

```
In [2]: import pandas as pd
import numpy as np
from sklearn.linear_model import LogisticRegression
from sklearn.preprocessing import StandardScaler
```

```
In [3]: df=pd.read_csv(r"C:\Users\manis\OneDrive\Desktop\gender_submission.csv")
df
```

```
Out[3]:
```

	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

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

This DataFrame has 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

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

```
In [6]: pd.set_option('display.max_rows',1000000000)
pd.set_option('display.max_columns',1000000000)
pd.set_option('display.width',95)
```

```
In [7]: features_matrix=df.iloc[:, 0:34]
```

```
In [8]: target_vector=df.iloc[:, -1]
```

```
In [9]: print('The Featues Matrix Has %d Rows adn %d Columns(s)'%(features_matrix.shape))
print('The Target Matrix Has %d Rows adn %d Columns(s)'%(np.array(target_vector)
```

The Featues Matrix Has 418 Rows adn 2 Columns(s)

The Target Matrix Has 418 Rows adn 1 Columns(s)

```
In [10]: features_matrix_standardized=StandardScaler().fit_transform(features_matrix)
```

```
In [11]: algorithm=LogisticRegression(penalty='l2',dual=False,tol=1e-4,C=1.0,fit_intercep
```

```
In [12]: Logistic_Regression_Model=algorithm.fit(features_matrix_standardized,target_vect
```

```
In [18]: observation=[[0.99539,-0.05889]]
```

```
In [19]: predictions=Logistic_Regression_Model.predict(observation)
print('The Model Predicted The Observation To Belong To Class %s'%(predictions))
```

The Model Predicted The Observation To Belong To Class [0]

```
In [20]: 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 [21]: print("""The Model Says The Probability Of The Observation We Passed Belonging T
print()
print("""The Model Says The Probability Of The Observation We Passed Belonging T
```

The Model Says The Probability Of The Observation We Passed Belonging To Class  
[0] Is 0.8582107836963538

The Model Says The Probability Of The Observation We Passed Belonging To Class  
[1] Is 0.14178921630364613

```
In [ ]:
```