In [6]:
```
import pandas as pd
from sklearn.ensemble import RandomForestClassifier
from sklearn.model_selection import train_test_split
from sklearn.datasets import load_iris
iris = load_iris()
```

In [7]:
```
dir(iris)
```

Out[7]:
```
['DESCR',
 'data',
 'feature_names',
 'filename',
 'frame',
 'target',
 'target_names']
```

In [8]:
```
iris.target
```

Out[8]:
```
array([0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
       0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
       0, 0, 0, 0, 0, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
       1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
       1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2,
       2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
       2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2])
```

In [9]:
```
iris.target_names
```

Out[9]:
```
array(['setosa', 'versicolor', 'virginica'], dtype='<U10')
```

In [11]:
```
df = pd.DataFrame(iris.data,columns = iris.feature_names)
df.head()
```

Out[11]:

	sepal length (cm)	sepal width (cm)	petal length (cm)	petal width (cm)
0	5.1	3.5	1.4	0.2
1	4.9	3.0	1.4	0.2
2	4.7	3.2	1.3	0.2
3	4.6	3.1	1.5	0.2
4	5.0	3.6	1.4	0.2

In [14]:
```
df['target'] = iris.target
df.head()
```

Out[14]:

	sepal length (cm)	sepal width (cm)	petal length (cm)	petal width (cm)	target
0	5.1	3.5	1.4	0.2	0
1	4.9	3.0	1.4	0.2	0
2	4.7	3.2	1.3	0.2	0
3	4.6	3.1	1.5	0.2	0
4	5.0	3.6	1.4	0.2	0

In [25]:
```
x = df.drop('target', axis = 'columns')
y = df.target
```

In [27]:
```
x_train,x_test,y_train,y_test = train_test_split(x,y,test_size = 0.2)
```

In [30]:
```
model = RandomForestClassifier(n_estimators=10)
model.fit(x_train,y_train)
```

Out[30]:
```
RandomForestClassifier(n_estimators=10)
```

In [41]:
```
model.score(x_test,y_test)
```

Out[41]:
```
0.9666666666666667
```

In [40]:
```
model = RandomForestClassifier(n_estimators = 100)
model.fit(x_train,y_train)
```

Out[40]:
```
RandomForestClassifier()
```

In [42]:
```
model.score(x_train,y_train)
```

Out[42]:
```
1.0
```

In [ ]:
```

```