**Support Vector Machine:**

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| --- | --- | --- | --- |
| **S.I.NO** | **KERNEL** | **HYPER PARAMETER** | **R\_VAVUE** |
| 1 | rbf | C1000 | 0.00676 |
| 2 | rbf | C100 | -0.05072 |
| 3 | poly | C1000 | 0.26616 |
| 4 | poly | C100 | -0.01980 |
| 5 | sigmoid | C1000 | 0.18506 |
| 6 | sigmoid | C100 | -0.03045 |
| 7 | linear | C1000 | 0.78028 |
| 8 | linear | C100 | 0.10646 |

**Support Vector Machine: R Square Value = 0.78028 (With Kernel=linear & C=1000)**

**Decision Tree Algorithm:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.I.NO** | **CRITERIAN** | **SPLITTER** | **MAX\_FEATURES** | **R\_VALUE** |
| 1 | squared error | best | sqrt | 0.79538 |
| 2 | squared error | best | log2 | 0.39239 |
| 3 | squared error | best | None | 0.92652 |
| 4 | squared error | random | sqrt | 0.84070 |
| 5 | squared error | random | log2 | 0.09376 |
| 6 | squared error | random | None | 0.83827 |
| 7 | friedman\_mse | best | sqrt | 0.53043 |
| 8 | friedman\_mse | best | log2 | 0.46906 |
| 9 | friedman\_mse | best | None | 0.89232 |
| 10 | friedman\_mse | random | sqrt | 0.84777 |
| 11 | friedman\_mse | random | log2 | 0.74152 |
| 12 | friedman\_mse | random | None | 0.88395 |
| 13 | absolute\_error | best | sqrt | 0.58099 |
| 14 | absolute\_error | best | log2 | 0.91272 |
| 15 | absolute\_error | best | None | 0.95079 |
| 16 | absolute\_error | Random | sqrt | 0.74503 |
| 17 | absolute\_error | Random | log2 | 0.87469 |
| 18 | absolute\_error | random | None | 0.94541 |
| 19 | poisson | best | sqrt | 0.61594 |
| 20 | poisson | best | log2 | 0.76681 |
| 21 | poisson | best | None | 0.91792 |
| 22 | poisson | random | sqrt | 0.24718 |
| 23 | poisson | random | log2 | 0.58978 |
| 24 | poisson | random | None | 0.94282 |

**Decision Tree: R Square Value = 0.95079(with Criterian =absolute\_error, Splitter = best & Max\_Features = None)**