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###Branch: Data Science

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##Project Title:

###Prediction of iris.csv dataset for Decision Algorithm using supervised learning machine algorithm

##Problem Statement:

A American waist botonical garden grow iris flowers in their labs but using biotechnology in a single tree different type of variety flower is grow. As a dataE Science Enginner find out how much accuracy is there all category content same species

##Conclusion:

####According my decision tree model the flower not contains exact same species,but only 1% species in found

```
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
```