```
import numpy as np
import pandas as pd
from google.colab import drive
```

```
drive.mount('/content/drive')
```

```
Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force_remount=True).
```

```
df = pd.read_csv('/content/drive/MyDrive/python-Saylani/customer.csv')
```

```
df.sample(5)
```

	age	gender	review	education	purchased
18	19	Male	Good	School	No
37	94	Male	Average	PG	Yes
41	23	Male	Good	PG	Yes
24	16	Female	Average	PG	Yes
13	57	Female	Average	School	No

```
df = df.iloc[:,2:]
```

```
df.head()
```

	review	education	purchased
0	Average	School	No
1	Poor	UG	No
2	Good	PG	No
3	Good	PG	No
4	Average	UG	No

```
df['review'].unique()
```

```
array(['Average', 'Poor', 'Good'], dtype=object)
```

```
df['education'].unique()
```

```
array(['School', 'UG', 'PG'], dtype=object)
```

```
from sklearn.preprocessing import OrdinalEncoder
from sklearn.model_selection import train_test_split
```

```
x=df.drop(['purchased'],axis=1)
y=df['purchased']
```

```
x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.2)
```

```
x_train
```

	review	education
38	Good	School
16	Poor	UG
27	Poor	PG
33	Good	PG
40	Good	School
29	Average	UG
10	Good	UG
5	Average	School
28	Poor	School
4	Average	UG
31	Poor	School
13	Average	School
36	Good	UG
11	Good	UG
21	Average	PG
48	Good	UG
7	Poor	School
49	Good	UG
14	Poor	PG
47	Good	PG
44	Average	UG
22	Poor	PG
3	Good	PG
41	Good	PG
34	Average	School
12	Poor	School
18	Good	School
35	Poor	School
45	Poor	PG
23	Good	School
42	Good	PG
30	Average	UG
17	Poor	UG
2	Good	PG
37	Average	PG
6	Good	School
32	Average	UG
26	Poor	PG
15	Poor	UG
24	Average	PG

```
oe = OrdinalEncoder(categories=[['Poor','Average','Good'],['School','UG','PG']])
```

```
oe.fit(x_train)
```

```
OrdinalEncoder(categories=[['Poor', 'Average', 'Good'], ['School', 'UG', 'PG']])
```

```
x_train = oe.transform(x_train)
```

```
x_train
```

```
array([[2., 0.],
       [0., 1.],
       [0., 2.],
       [2., 2.],
       [2., 0.],
       [1., 1.],
       [2., 1.],
       [1., 0.],
       [0., 0.],
       [1., 1.],
       [0., 0.],
       [1., 0.],
       [2., 1.],
       [2., 1.],
       [1., 2.],
       [2., 1.],
       [0., 0.],
       [2., 1.],
       [0., 2.],
       [2., 2.],
       [1., 1.],
       [0., 2.],
       [2., 2.],
       [2., 2.],
       [1., 0.],
       [0., 0.],
       [2., 0.],
       [0., 0.],
       [0., 2.],
       [2., 0.],
       [2., 2.],
       [1., 1.],
       [0., 1.],
       [2., 2.],
       [1., 2.],
       [2., 0.],
       [1., 1.],
       [0., 2.],
       [0., 1.],
       [1., 2.]])
```

```
oe.categories_
```

```
[array(['Poor', 'Average', 'Good'], dtype=object),
 array(['School', 'UG', 'PG'], dtype=object)]
```

```
x_train
```

```
array([[2., 0.],
       [0., 1.],
       [0., 2.],
       [2., 2.],
       [2., 0.],
       [1., 1.],
       [2., 1.],
       [1., 0.],
       [0., 0.],
       [1., 1.],
       [0., 0.],
       [1., 0.],
       [2., 1.],
       [2., 1.],
       [1., 2.],
       [2., 1.],
       [0., 0.],
       [2., 1.],
       [0., 2.],
       [2., 2.],
       [1., 1.],
       [0., 2.],
       [2., 2.],
       [2., 2.],
```

```
       [1., 0.],
       [0., 0.],
       [2., 0.],
       [0., 0.],
       [0., 2.],
       [2., 0.],
       [2., 2.],
       [1., 1.],
       [0., 1.],
       [2., 2.],
       [1., 2.],
       [2., 0.],
       [1., 1.],
       [0., 2.],
       [0., 1.],
       [1., 2.]])
```

```
y_train
```