

Exno: 13 Implementation of Decision Tree
Date: Classification Techniques

Aim:

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

Program:

```
from sklearn import tree
clf = tree.DecisionTreeClassifier()
X = [[181, 180, 191], [182, 90, 92], [183, 100, 92],
      [184, 200, 193], [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)
prediction_f = clf.predict([[181, 80, 91]])
prediction_m = clf.predict([[183, 100, 92]])
print(prediction_f)
print(prediction_m)
```

Output:

male

female

Program is successfully executed and output is verified.