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

In [2]:
```
```

In [3]:
```
df = pd.read_csv("C6_bmi.csv")
```

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

500 rows × 4 columns

In [4]:
```
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 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: 15.8+ KB
```

In [5]:
```
```

Out[5]:
```
Index(['Gender', 'Height', 'Weight', 'Index'], dtype='object')
```

In [6]:
```
f_m=df[['Height', 'Weight', 'Index']]
```

In [7]:

Out[7]: (500, 3)

In [8]:

Out[8]: (500,)

In [9]:

In [10]:

In [11]:
```
logr=LogisticRegression()
```

Out[11]: LogisticRegression()

In [14]:

In [15]:
```
prediction=logr.predict(observation)
```

Out[15]: array(['Male'], dtype=object)

In [16]:

Out[16]: array(['Female', 'Male'], dtype=object)

In [17]:

Out[17]: 0.4428979082451251

In [18]:

Out[18]: 0.5571020917548749