

### EXPERIMENT – 3

#### PROGRAM:

```
from sklearn import datasets

from sklearn.tree import DecisionTreeClassifier, plot_tree

import matplotlib.pyplot as plt

iris = datasets.load_iris()

X = iris.data

y = iris.target

clf = DecisionTreeClassifier()

clf.fit(X, y)

new_sample = []

for i in range(4):

    new_sample.append(float(input(f"Enter feature {i+1}: ")))

prediction = clf.predict([new_sample])

print("Predicted class:", iris.target_names[prediction[0]])
```