

In [1]:

```
from sklearn import datasets
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.ensemble import RandomForestClassifier #Importing Random Forest Classifier
from sklearn import metrics # Importing metrics to test accuracy

iris = datasets.load_iris()

data=pd.DataFrame({
'sepal length': iris.data[:,0],
'sepal width': iris.data[:,1],
'petal length': iris.data[:,2],
'petal width': iris.data[:,3],
'species': iris.target
})

X=data[['sepal length', 'sepal width', 'petal length', 'petal width']] #features
y=data['species'] #target
x_train, x_test, y_train, y_test= train_test_split(X, y, test_size=0.3) #splitting data with
```

In [2]:

```
clf=RandomForestClassifier(n_estimators=10) #Creating a random forest with 100 decision trees
clf.fit(x_train, y_train) #Training our model
y_pred=clf.predict(x_test) #testing our model
print("Accuracy:", metrics.accuracy_score(y_test, y_pred)) #Measuring the accuracy of our
```

Accuracy: 0.9333333333333333

In []:

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#if we compared the difference accuracy we result:
#Decision Tree accuracy = 0.77
#Random forest tree accuracy=0.93
#Random forest tree algorithm have a better precision than Decision tree
```