

Exp No: 11

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DECISION TREE CLASSIFICATION

AIM:

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

PROGRAM:

```
from sklearn import tree
```

```
clf = tree.DecisionTreeClassifier()
```

```
X = [[181, 180, 91], [182, 90, 92], [183, 100, 93],  
      [184, 200, 92], [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 decision tree is
executed successfully and output is verified.