	1	2	W./C. 6607	23.45	NaN	S
889	890	1	1	Behr, Mr. Karl Howell	male	26.0	0	0	111369	30.00	C148	C
890	891	0	3	Dooley, Mr. Patrick	male	32.0	0	0	370376	7.75	NaN	Q

```
In [5]:  data1.shape
```

Out[5]: (891, 12)

checking for is null()
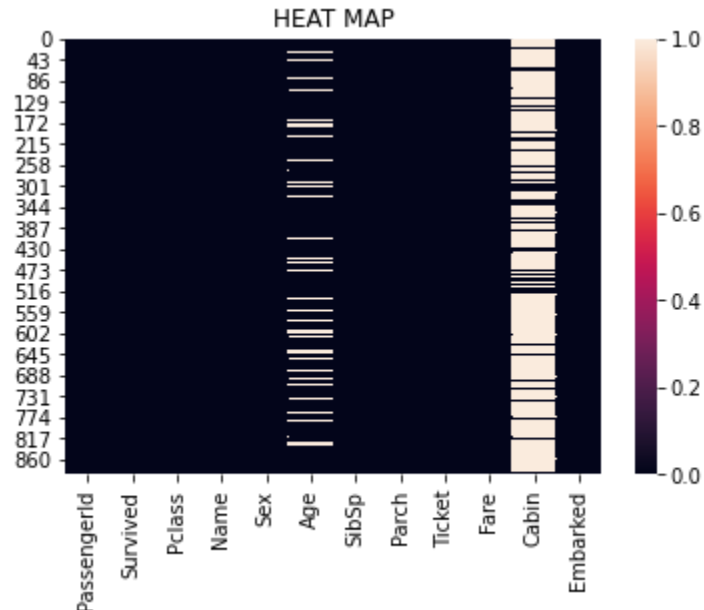
```
In [7]:  data1.isnull().sum()
```

```
Out[7]:  PassengerId     0
         Survived        0
         Pclass          0
         Name            0
         Sex             0
         Age           177
         SibSp           0
         Parch           0
         Ticket          0
         Fare            0
         Cabin         687
         Embarked        2
         dtype: int64
```
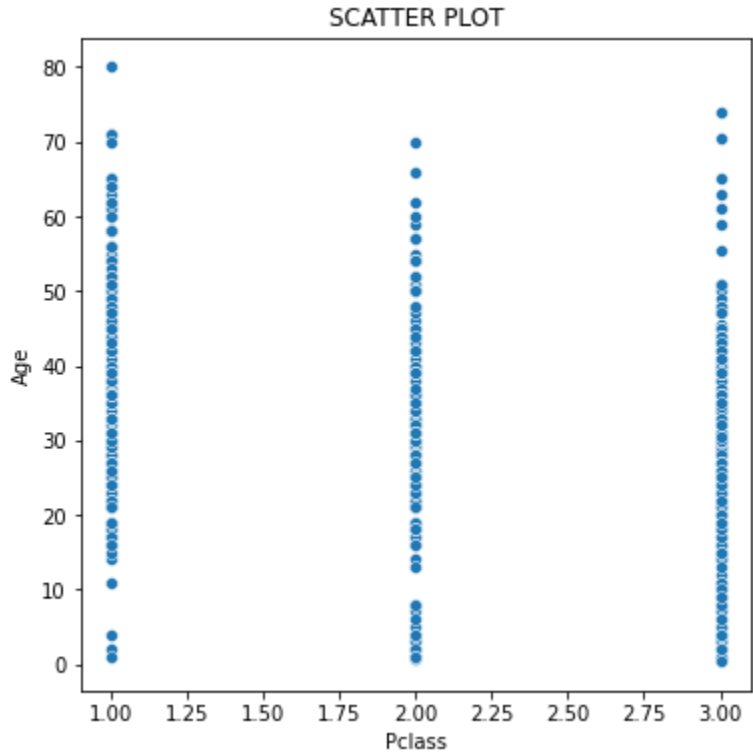
```
In [15]:  sns.heatmap(data1.isnull())
          plt.title("HEAT MAP")
          plt.show()
```


sns.lineplot(data=data1,x="Age",y="Embarked") plt.title("BAR PLOT") plt.show()

```
In [12]:  plt.figure(figsize=(6,6))
          sns.scatterplot(x='Pclass',y='Age',data=data1)
          plt.title("SCATTER PLOT")
          plt.show()
```



```
In [13]:  sns.catplot(data=data1,x='Age',y='Pclass')
          plt.title("CAT PLOT")
          plt.show()
```