EX:14
Date:

Implementation of decision tree classification technique

Aim:

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

Source Code:

```
from sklearn import tree
# Using Decision Tree Classifier for Prediction
clf = tree.DecisionTreeClassifier()

#Here the array contains three values which are height, weight and shoe size
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)

#Predicting on basis of given random values for each given feature
Prediction1 = clf.Predict([[181,80,91]])
Prediction2 = clf.Predict([[183,100,92]])
#Printing final Prediction
Print(Prediction1)
Print(Prediction2)
```

Output:

['male']
['female']

Result:

Thus decision tree classification technique is successfully executed & output verified