

AIM

To classify the Social Network dataset using Decision tree analysis.

SOURCE CODE :

```
from google.colab import drive
drive.mount("/content/gdrive")
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
dataset = pd.read_csv('/content/gdrive/My Drive/
                        Social-Network-Ads.csv')
X = dataset.iloc[:, [2, 3]].values
y = dataset.iloc[:, -1].values
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)
from sklearn.preprocessing import StandardScaler
sc = StandardScaler()
X_train = sc.fit_transform(X_train)
X_test = sc.transform(X_test)
X1, X2 = np.meshgrid(np.arange(start=X_set[:, 0].min() - 1,
                                stop=X_set[:, 0].max() + 1, step=0.01),
                      np.arange(start=X_set[:, 1].min() - 1,
                                stop=X_set[:, 1].max() + 1, step=0.01))
```

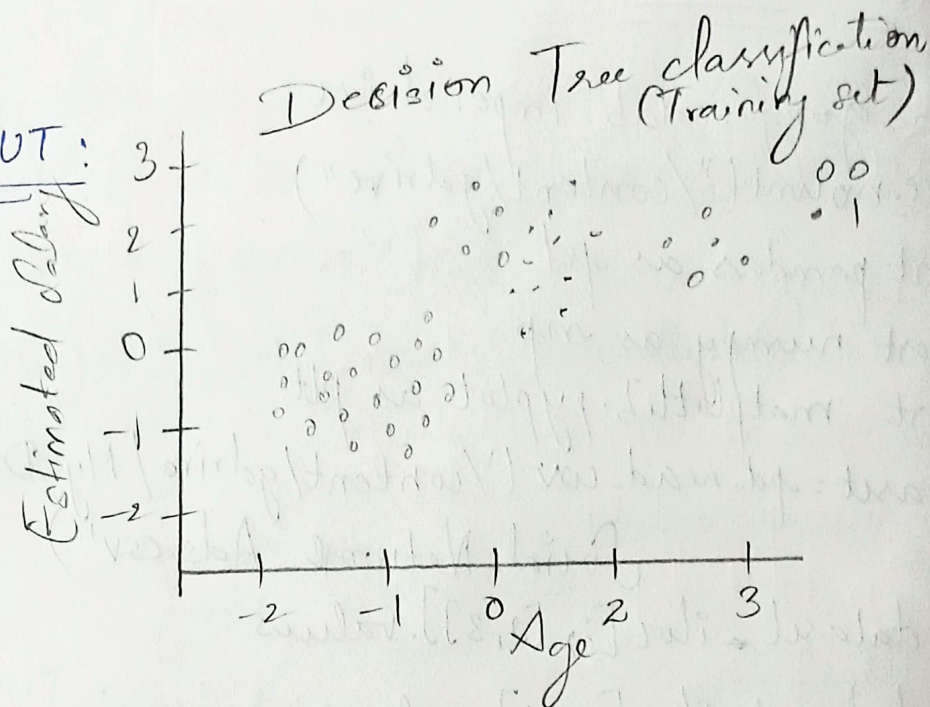
```
X_set[:,1].min()-1, stop=X_set[:,1].max()+1, step=0.01))
```

```
plt.xlim(X1, min(), X1.max())
```

```
plt.ylim(X2, min(), X2.max())
```

```
plt.show()
```

OUTPUT:



RESULT:

Thus the program is successfully executed & output is verified.