## **Loading Random Forest Regressor Model**

```
In [1]: from joblib import load
model = load("RANDOM_FOREST_REGRESSOR.joblib")
```

## Giving Feature Information (To help user in INPUT)

```
print("Feature Information:")
In [2]:
        print("")
        print("1. CRIM
                             per capita crime rate by town")
        print("2. ZN
                             proportion of residential land zoned for lots over 25,000 sc
                             proportion of non-retail business acres per town")
        print("3. INDUS
        print("4. CHAS
                             Charles River dummy variable (= 1 if tract bounds river; 0 o
        print("5. NOX
                             nitric oxides concentration (parts per 10 million)")
        print("6. RM
                             average number of rooms per dwelling")
        print("7. AGE
                             proportion of owner-occupied units built prior to 1940")
        print("8. DIS
                             weighted distances to five Boston employment centres")
        print("9. RAD
                             index of accessibility to radial highways")
        print("10. TAX
                             full-value property-tax rate per $10,000")
        print("11. PTRATIO
                             pupil-teacher ratio by town")
        print("12. B
                             1000(Bk - 0.63)^2 where Bk is the proportion of blacks by to
        print("13. LSTAT
                             % lower status of the population")
        print("")
        print("Label Information: ")
        print("")
        print("14. MEDV
                            Median value of owner-occupied homes in $1000's")
```

### Feature Information:

```
1. CRIM
              per capita crime rate by town
2. ZN
              proportion of residential land zoned for lots over 25,000 sq.ft.
   INDUS
              proportion of non-retail business acres per town
4. CHAS
              Charles River dummy variable (= 1 if tract bounds river; 0 otherw
ise)
5. NOX
              nitric oxides concentration (parts per 10 million)
6. RM
              average number of rooms per dwelling
7. AGE
              proportion of owner-occupied units built prior to 1940
              weighted distances to five Boston employment centres
8. DIS
9. RAD
              index of accessibility to radial highways
              full-value property-tax rate per $10,000
10. TAX
11. PTRATIO
              pupil-teacher ratio by town
              1000(Bk - 0.63)^2 where Bk is the proportion of blacks by town
12. B
13. LSTAT
             % lower status of the population
```

#### Label Information:

14. MEDV Median value of owner-occupied homes in \$1000's

# Taking input of Features of a house to predict its price

Here we will take input as a list of 13 features. It must be converted into a DDL(Double Dimensional List) because .predict() function takes DDL.

```
In [3]: temp = eval(input("Enter a list of 13 features of a house to predict it's price:
    predicted_label = model.predict([temp])
    print("")
    print("")
    print("")
    print("The Price of house is : ", "$", predicted_label[0]*1000)
    print("")
    print("")
    print("")
    print("")
```

Enter a list of 13 features of a house to predict it's price: [0.06905,0,2.18, 0,0.458,7.147,54.2,6.0622,3,222,18.7,396.9,5.33]

The Price of house is : \$ 35242.9999999996

C:\Users\prath\Desktop\Coding\Machine Learning\learning\_ml\lib\site-packages\sk
learn\base.py:450: UserWarning: X does not have valid feature names, but Random
ForestRegressor was fitted with feature names
 warnings.warn(