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

In [ ]:
```
df = pd.read_csv('customer.csv')
```

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

Out[ ]:

	gender	age	salary	purchased
0	Male	19	19000	0
1	Male	35	20000	0
2	Female	26	43000	0
3	Female	27	57000	0
4	Male	19	76000	0

In [ ]:
```
from sklearn.preprocessing import StandardScaler
from sklearn.model_selection import train_test_split
from sklearn.neighbors import KNeighborsClassifier
```

In [ ]:
```
att = df[['age' ,'salary']]
label = df['purchased']

att_train , att_test , class_train , class_test = train_test_split(att, label,
                                                                   random_state=0,t

scaler = StandardScaler()
scaler.fit(att_train)
att_train[['age' ,'salary']] = scaler.transform(att_train)

model = KNeighborsClassifier(n_neighbors=3)
model.fit(att_train, class_train)

model.score( scaler.transform(att_test), class_test)
# model.score( att_train, class_train)
```

```
c:\Users\pawar\Desktop\Code\DS\.venv\Lib\site-packages\sklearn\base.py:493: UserWarn
ing: X does not have valid feature names, but KNeighborsClassifier was fitted with f
eature names
  warnings.warn(
```

Out[ ]:
```
0.9083333333333333
```

In [ ]:
```
resule = pd.concat([att_test, class_test],axis=1)
resule['predict'] = model.predict(scaler.transform(att_test))
resule
```

```
c:\Users\pawar\Desktop\Code\DS\.venv\Lib\site-packages\sklearn\base.py:493: UserWarn
ing: X does not have valid feature names, but KNeighborsClassifier was fitted with f
eature names
  warnings.warn(
```

Out[ ]:

	age	salary	purchased	predict
132	30	87000	0	0
309	38	50000	0	0
341	35	75000	0	0
196	30	79000	0	0
246	35	50000	0	0
...	...	...	...	...
216	49	65000	0	0
259	45	131000	1	1
49	31	89000	0	0
238	46	82000	0	1
343	47	51000	1	0

120 rows × 4 columns