```
#Priya MOre(305C002)


import pandas as pd
import numpy as np


df=pd.read_csv("titanic.csv")


from google.colab import files
uploades=files.upload()
```

Choose Files No file chosen Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.

```
Saving titanic.csv to titanic.csv
```

```
df
```

	Survived	Pclass	Name	Sex	Age	Siblings/Spouses Aboard	Parents/Children Aboard	Fare
0	0	3	Mr. Owen Harris Braund	male	22.0	1	0	7.2500
1	1	1	Mrs. John Bradley (Florence Briggs Thayer) Cum...	female	38.0	1	0	71.2833
2	1	3	Miss. Laina Heikkinen	female	26.0	0	0	7.9250
3	1	1	Mrs. Jacques Heath (Lily May Peel) Futrelle	female	35.0	1	0	53.1000
4	0	3	Mr. William Henry Allen	male	35.0	0	0	8.0500
...	...	...	...	...	...	...	...	...
882	0	2	Rev. Juozas Montvila	male	27.0	0	0	13.0000
883	1	1	Miss. Margaret Edith Graham	female	19.0	0	0	30.0000
884	0	3	Miss. Catherine Helen Johnston	female	7.0	1	2	23.4500
885	1	1	Mr. Karl Howell Behr	male	26.0	0	0	30.0000
886	0	3	Mr. Patrick Dooley	male	32.0	0	0	7.7500

```
Start coding or generate with AI.
```

```
(887, 8)
```

```
Start coding or generate with AI.
```

```
df.columns
```

```
Index(['Survived', 'Pclass', 'Name', 'Sex', 'Age', 'Siblings/Spouses Aboard',
       'Parents/Children Aboard', 'Fare'],
      dtype='object')
```

```
df.size
```

```
7096
```

```
Start coding or generate with AI.
```

```
df.dtypes
```

```
Survived                    int64
Pclass                      int64
Name                       object
Sex                        object
Age                       float64
Siblings/Spouses Aboard     int64
Parents/Children Aboard     int64
Fare                      float64
dtype: object
```

```
df.head(n=5)
```

	Survived	Pclass	Name	Sex	Age	Siblings/Spouses Aboard	Parents/Children Aboard	Far
0	0	3	Mr. Owen Harris Braund	male	22.0	1	0	7.250
1	1	1	Mrs. John Bradley (Florence	female	38.0	1	0	71.283

```
df.tail(n=5)
```

	Survived	Pclass	Name	Sex	Age	Siblings/Spouses Aboard	Parents/Children Aboard	Far
882	0	2	Rev. Juozas Montvila	male	27.0	0	0	13.0
883	1	1	Miss. Margaret Edith	female	19.0	0	0	30.0

```
df.index
```

```
RangeIndex(start=0, stop=887, step=1)
```

```
df.iloc[3:5,0:2]
```

	Survived	Pclass
3	1	1
4	0	3

```
df.isnull()
```

	Survived	Pclass	Name	Sex	Age	Siblings/Spouses Aboard	Parents/Children Aboard	Fare
0	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False
3	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False
...	...	...	...	...	...	...	...	...
882	False	False	False	False	False	False	False	False
883	False	False	False	False	False	False	False	False
884	False	False	False	False	False	False	False	False
885	False	False	False	False	False	False	False	False
886	False	False	False	False	False	False	False	False

887 rows × 8 columns

```
df.isnull().any()
```

```
Survived                  False
Pclass                    False
Name                      False
Sex                       False
Age                       False
Siblings/Spouses Aboard   False
Parents/Children Aboard   False
Fare                      False
dtype: bool
```

```
df.isnull().sum()
```

```
Survived                  0
Pclass                    0
Name                      0
Sex                       0
Age                       0
```

```
Siblings/Spouses Aboard    0
Parents/Children Aboard    0
Fare                       0
dtype: int64
```

```
df.isnull().sum(axis=1)
```

```
0      0
1      0
2      0
3      0
4      0
      ..
882    0
883    0
884    0
885    0
886    0
Length: 887, dtype: int64
```

```
df.Sex.isnull().sum()
```

```
0
```

Start coding or generate with AI.

```
df.describe()
```

	Survived	Pclass	Age	Siblings/Spouses Aboard	Parents/Children Aboard	Far
count	887.000000	887.000000	887.000000	887.000000	887.000000	887.000(
mean	0.385569	2.305524	29.471443	0.525366	0.383315	32.3054
std	0.487004	0.836662	14.121908	1.104669	0.807466	49.782(
min	0.000000	1.000000	0.420000	0.000000	0.000000	0.000(
25%	0.000000	2.000000	20.250000	0.000000	0.000000	7.925(
50%	0.000000	3.000000	28.000000	0.000000	0.000000	14.4542
75%	1.000000	3.000000	38.000000	1.000000	0.000000	31.1375

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 887 entries, 0 to 886
Data columns (total 8 columns):
 #   Column                   Non-Null Count  Dtype
---  ------                   --------------  -----
 0   Survived                 887 non-null    int64
 1   Pclass                   887 non-null    int64
 2   Name                     887 non-null    object
 3   Sex                      887 non-null    object
 4   Age                      887 non-null    float64
 5   Siblings/Spouses Aboard  887 non-null    int64
 6   Parents/Children Aboard  887 non-null    int64
 7   Fare                     887 non-null    float64
dtypes: float64(2), int64(4), object(2)
memory usage: 55.6+ KB
```

```
df["Age"]=df["Age"].interpolate()
```

```
df
```

	Survived	Pclass	Name	Sex	Age	Siblings/Spouses Aboard	Parents/Children Aboard	F
0	0	3	Mr. Owen Harris Braund	male	22.0	1	0	7.2
1	1	1	Mrs. John Bradley (Florence Briggs Thayer) Cum...	female	38.0	1	0	71.2
2	1	3	Miss. Laina Heikkinen	female	26.0	0	0	7.9
3	1	1	Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	53.1

```
df.dtypes
```

```
Survived                    int64
Pclass                      int64
Name                       object
Sex                        object
Age                       float64
Siblings/Spouses Aboard     int64
Parents/Children Aboard     int64
Fare                      float64
dtype: object
```

```
df["Age"]=df["Age"].astype('int64')
```

```
df.dtypes
```

```
Survived                    int64
Pclass                      int64
Name                       object
Sex                        object
Age                         int64
Siblings/Spouses Aboard     int64
Parents/Children Aboard     int64
Fare                      float64
dtype: object
```

```
Start coding or generate with AI.
```