Exp No 12
Date: Decision Tree Classification.

Aim:
To classify a social network dataset

Program:

```
from google.colab import drive
drive.mount("/content/gdrive")

import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

x = dataset.iloc[:, [2,3]].values
y = dataset.iloc[:, -1].values

x_train, x_test, y_train, y_test = train_test_
random_state=0)

from sklearn.preprocessing import StandardScaler
sc = StandardScaler()
x_train = sc.fit_transform(x_train)
x_test = sc.transform(x_test)

from sklearn.tree import DecisionTreeClassifier
classifier.fit(x_train, y_train)
```

for sk-learn metrics import confusion

cm = confusion_matrix (y_test, y_pred)
print (cm)

linspace = x_set [:, 1] .max () + 1, step = 0.01
reshape (x1.ravel (), x2.ravel ()).T

ListedColorMap (x1.min (), x1.max ())
for i, j in enumerate (np.unique (y_set))
plt.scatter (x_set [y_set == j, 0],
x_set [y_set == j, 1], c =
ListedColorMap (('red', 'green'))
(i), label (j).

plt.xlabel ('Age')
plt.ylabel ('purchased')
plt.legend ()
plt.show ().

Result:

The program is successfully executed.