In [1]:
```
import pandas as pd
```

In [2]:
```
df=pd.read_csv("/Users/akheruddinahmed/Downloads/MLData.csv")
```

In [3]:
```
df.shape
```

Out[3]:
```
(11, 6)
```

In [4]:
```
df.head()
```

Out[4]:

	Patient id	Name	Age	Gender	Chol	Target
0	1	a	35	M	100	0
1	2	b	30	F	130	0
2	3	c	20	F	120	0
3	4	d	59	M	350	1
4	5	e	28	F	80	0

In [5]:
```
df.drop(['Name'],axis='columns',inplace=True)
```

In [6]:
```
df
```

Out[6]:

	Patient id	Age	Gender	Chol	Target
0	1	35	M	100	0
1	2	30	F	130	0
2	3	20	F	120	0
3	4	59	M	350	1
4	5	28	F	80	0
5	6	60	M	300	1
6	7	25	F	280	1
7	8	65	M	88	0
8	9	20	M	90	0
9	10	55	M	170	1
10	11	60	F	120	0

In [7]:
```
dummies=pd.get_dummies(df.Gender)
```

In [8]:
```
dummies
```

Out[8]:

	F	M
0	False	True
1	True	False
2	True	False
3	False	True
4	True	False
5	False	True
6	True	False
7	False	True
8	False	True
9	False	True
10	True	False

In [9]:
```
df=pd.concat([df,dummies],axis ='columns')
```

In [10]:
```
df
```

Out[10]:

	Patient id	Age	Gender	Chol	Target	F	M
0	1	35	M	100	0	False	True
1	2	30	F	130	0	True	False
2	3	20	F	120	0	True	False
3	4	59	M	350	1	False	True
4	5	28	F	80	0	True	False
5	6	60	M	300	1	False	True
6	7	25	F	280	1	True	False
7	8	65	M	88	0	False	True
8	9	20	M	90	0	False	True
9	10	55	M	170	1	False	True
10	11	60	F	120	0	True	False

In [11]:
```
df.drop('Gender',axis='columns',inplace=True)
```

In [12]:
```
df
```

Out[12]:

	Patient id	Age	Chol	Target	F	M
0	1	35	100	0	False	True
1	2	30	130	0	True	False
2	3	20	120	0	True	False
3	4	59	350	1	False	True
4	5	28	80	0	True	False
5	6	60	300	1	False	True
6	7	25	280	1	True	False
7	8	65	88	0	False	True
8	9	20	90	0	False	True
9	10	55	170	1	False	True
10	11	60	120	0	True	False

In [13]:
```
from sklearn.model_selection import train_test_split
x_train,x_test,y_train,y_test=train_test_split(df[['Age','Chol','F','M
```

In [14]:
```
from sklearn.naive_bayes import MultinomialNB
```

In [15]:
```
model=MultinomialNB()
```

In [16]:
```
model.fit(x_train,y_train)
```

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

In [17]:
```
model.score(x_test,y_test)
```

Out[17]: 0.5

In [18]:
```
model.predict(x_test)
```

Out[18]: array([1, 0])

In [19]:
```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 11 entries, 0 to 10
Data columns (total 6 columns):
 #   Column      Non-Null Count  Dtype
---  ------      --------------  -----
 0   Patient id  11 non-null     int64
 1   Age         11 non-null     int64
 2   Chol        11 non-null     int64
 3   Target      11 non-null     int64
 4   F           11 non-null     bool
 5   M           11 non-null     bool
dtypes: bool(2), int64(4)
memory usage: 506.0 bytes
```

In [ ]:
```

```