3.D)Implementation of Decision Tree

AIM:

To implement a Decision Tree classifier that can learn from labeled data and

predict the label of new examples using a tree structure based on feature values.

CODE:

|  |  |
| --- | --- |
| [150, | 40], |
| [160, | 55], |
| [170, | 65], |
| [155, | 48], |
| [180, | 70], |

**OUTPUT:**

from sklearn import tree

X = [

[165, 50]

]

y = [0, 0, 1, 0, 1, 1]

model = tree.DecisionTreeClassifier()

model.fit(X, y)

prediction = model.predict([[158, 52]])

if prediction[0] == 0:

print("Predicted: Girl") else:

print("Predicted: Boy")

Predicted: Girl

**RESULT:**

The code is executed as expected and the output have been verified successfully.