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Project Title:

Prediction of iris.csv dataset for decision tree algorithm using supervised learning machine algorithm

→ Problem Ststement:

A American based botonical garden grow iris flower in there labs but using bio technology in a single tree diffferent type of variety flower is grow.

As a data science enginer to find out how much accuracy is there all category contains same spacious.

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

```
• DecisionTreeClassifier
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 these model with 1% accuracy in spacious

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