

## Implementation of Decision Tree Classification Techniques

Aim:

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

Code:

```
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']
```

```
clf = clf.fit(X, Y)
```

```
Prediction f = clf.predict([[181.80, 91]])
```

```
predictionnm = clf.predict([[183, 100, 92]])
```

```
Print(prediction f)
```

```
print(predictionnm)
```

Output

```
['Male']
```

```
['Female']
```