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In [1]: import pandas as pd
import numpy as np
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In [5]: iris=pd.read_csv('C://Users/Gopi/Desktop/machine learning/csv files/iris.csv')
```

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In [8]: iris_setosa = iris.iloc[0:50,0:5]
iris_versicolor = iris.iloc[50:100,0:5]
iris_vergenica = iris.iloc[100:150,0:5]
```

```
In [9]: df1 = pd.DataFrame(iris_setosa.iloc[0:25,0:5])
df2 = pd.DataFrame(iris_versicolor.iloc[0:25,0:5])
df3 = pd.DataFrame(iris_vergenica.iloc[0:25,0:5])
```

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In [10]: iris_train = pd.concat([df1,df2,df3])
X_train = iris_train.iloc[:,0:4]
y_train = iris_train.iloc[:,4]
```

```
In [11]: df1 = pd.DataFrame(iris_setosa.iloc[25:50,0:5])
df2 = pd.DataFrame(iris_versicolor.iloc[25:50,0:5])
df3 = pd.DataFrame(iris_vergenica.iloc[25:50,0:5])
```

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In [12]: iris_test= pd.concat([df1,df2,df3])
X_test = iris_test.iloc[:,0:4]
y_test = iris_test.iloc[:,4]
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In [13]: from sklearn.tree import DecisionTreeClassifier
classifier = DecisionTreeClassifier(criterion = 'entropy', random_state = 0)
classifier.fit(X_train, y_train)
y_pred = classifier.predict(X_test)
```

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In [15]: from sklearn.metrics import confusion_matrix,accuracy_score
Confusion_Matrix = confusion_matrix(y_test, y_pred)
Accuracy_Score = accuracy_score(y_test, y_pred)
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In [22]: print('CONFUSION MATRIX')
print(Confusion_Matrix)
print('ACCURACY SCORE')
print(Accuracy_Score)
```

```
CONFUSION MATRIX
[[25  0  0]
 [ 0 23  2]
 [ 0  2 23]]
ACCURACY SCORE
0.9466666666666667
```