

## ✓ Random Forest Regression

### ✓ Importing the libraries

```
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
```

### ✓ Importing the dataset



```
dataset = pd.read_csv('Data.csv')
X = dataset.iloc[:, :-1].values
y = dataset.iloc[:, -1].values
```

### ✓ Splitting the dataset into the Training set and Test set

```
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 0.2, random_state = 0)
```



### ✓ Training the Random Forest Regression model on the whole dataset

```
from sklearn.ensemble import RandomForestRegressor
regressor = RandomForestRegressor(n_estimators = 10, random_state = 0)
regressor.fit(X_train, y_train)
```

  RandomForestRegressor  
RandomForestRegressor(n\_estimators=10, random\_state=0)


### ✓ Predicting the Test set results

```
y_pred = regressor.predict(X_test)
np.set_printoptions(precision=2)
print(np.concatenate((y_pred.reshape(len(y_pred),1), y_test.reshape(len(y_test),1)),1))
```

    
[[434.05 431.23]  
[458.79 460.01]  
[463.02 461.14]  
...  
[469.48 473.26]  
[439.57 438. ]  
[460.38 463.28]]

### ✓ Evaluating the Model Performance

```
from sklearn.metrics import r2_score
r2_score(y_test, y_pred)
```

 0.9615908334363876

