E.Anjukumar

21X05A6715

CSE-DS

NRCM

PROJECT TITLE: PREDICTION OF "IRIS.CSV".DATASET FOR DECISION TREE ALGORITHM USING SUPERVISED LEARNING MACHINE ALGORITHM

PROBLEM STATEMENT A american based botanical garden a grow iris flower in their lab.But using "bio-technology" in a single tree different type of flowe is grow.As a data science engineer find out how much accuracy is there all category contain same species

```python
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

# Load the Iris dataset
iris = load_iris()
X = iris.data
y = iris.target

# Split the dataset into training and testing sets
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
decision_tree = DecisionTreeClassifier()

# Train the classifier on the training data
decision_tree.fit(X_train, y_train)

DecisionTreeClassifier()

# Make predictions on the test data
y_pred = decision_tree.predict(X_test)


# Calculate accuracy
accuracy = accuracy_score(y_test, y_pred)
print(f"Accuracy: {accuracy:.2f}")

Accuracy: 1.00
```

CONCLUSION According to my decision accuracy will be 1%