

In [1]:

```
import pandas as pd
```

In [2]:

```
import numpy as np
```

In [3]:

```
df = pd.read_csv(r'https://github.com/YBI-Foundation/Dataset/raw/main/Customer%20Purchase.c
```

In [5]:

```
df.head()
```

Out[5]:

	Customer ID	Age	Gender	Education	Review	Purchased
0	1021	30	Female	School	Average	No
1	1022	68	Female	UG	Poor	No
2	1023	70	Female	PG	Good	No
3	1024	72	Female	PG	Good	No
4	1025	16	Female	UG	Average	No

In [6]:

```
df.shape
```

Out[6]:

```
(50, 6)
```

In [7]:

```
df.columns
```

Out[7]:

```
Index(['Customer ID', 'Age', 'Gender', 'Education', 'Review', 'Purchased'],  
      dtype='object')
```

In [8]:

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 50 entries, 0 to 49
Data columns (total 6 columns):
 #   Column          Non-Null Count  Dtype  
---  -
 0   Customer ID     50 non-null    int64  
 1   Age             50 non-null    int64  
 2   Gender          50 non-null    object  
 3   Education       50 non-null    object  
 4   Review          50 non-null    object  
 5   Purchased       50 non-null    object  
dtypes: int64(2), object(4)
memory usage: 2.5+ KB
```

In [9]:

```
y = df['Purchased']
```

In [10]:

```
y
```

Out[10]:

0	No
1	No
2	No
3	No
4	No
5	Yes
6	No
7	Yes
8	No
9	Yes
10	Yes
11	Yes
12	No
13	No
14	Yes
15	No
16	Yes
17	Yes
18	No
19	Yes
20	Yes
21	No
22	Yes
23	No
24	Yes
25	No
26	No
27	No
28	No
29	Yes
30	No
31	Yes
32	Yes
33	Yes
34	No
35	Yes
36	Yes
37	Yes
38	No
39	No
40	No
41	Yes
42	Yes
43	No
44	No
45	Yes
46	No
47	Yes
48	Yes
49	No

Name: Purchased, dtype: object

In [11]:

```
from sklearn.preprocessing import LabelEncoder
```

In [12]:

```
le = LabelEncoder()
```

In [13]:

```
y = le.fit_transform(y)
```

In [14]:

```
y
```

Out[14]:

```
array([0, 0, 0, 0, 0, 1, 0, 1, 0, 1, 1, 1, 0, 0, 1, 0, 1, 1, 0, 1, 1, 0,
        1, 0, 1, 0, 0, 0, 0, 1, 0, 1, 1, 1, 0, 1, 1, 1, 0, 0, 0, 1, 1, 0,
        0, 1, 0, 1, 1, 0])
```

In [15]:

```
le.classes_
```

Out[15]:

```
array(['No', 'Yes'], dtype=object)
```

In [16]:

```
le.inverse_transform([0,0,1,1])
```

Out[16]:

```
array(['No', 'No', 'Yes', 'Yes'], dtype=object)
```

In [ ]: