In [1]:
```python
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
df=pd.read_csv("C:/Users/User/Downloads/gender_weight-height.csv")
df
```

Out[1]:

	Gender	Height	Weight
0	Male	73.847017	241.893563
1	Male	68.781904	162.310473
2	Male	74.110105	212.740856
3	Male	71.730978	220.042470
4	Male	69.881796	206.349801
...	...	...	...
9995	Female	66.172652	136.777454
9996	Female	67.067155	170.867906
9997	Female	63.867992	128.475319
9998	Female	69.034243	163.852461
9999	Female	61.944246	113.649103

10000 rows × 3 columns

In [5]:

Out[5]:
```
0       73.847017
1       68.781904
2       74.110105
3       71.730978
4       69.881796
          ...
9995    66.172652
9996    67.067155
9997    63.867992
9998    69.034243
9999    61.944246
Name: Height, Length: 10000, dtype: float64
```

In [2]:
```python
X=df.drop(["Gender","Weight"],axis=1)
y=df.Gender
X
```

Out[2]:

	Height
0	73.847017
1	68.781904
2	74.110105
3	71.730978
4	69.881796
...	...
9995	66.172652
9996	67.067155
9997	63.867992
9998	69.034243
9999	61.944246

10000 rows × 1 columns

In [3]:
```python
y
```

Out[3]:
```
0          Male
1          Male
2          Male
3          Male
4          Male
          ...
9995     Female
9996     Female
9997     Female
9998     Female
9999     Female
Name: Gender, Length: 10000, dtype: object
```

```
In [4]: from sklearn.model_selection import train_test_split
        X_train,X_test,y_train,y_test=train_test_split(X,y)
        X_train
```

Out[4]:

	Height
4366	72.074776
6267	61.764569
5710	63.623574
4418	69.762905
3121	70.120378
...	...
7690	65.939828
4033	65.769967
8438	59.893894
7692	63.957785
8677	60.857543

7500 rows × 1 columns

```
In [6]: from sklearn.linear_model import LogisticRegression
        reg = LogisticRegression()
        reg.fit(X_train,y_train)
```

Out[6]: LogisticRegression()

```
In [7]: y_pred=reg.predict(X_test)
        y_pred
```

Out[7]: array(['Female', 'Female', 'Male', ..., 'Female', 'Male', 'Male'],
             dtype=object)

```
In [8]: y_test
```

Out[8]:
```
7188     Female
6693     Female
8280     Female
8256     Female
9329     Female
          ...
1494       Male
2426       Male
8640     Female
1451       Male
119        Male
Name: Gender, Length: 2500, dtype: object
```

In [11]: `reg.predict([[70.0]])`

Out[11]: `array(['Male'], dtype=object)`

In [12]:
```python
from sklearn.metrics import accuracy_score,confusion_matrix
accuracy_score(y_pred,y_test)
```

Out[12]: `0.834`

In [ ]:

In [13]: `confusion_matrix(y_pred,y_test)`

Out[13]:
```
array([[1024,  194],
       [ 221, 1061]], dtype=int64)
```

In [14]:
```python
a=(1024+1061)/(1024+1061+194+221)
a
```
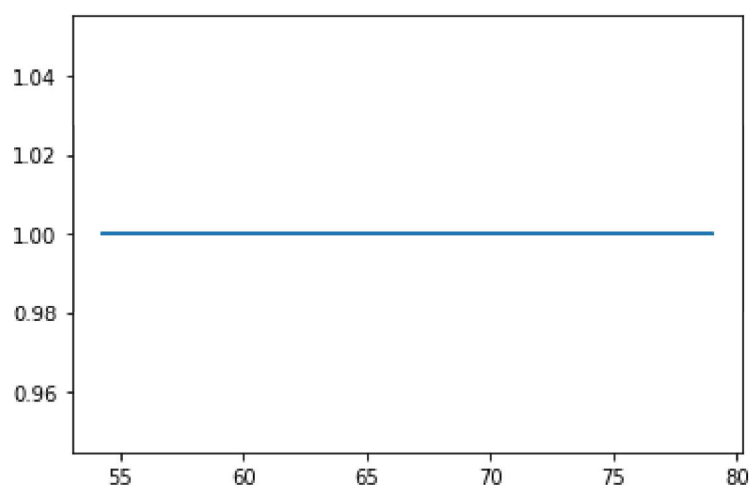
Out[14]: `0.834`

In [15]: `reg.coef_`

Out[15]: `array([[0.67457287]])`

In [16]: `reg.intercept_`

Out[16]: `array([-44.73916036])`

In [21]:

In [ ]:

In [ ]: