

```
In [1]: import pandas as pd
import numpy as np
from sklearn.linear_model import LogisticRegression
from sklearn.preprocessing import StandardScaler
```

```
In [2]: df=pd.read_csv(r"C:\Users\Welcome\Downloads\gender_submission.csv")
df
```

```
Out[2]:
```

	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 × 2 columns

```
In [3]: pd.set_option('display.max_rows',10000000000)
pd.set_option('display.max_columns',10000000000)
pd.set_option('display.width',95)
```

```
In [4]: print('This DataFrame ha %d Rows and %d Columns'%(df.shape))
```

This DataFrame ha 418 Rows and 2 Columns

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

```
Out[5]:
```

	PassengerId	Survived
0	892	0
1	893	1
2	894	0
3	895	0
4	896	1

```
In [6]: features_matrix=df.iloc[:,0:34]
```

```
In [7]: target_vector=df.iloc[:,-1]
```

```
In [8]: print('The Features Matrix Has %d Rows And %d Columns'%(features_matrix.shape))  
print('The Features Matrix Has %d Rows And %d Columns'%(np.array(target_vector)
```

```
The Features Matrix Has 418 Rows And 2 Columns  
The Features Matrix Has 418 Rows And 1 Columns
```

```
In [9]: features_matrix_standardized=StandardScaler().fit_transform(features_matrix)
```

```
In [10]: algorithm=LogisticRegression(penalty='l2',dual=False,tol=1e-4,C=1.0,fit_intercept
```

```
In [11]: Logistic_Regression_Model=algorithm.fit(features_matrix_standardized,target_vec
```

```
In [19]: Observation=[[1,0]]
```

```
In [20]: predictions=Logistic_Regression_Model.predict(Observation)  
print('The Model Predicted The Observations To Belong To Class %s'%(predictions
```

```
The Model Predicted The Observations To Belong To Class [0]
```

```
In [21]: print('The Algorithm Was Trained To Predict One Of The Two Classes:%s'%(algorithm
```

```
The Algorithm Was Trained To Predict One Of The Two Classes:[0 1]
```

```
In [22]: print("""The Model Says The Probability Of The Observation we Passed Belonging  
print("""The Model Says The Probability Of The Observation we Passed Belonging
```

```
The Model Says The Probability Of The Observation we Passed Belonging To clas  
s['b']Is 0.8238872695984016  
The Model Says The Probability Of The Observation we Passed Belonging To clas  
s['g']Is 0.17611273040159833
```

```
In [ ]:
```