|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.NO | HYPER PARAMETER | LINEAR | RBF (NON-LINEAR) | RBF | POLY |
| 1 | C100 | 0.1064 | -0.5072 | -0.0198 | -0.0304 |
| 2 | C500 | 0.5928 | -0.0243 | -0.1146 | 0.0705 |
| 3 | C1000 | 0.7802 | 0.0067 | 0.2661 | 0.1850 |
| 4 | C2000 | 0.8767 | 0.0675 | 0.4810 | 0.3970 |
| 5 | C3000 | 0.8956 | 0.1232 | 0.6370 | 0.5913 |
| 6 | C4000 | 0.8972 | 0.1723 | 0.7326 | 0.6282 |

To find following the Machine Learning Regression Method using in R2 value

SUPPORT VECTOR MACHINE:

The SVM Regression use R value ((LINEAR) and hyper parameter (C4000)) =0.8972

Decision Tree

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.NO | CRITERION | MAX\_FEATURESINT | SPLITTER | R VALUE |
| 1 | friedman\_mse | sqrt | best | 0.6384 |
| 2 | friedman\_mse | log2 | random | 0.5796 |
| 3 | absolute\_error | sqrt | best | -0.9669 |
| 4 | absolute\_error | log2 | random | 0.7132 |
| 5 | poisson | log2 | random | 0.9026 |
| 6 | friedman\_mse | log2 | random | 0.7127 |
| 7 | friedman\_mse | sqrt | best | -0.4120 |
| 8 | absolute\_error | sqrt | random | 0.4303 |
| 9 | absolute\_error | log2 | best | 0.7357 |
| 10 | poisson | sqrt | random | 0.5691 |
| 11 | poisson | log2 | best | 0.3052 |

The Decision Tree Regression use R-value (poisson, log2, random) =0.9026