

```
In [13]: # Importing the Libraries
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
```

```
In [14]: # Importing the dataset
dataset = pd.read_csv('Social_Network_Ads.csv')
```

```
In [15]: dataset.head()
```

```
Out[15]:
```

| | User ID | Gender | Age | EstimatedSalary | Purchased |
|---|----------|--------|-----|-----------------|-----------|
| 0 | 15624510 | Male | 19 | 19000 | 0 |
| 1 | 15810944 | Male | 35 | 20000 | 0 |
| 2 | 15668575 | Female | 26 | 43000 | 0 |
| 3 | 15603246 | Female | 27 | 57000 | 0 |
| 4 | 15804002 | Male | 19 | 76000 | 0 |

```
In [16]: X = dataset.iloc[:, [2, 3]].values    #iloc[row selection, columns selection]
y = dataset.iloc[:, 4].values
```

```
In [17]: # Splitting the dataset into the Training set and Test set
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 0.2)
```

```
In [18]: # Fitting K-NN to the Training set
from sklearn.neighbors import KNeighborsClassifier
classifier = KNeighborsClassifier(n_neighbors = 5)
classifier.fit(X_train, y_train)
```

```
Out[18]: KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski',
                             metric_params=None, n_jobs=1, n_neighbors=5, p=2,
                             weights='uniform')
```

```
In [19]: # Predicting the Test set results
y_pred = classifier.predict(X_test)
```

```
In [20]: # Making the Confusion Matrix
from sklearn.metrics import confusion_matrix
cm = confusion_matrix(y_test, y_pred)
```

```
In [21]: cm
```

```
Out[21]: array([[45,  5],
               [11, 19]])
```

```
In [22]: from sklearn.metrics import accuracy_score
```

```
In [23]: accuracy_score(y_test, y_pred)
```

```
Out[23]: 0.8
```

```
In [ ]:
```

```
In [ ]:
```