Ex No: 13
Date:

Implementation of Decision Tree classification Techniques.

Aim:

To implement a decision tree classification technique for gender classification using python.

Explanation:

* Import tree from sklearn
* Call the function DecisionTreeClassifier() from tree
* Assign values x and y
* Call the function predict for Prediction on the basis of given random values for each given features
* Display the output.

Source Code:

```
from sklearn import tree
clf = tree.DecisionTreeClassifier()
x = [[181, 80, 91], [182, 90, 92], [183, 100, 92], [184, 200, 93],
     [185, 300, 94], [186, 400, 95], [187, 500, 96], [189, 600, 97],
     [190, 700, 98], [191, 800, 99], [192, 900, 100], [193, 1000, 101]]
Y = ['male', 'male', 'female', 'male', 'female', 'male', 'female',
     'male', 'female', 'male', 'female', 'male']
clf = clf.fit(x, Y)
predictionf = clf.predict([[181, 80, 91]])
predictionm = clf.predict([[183, 100, 92]])
print(predictionf)
print(predictionm)
```

output:

['male']

['female']

RESULT:

Thus the program was successfully executed and the output was verified.