In [ ]:
```
#Social_Network_Ads.csv
```

Importing the libraries

In [1]:
```
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
```

Importing the dataset

In [2]:
```
data = pd.read_csv('C:/Users/Karthi/Desktop/Social_Network_Ads.csv')
data
```

Out[2]:

	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
...	...	...	...	...	...
395	15691863	Female	46	41000	1
396	15706071	Male	51	23000	1
397	15654296	Female	50	20000	1
398	15755018	Male	36	33000	0
399	15594041	Female	49	36000	1

400 rows × 5 columns

In [4]:
```
X=data.iloc[:,[2,3]].values
y=data.iloc[:,[4]].values
```

Splitting the dataset into the Training set and Test set

In [5]:
```
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 0.25, random_state = 0)
```

Feature Scaling

In [6]:
```
#feature scaling is for standardizing the range of feature around same range using Standardscaler
from sklearn.preprocessing import StandardScaler
sc = StandardScaler()
X_train = sc.fit_transform(X_train)
X_test = sc.transform(X_test)
```

Fitting Decision Tree Classification to the Training set

In [7]:
```
from sklearn.tree import DecisionTreeClassifier
classifier= DecisionTreeClassifier(criterion='entropy')
classifier.fit(X_train,y_train)
```

Out[7]:

```
DecisionTreeClassifier(criterion='entropy')
```

Predicting the Test set results

In [9]:

```
y_predict=classifier.predict(X_test)
print(y_predict)
```

```
[0 0 0 0 0 0 0 1 0 0 0 0 0 1 0 1 1 0 1 0 0 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0
 0 0 1 0 0 0 0 1 0 0 1 0 1 1 0 0 1 1 1 0 0 1 0 0 1 0 1 0 1 0 0 0 1 1 0 0 1
 0 0 0 0 1 1 1 1 0 0 1 0 0 1 1 0 0 1 0 0 0 1 0 1 1 1]
```

Making the Confusion Matrix

In [10]:

```
from sklearn.metrics import confusion_matrix
cm=confusion_matrix(y_test,y_predict)
print(cm)
```

```
[[62  6]
 [ 3 29]]
```

Visualising the Training set results

In [ ]:

Visualising the Test set results

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]: