**MACHINE LEARNING REGRESSION**

**50\_STARTUPS**

**DECISION TREE REGRESSION**

The Decision Tree Regression best **R2-Score Vaule** =**(mean,auto,best)=(0.9517)**

Below the table using a all parameter Criterion, Max\_Features and Splitter use R2-Score Value

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No** | **CRITERION** | **MAX\_FEATURES** | **SPLITTER** | **R2-SCORE** |
| 1 | mse | auto | best | 0.9312 |
| 2 | mse | auto | random | 0.7436 |
| 3 | mse | sqrt | random | 0.6765 |
| 4 | mse | sqrt | best | 0.4860 |
| 5 | mse | log2 | best | 0.6745 |
| 6 | mse | log2 | random | 0.7757 |
| 7 | mae | auto | best | 0.9517 |
| 8 | mae | auto | random | 0.8687 |
| 9 | mae | sqrt | best | 0.5621 |
| 10 | mae | sqrt | random | 0.6212 |
| 11 | mae | log2 | best | 0.8545 |
| 12 | mae | log2 | random | 0.4403 |
| 13 | friedman\_mse | auto | best | 0.9173 |
| 14 | friedman\_mse | auto | random | 0.8830 |
| 15 | friedman\_mse | sqrt | best | 0.6007 |
| 16 | friedman\_mse | sqrt | random | 0.5523 |
| 17 | friedman\_mse | log2 | best | 0.3866 |
| 18 | friedman\_mse | log2 | random | 0.6810 |
|  |  |  |  |  |

The Decision Tree Regression use **R2-Score Vaule** = **(mean,auto,best)=(0.9517)**