

```
From sklearn.datasets import load_iris

From sklearn.tree import DecisionTreeClassifier, export_text

From sklearn.model_selection import train_test_split

From sklearn.metrics import accuracy_score


# Load the Iris dataset

Iris = load_iris()

X = iris.data

Y = iris.target


# Split into training and testing data

X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2,
random_state=42)


# Create a decision tree classifier

Clf = DecisionTreeClassifier()


# Train the classifier

Clf.fit(X_train, y_train)


# Predict the test data

Y_pred = clf.predict(X_test)


# Print the accuracy

Print("Accuracy:", accuracy_score(y_test, y_pred))
```

```
# Print the decision tree in text form

Tree_rules = export_text(clf, feature_names=iris.feature_names)

Print("\nDecision Tree Rules:\n")

Print(tree_rules)
```

OUTPUT :

Accuracy: 1.0

Decision Tree Rules:

```
|--- petal length (cm) <= 2.45
|   |--- class: 0
|--- petal length (cm) > 2.45
|   |--- petal width (cm) <= 1.75
|       |--- petal length (cm) <= 4.95
|           |--- class: 1
|           |--- petal length (cm) > 4.95
|               |--- class: 2
|   |--- petal width (cm) > 1.75
|       |--- class: 2
```