EX NO : 10

DATE :

IMPLEMENTATION OF DECISION TREE 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, 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 :

To implement decision tree classification techniques python program is executed and the output is verified.