

AIM:

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

EXPLANATION:-

- Import tree from sklearn
- Call the function `DecisionTreeClassifier()`
- Assign value X and Y
- Call the function `predict` given feature
- Display the output.

SOURCE CODE:

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

RESULT:-

Thus Implementation of decision tree classification technique is implemented and executed successfully.