

## Titanic Survival Analysis

```
import pandas as pd
import matplotlib.pyplot as mp

stored_data = pd.read_csv("gender_submission.csv")
print(stored_data)

stored_data.rename(columns={"PassengerId": "Id", "Survived": "Status for clarity"}, inplace=True)
print(stored_data)

print(stored_data.head())
print(stored_data.tail())
print(stored_data.shape)
print(stored_data.info())

filter = stored_data[stored_data["Status for clarity"] == 1].head(10)
print(filter)

filter = stored_data[stored_data["Status for clarity"] == 0].head(10)
print(filter)

count = stored_data["Status for clarity"].value_counts()
print(count[1])
print(count[0])

total = len(stored_data)
servivor = count[1]
per1 = servivor / total
print(per1)

nonservivor = count[0]
per2 = nonservivor / total
print(per2)

count.plot(kind='bar', color=["red", "green"])
mp.xlabel("status")
mp.ylabel("no of persons")
mp.title("survivor vs nonsurvivor")
mp.xticks(rotation=0)
mp.show()
```

output

```
PS C:\Users\slava\python.1\python> & 'c:\Program Files\Python313\python.exe' 'c:\Users\slava\.vscode\extensions\ms-p
ython.debugpy-2025.10.0-win32-x64\bundled\libs\debugpy\launcher' '57855' '--' 'c:\Users\slava\python.1\python\index.p
y'

  PassengerId  Survived
0            892         0
1            893         1
2            894         0
3            895         0
4            896         1
..          ...      ...
413         1305         0
414         1306         1
415         1307         0
416         1308         0
417         1309         0

[418 rows x 2 columns]
   Id  Status for clarity
0   892                 0
1   893                 1
2   894                 0
3   895                 0
4   896                 1
..  ...              ...
413 1305                 0
414 1306                 1
415 1307                 0
416 1308                 0
417 1309                 0

[418 rows x 2 columns]
   Id  Status for clarity
0   892                 0
1   893                 1
2   894                 0
3   895                 0
4   896                 1
   Id  Status for clarity
413 1305                 0
414 1306                 1
415 1307                 0
```

```

[418 rows x 2 columns]
   Id  Status for clarity
0  892                  0
1  893                  1
2  894                  0
3  895                  0
4  896                  1
   Id  Status for clarity
413 1305                  0
414 1306                  1
415 1307                  0
416 1308                  0
417 1309                  0
(418, 2)
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 418 entries, 0 to 417
Data columns (total 2 columns):
 #   Column          Non-Null Count  Dtype
---  -
 0   Id              418 non-null   int64
 1   Status for clarity 418 non-null   int64
dtypes: int64(2)
memory usage: 6.7 KB
None
   Id  Status for clarity
1  893                  1
4  896                  1
6  898                  1
8  900                  1
12 904                  1
14 906                  1
15 907                  1
18 910                  1
19 911                  1
22 914                  1
   Id  Status for clarity
0  892                  0
2  894                  0
3  895                  0
5  897                  0

```

```

415 1307          0
416 1308          0
417 1309          0
(418, 2)
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 418 entries, 0 to 417
Data columns (total 2 columns):
#   Column          Non-Null Count  Dtype
---  ---
0    Id              418 non-null    int64
1    Status for clarity 418 non-null    int64
dtypes: int64(2)
memory usage: 6.7 KB
None
   Id  Status for clarity
1  893                1
4  896                1
6  898                1
8  900                1
12 904                1
14 906                1
15 907                1
18 910                1
19 911                1
22 914                1
   Id  Status for clarity
0  892                0
2  894                0
3  895                0
5  897                0
7  899                0
9  901                0
10 902                0
11 903                0
13 905                0
16 908                0
152
266
0.36363636363636365
0.6363636363636364

```

Select 5

