**MACHINE LEARNING REGRESSION**

**INSURANCE CHARGES PREDICTION**

**DECISION TREE REGRESSION**

The Decision Tree Regression best

**R2-Score Value** = **(Friedmans, sqrt, random) =(0.7771)**

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 | 0.7050 |
| 2 | mse | auto | random | 0.7120 |
| 3 | mse | sqrt | best | 0.6936 |
| 4 | mse | sqrt | random | 0.6833 |
| 5 | mse | log2 | best | 0.6917 |
| 6 | mse | log2 | random | 0.6651 |
| 7 | mae | auto | best | 0.6851 |
| 8 | mae | auto | random | 0.7643 |
| 9 | mae | sqrt | best | 0.7113 |
| 10 | mae | sqrt | random | 0.7607 |
| 11 | mae | log2 | best | 0.7127 |
| 12 | mae | log2 | random | 0.6650 |
| 13 | Friedman\_mse | auto | best | 0.6982 |
| 14 | Friedman\_mse | auto | random | 0.7151 |
| 15 | Friedman\_mse | sqrt | best | 0.7142 |
| 16 | Friedman\_mse | sqrt | random | 0.7771 |
| 17 | Friedman\_mse | Log2 | best | 0.6805 |
| 18 | Friedman\_mse | Log2 | random | 0.6287 |

The Decision Tree Regression best

**R2-Score Vaule** =**(Friedmans, sqrt, random)=(0.7771)**