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#Project Title: Classify random forest algorithm using skit learning clsifier
"RandomForestClassifier" for iris.csv, and predicit the data. How many species are
interconnected with nth Decision Tree Node.

#Task 1: Import the RandomForest classifier by using sklearn.ensemble library

#Task 2: Load your data using Seaborn graphics library as a argument Load_iris(dataset)

#Task 3: preprcess the data using skit learn Machine Learning Library

#Task:4 Select the model using "model_selection" from SNS as a Seaborn

#Task 5: Load iris.csv dataset for data as a input variable and target as a functionable output
variable

#Task 6: Pick the train and test data using train_test_split.

#Task 7: Select the estimators as nth Descision Tree.

#Task 8: Use a RandomForest classifier and fit your model.

#Task 9: Predict the data

#Task 10: Find the accuracy which should be 0 to 1.

```
from sklearn.datasets import load_iris
from sklearn.model_selection import train_test_split
from sklearn.ensemble import RandomForestClassifier
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 Random Forest classifier with 100 trees
random_forest = RandomForestClassifier(n_estimators=100)

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

```
RandomForestClassifier()

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

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

Accuracy: 1.00
```

#Conclusion: My model has approach 1.00 accuracy, which is lies between in the range of 0to1.
Hence it is shows that RandomForest Decision Model is successfully implement