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\HP\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 has %d Rows and %d Columns'%(df.shape))
```

```
This DataFrame has 418 Rows and 2 Columns
```

In [5]:

```
1 df.head()
```

Out[5]:

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

In [6]:

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

In [7]:

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

In [8]:

```
1 print('The Features Matrix Has %d Rows AND %d Columns(s)'%(features_matrix.shape))
```

```
The Features Matrix Has 418 Rows AND 2 Columns(s)
```

In [9]:

```
1 print('The Target Matrix Has %d Rows AND %d Column(s)'%(np.array(target_vector).resha
```

```
The Target Matrix Has 418 Rows AND 1 Column(s)
```

In [10]:

```
1 features_matrix_Standardized=StandardScaler().fit_transform(features_matrix)
```

In [11]:

```
1 algorithm=LogisticRegression(penalty='l2',dual=False,tol=1e-4,C=1.0,fit_intercept=Tru
```

In [18]:

```
1 Logistic_Regression_Model=algorithm.fit(features_matrix_Standardized,target_vector)
```

In [19]:

```
1 observation=[[1,0]]
```

In [20]:

```
1 predictions=Logistic_Regression_Model.predict(observation)
2 print("The model predicted the observation to belong to class %s"%(predictions))
```

```
The model predicted the observation to belong to class [0]
```

In [21]:

```
1 print('The algorithm was Trained to predict one of the Two Classes %s'%(algorithm.cla
```

```
The algorithm was Trained to predict one of the Two Classes [0 1]
```

In [22]:

```
1 print("""The Model says The probability of the observation we passed Belonging to cla
2 print()
3 print("""The Model says The probability of the observation we passed Belonging to cla
```

```
The Model says The probability of the observation we passed Belonging to c
lass['b']Is 0.8238872695984016

The Model says The probability of the observation we passed Belonging to c
lass['g']Is 0.17611273040159833
```

In [ ]:

```
1
```