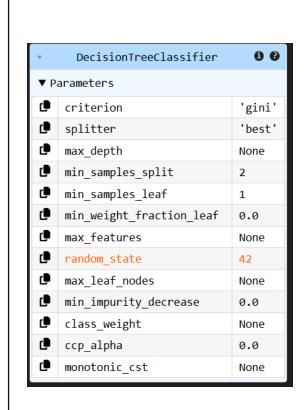
Centurion UNIVERSITY Sugget Lies - Engineering Committee.	School:	Campus:	
	Academic Year: Subject Name:	Subject Code:	
	Semester: Program: E	Branch: Specialization:	
	Date:  Applied and Action Learning (Learning by Doing and Discovery)		

Name of the Experiement: sklearn classification using the Iris dataset with a Decision Tree Classifier

## \* Coding Phase: Pseudo Code / Flow Chart / Algorithm

```
from sklearn.datasets import load_iris
from sklearn.model_selection import train_test_split
from sklearn.tree import DecisionTreeClassifier
from sklearn.metrics import accuracy_score, classification_report
# 1. Load dataset
iris = load iris()
X = iris.data # features
y = iris.target # labels
# 2. Split into train & test (80% train, 20% test)
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)
# 3. Create and train model
clf = DecisionTreeClassifier(random state=42)
clf.fit(X_train, y_train)
# 4. Predictions
y_pred = clf.predict(X_test)
# 5. Evaluate model
print("Accuracy:", accuracy_score(y_test, y_pred))
print("\nClassification Report:\n", classification_report(y_test, y_pred,
target_names=iris.target_names))
```

## \* Implementation Phase: Final Output (no error)



Accuracy: 1.0				
Classification	Report: precision	recall	f1-score	support
setosa	1.00	1.00	1.00	10
versicolor	1.00	1.00	1.00	9
virginica	1.00	1.00	1.00	11
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30

## **ASSESSMENT**

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/	10		
Practical Simulation/ Programming			
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
Total	50		

Signat	ure of th	he Stud	ent:
--------	-----------	---------	------

Name:

Signature of the Faculty:

Regn. No.:

Page No.....