

```
In [1]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [2]: from sklearn.linear_model import LogisticRegression
```

```
In [3]: df=pd.read_csv("C6 bmi csv").dropna()

df
```

Out[3]:

	Gender	Height	Weight	Index
0	Male	174	96	4
1	Male	189	87	2
2	Female	185	110	4
3	Female	195	104	3
4	Male	149	61	3
...
495	Female	150	153	5
496	Female	184	121	4
497	Female	141	136	5
498	Male	150	95	5
499	Male	173	131	5

```
In [4]: df.dropna(inplace=True)
```

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

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 500 entries, 0 to 499
Data columns (total 4 columns):
#   Column  Non-Null Count  Dtype
---  -
0   Gender  500 non-null       object
1   Height  500 non-null       int64
2   Weight  500 non-null       int64
3   Index   500 non-null       int64
dtypes: int64(3), object(1)
memory usage: 19.5+ KB
```

```
In [6]: feature_matrix = df[['Index', 'Height', 'Weight']]
target_vector = df['Gender']
```

```
In [7]: feature_matrix.shape
```

```
Out[7]: (500, 3)
```

```
In [8]: target_vector.shape
```

```
Out[8]: (500,)
```

```
In [9]: from sklearn.preprocessing import StandardScaler
```

```
In [10]: fs = StandardScaler().fit_transform(feature_matrix)
```

```
In [11]: logr = LogisticRegression()  
logr.fit(fs,target_vector)
```

```
Out[11]: LogisticRegression()
```

```
In [12]: feature_matrix.shape
```

```
Out[12]: (500, 3)
```

```
In [13]: target_vector.shape
```

```
Out[13]: (500,)
```

```
In [14]: from sklearn.preprocessing import StandardScaler
```

```
In [15]: fs = StandardScaler().fit_transform(feature_matrix)
```

```
In [16]: logr = LogisticRegression()  
logr.fit(fs,target_vector)
```

```
Out[16]: LogisticRegression()
```

```
In [17]: observation=df[['Index','Height','Weight']]
```

