

```
In [66]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [67]: from sklearn.linear_model import LogisticRegression
```

```
In [82]: df=pd.read_csv(r"C:\Users\Admin\Downloads\C6_bmi - C6_bmi.csv")
df
```

Out[82]:

	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 [83]: df.info()
```

```
<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
```

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In [84]: df1=df.dropna()
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```
In [93]: d1=df1.iloc[:,1:3]
d2=df1.iloc[:, -1]
```

```
In [94]: d1.shape
```

```
Out[94]: (500, 2)
```

```
In [95]: d2.shape
```

```
Out[95]: (500,)
```

```
In [96]: from sklearn.preprocessing import StandardScaler
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In [97]: a=StandardScaler().fit_transform(d1)
```

```
In [98]: lr=LogisticRegression()  
lr.fit(a,d2)
```

```
Out[98]: LogisticRegression()
```

```
In [101]: obs=[[10,12]]
```

```
In [102]: pdt=lr.predict(obs)  
print(pdt)
```

```
[5]
```

```
In [103]: lr.classes_
```

```
Out[103]: array([0, 1, 2, 3, 4, 5], dtype=int64)
```

```
In [104]: lr.predict_proba(obs)[0][0]
```

```
Out[104]: 2.21175337223135e-34
```

```
In [105]: lr.predict_proba(obs)[0][1]
```

```
Out[105]: 8.910952526246851e-32
```

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In [ ]:
```

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In [ ]:
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