

```
In [1]: import pandas as pd
```

```
In [2]: df=pd.read_csv("c:/Dataset/Titanic-Dataset.csv")
df
```

```
Out[2]:
```

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cal
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.2500	N
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17599	71.2833	C
2	3	1	3	Heikkinen, Miss. Laina	female	26.0	0	0	STON/O2. 3101282	7.9250	N
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803	53.1000	C1
4	5	0	3	Allen, Mr. William Henry	male	35.0	0	0	373450	8.0500	N
...
886	887	0	2	Montvila, Rev. Juozas	male	27.0	0	0	211536	13.0000	N
887	888	1	1	Graham, Miss. Margaret Edith	female	19.0	0	0	112053	30.0000	E
888	889	0	3	Johnston, Miss. Catherine Helen "Carrie"	female	NaN	1	2	W./C. 6607	23.4500	N
889	890	1	1	Behr, Mr. Karl Howell	male	26.0	0	0	111369	30.0000	C1
890	891	0	3	Dooley, Mr. Patrick	male	32.0	0	0	370376	7.7500	N

891 rows × 12 columns

No. of passengers survived or not.

```
In [10]: df.Survived.value_counts()
```

```
Out[10]: Survived
0      549
1      342
Name: count, dtype: int64
```

No. of Passengers in each class

```
In [6]: df.Pclass.value_counts()
```

```
Out[6]: Pclass
3      491
1      216
2      184
Name: count, dtype: int64
```

Number of passengers survived in each class

```
In [8]: df[df.Survived==1].Pclass.value_counts()
```

```
Out[8]: Pclass
1      136
3      119
2       87
Name: count, dtype: int64
```

```
In [5]: s_0=549/891
s_1=342/891
print(s_1)
```

```
0.3838383838383838
```

Passengers distribution by Gender

```
In [14]: df.Sex.value_counts()
```

```
Out[14]: Sex
male      577
female    314
Name: count, dtype: int64
```

Survived Passengers distribution by Gender

```
In [19]: df[df.Survived==1].Sex.value_counts()
```

```
Out[19]: Sex
female    233
male      109
Name: count, dtype: int64
```

```
In [20]: sur_male=109/577  
sur_female=233/314  
print(sur_male,sur_female)  
  
0.18890814558058924 0.7420382165605095
```

Age Analysis

```
In [24]: df[df.Age>60].shape
```

```
Out[24]: (22, 12)
```

```
In [25]: df[df.Age>60].Survived.value_counts()
```

```
Out[25]: Survived  
0      17  
1       5  
Name: count, dtype: int64
```

```
In [26]: df[df.Age<10].shape
```

```
Out[26]: (62, 12)
```

```
In [27]: df[df.Age<10].Survived.value_counts()
```

```
Out[27]: Survived  
1      38  
0      24  
Name: count, dtype: int64
```

```
In [30]: df[(df.Age<10) & (df.Survived==0)].Pclass.value_counts()
```

```
Out[30]: Pclass  
3      23  
1       1  
Name: count, dtype: int64
```

```
In [31]: df[(df.SibSp==0) & (df.Parch==0)].shape
```

```
Out[31]: (537, 12)
```

```
In [33]: df[(df.SibSp==0) & (df.Parch==0)].Survived.value_counts()
```

```
Out[33]: Survived  
0      374  
1      163  
Name: count, dtype: int64
```

```
In [35]: df.Fare.min()
```

```
Out[35]: 0.0
```

```
In [36]: df.Fare.max()
```

```
Out[36]: 512.3292
```

```
In [37]: df.Fare.mean()
```

```
Out[37]: 32.204207968574636
```

```
In [40]: df[df.Fare>df.Fare.mean()].Survived.value_counts()
```

```
Out[40]: Survived
1      126
0       85
Name: count, dtype: int64
```

```
In [42]: df[df.Fare.between(270,515)]
```

```
Out[42]:
```

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin
258	259	1	1	Ward, Miss. Anna	female	35.0	0	0	PC 17755	512.3292	NaN
679	680	1	1	Cardeza, Mr. Thomas Drake Martinez	male	36.0	0	1	PC 17755	512.3292	B51 B53 B55
737	738	1	1	Lesurer, Mr. Gustave J	male	35.0	0	0	PC 17755	512.3292	B101

```
In [43]: df[df.Fare==0].Survived.value_counts()
```

```
Out[43]: Survived
0       14
1        1
Name: count, dtype: int64
```

```
In [45]: df.Cabin.count()
```

```
Out[45]: 204
```

```
In [46]: 891-204
```

```
Out[46]: 687
```

```
In [47]: df.count()
```

```
Out[47]: PassengerId    891
Survived              891
Pclass                891
Name                  891
Sex                   891
Age                   714
SibSp                 891
Parch                 891
Ticket                891
Fare                  891
Cabin                 204
Embarked              889
dtype: int64
```

```
In [ ]:
```