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

In [4]:
```
#loading Data
data1 = pd.read_csv("titanic.csv")
```

In [5]:
```
data1.head()
```

Out[5]:

	Passengerid	Age	Fare	Sex	sibsp	zero	zero.1	zero.2	zero.3	zero.4	...	zero.12	zero.13	zero.14	Pclass	zero.15	zero.16	Embarked	zero.17	zero.18	2urvived
0	1	22.0	7.2500	0	1	0	0	0	0	0	...	0	0	0	3	0	0	2.0	0	0	0
1	2	38.0	71.2833	1	1	0	0	0	0	0	...	0	0	0	1	0	0	0.0	0	0	1
2	3	26.0	7.9250	1	0	0	0	0	0	0	...	0	0	0	3	0	0	2.0	0	0	1
3	4	35.0	53.1000	1	1	0	0	0	0	0	...	0	0	0	1	0	0	2.0	0	0	1
4	5	35.0	8.0500	0	0	0	0	0	0	0	...	0	0	0	3	0	0	2.0	0	0	0

5 rows × 28 columns

In [6]:
```
data1.tail()
```

Out[6]:

	Passengerid	Age	Fare	Sex	sibsp	zero	zero.1	zero.2	zero.3	zero.4	...	zero.12	zero.13	zero.14	Pclass	zero.15	zero.16	Embarked	zero.17	zero.18	2urvived
1304	1305	28.0	8.0500	0	0	0	0	0	0	0	...	0	0	0	3	0	0	2.0	0	0	0
1305	1306	39.0	108.9000	1	0	0	0	0	0	0	...	0	0	0	1	0	0	0.0	0	0	0
1306	1307	38.5	7.2500	0	0	0	0	0	0	0	...	0	0	0	3	0	0	2.0	0	0	0
1307	1308	28.0	8.0500	0	0	0	0	0	0	0	...	0	0	0	3	0	0	2.0	0	0	0
1308	1309	28.0	22.3583	0	1	0	0	0	0	0	...	0	0	0	3	0	0	0.0	0	0	0

5 rows × 28 columns

In [7]:
```
data1.shape
```

Out[7]:
```
(1309, 28)
```

In [8]:
```
data1.isnull()
```

Out[8]:

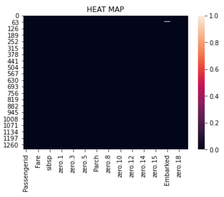
	Passengerid	Age	Fare	Sex	sibsp	zero	zero.1	zero.2	zero.3	zero.4	...	zero.12	zero.13	zero.14	Pclass	zero.15	zero.16	Embarked	zero.17	zero.18	2urvived
0	False	False	False	False	False	False	False	False	False	False	...	False	False	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False	False	False	...	False	False	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False	False	False	...	False	False	False	False	False	False	False	False	False	False
3	False	False	False	False	False	False	False	False	False	False	...	False	False	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False	False	False	...	False	False	False	False	False	False	False	False	False	False
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1304	False	False	False	False	False	False	False	False	False	False	...	False	False	False	False	False	False	False	False	False	False
1305	False	False	False	False	False	False	False	False	False	False	...	False	False	False	False	False	False	False	False	False	False
1306	False	False	False	False	False	False	False	False	False	False	...	False	False	False	False	False	False	False	False	False	False
1307	False	False	False	False	False	False	False	False	False	False	...	False	False	False	False	False	False	False	False	False	False
1308	False	False	False	False	False	False	False	False	False	False	...	False	False	False	False	False	False	False	False	False	False

1309 rows × 28 columns

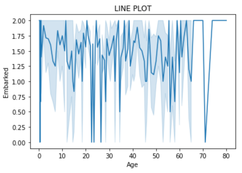
In [10]:
```
data1.isnull().sum()
```

Out[10]:
```
Passengerid     0
Age             0
Fare            0
Sex             0
sibsp           0
zero            0
zero.1          0
zero.2          0
zero.3          0
zero.4          0
zero.5          0
zero.6          0
Parch           0
zero.7          0
zero.8          0
zero.9          0
zero.10         0
zero.11         0
zero.12         0
zero.13         0
zero.14         0
Pclass          0
zero.15         0
zero.16         0
Embarked        2
zero.17         0
zero.18         0
2urvived        0
dtype: int64
```

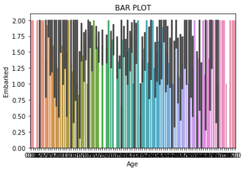
In [12]:
```
sns.heatmap(data1.isnull())
plt.title("HEAT MAP")
plt.show()
```



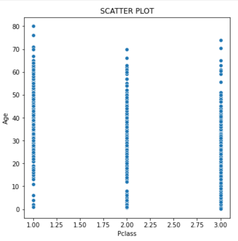
In [14]:
```
sns.lineplot(data=data1,x="Age",y="Embarked")
plt.title("LINE PLOT")
plt.show()
```



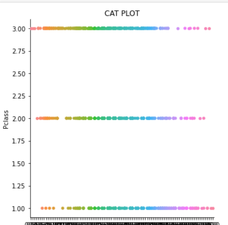
In [15]:
```
sns.barplot(data=data1,x="Age",y="Embarked")
plt.title("BAR PLOT")
plt.show()
```



In [16]:
```
plt.figure(figsize=(6,6))
sns.scatterplot(x='Pclass',y='Age',data=data1)
plt.title("SCATTER PLOT")
plt.show()
```



In [17]:
```
sns.catplot(data=data1,x='Age',y='Pclass')
plt.title("CAT PLOT")
plt.show()
```



In [ ]: