RANDOM FOREST

Random Forest accuracy value (R2) for Hyper parameter n_estimators=100, criterion=' absolute_error' is **0.9462**

 $from sklearn.ensemble import RandomForestRegressor \\ regressor=RandomForestRegressor(n_estimators=100, criterion='absolute_error') \\ regressor.fit(x_train,y_train)$

| SI no | N_Estimators | Criterion | Max features | R Value |
|-------|------------------|----------------|--------------|---------|
| 1 | 50 | squared_error | None | 0.9180 |
| 2 | 100 | squared_error | None | 0.9413 |
| 3 | 50 | squared_error | Sqrt | 0.8064 |
| 4 | 100 | squared_error | Sqrt | 0.8043 |
| 5 | 50 | squared_error | Log2 | 0.7926 |
| 6 | 100 | squared_error | Log2 | 0.7877 |
| 7 | 50 | friedman_mse | None | 0.9338 |
| 8 | 100 | friedman_mse | None | 0.9298 |
| 9 | 50 | friedman_mse | Sqrt | 0.8182 |
| 10 | 100 | friedman_mse | Sqrt | 0.8376 |
| 11 | 50 | friedman_mse | Log2 | 0.7982 |
| 12 | 100 | friedman_mse | Log2 | 0.8041 |
| 13 | 50 | absolute_error | None | 0.9328 |
| 14 | <mark>100</mark> | absolute_error | None None | 0.9462 |
| 15 | 50 | absolute_error | Sqrt | 0.8091 |
| 16 | 100 | absolute_error | Sqrt | 0.8632 |
| 17 | 50 | absolute_error | Log2 | 0.7805 |
| 18 | 100 | absolute_error | Log2 | 0.8116 |
| 19 | 50 | Poisson | None | 0.9384 |
| 20 | 100 | Poisson | None | 0.9417 |
| 21 | 50 | Poisson | Sqrt | 0.7364 |
| 22 | 100 | Poisson | Sqrt | 0.7825 |
| 23 | 50 | Poisson | Log2 | 0.6997 |
| 24 | 100 | poisson | Log2 | 0.7827 |