**Hyper Tuning Parameter Assignment**

1. Multiple Linear Regression

R2 value=0.9358680892466282

1. Support Vector Machines

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| ***s no*** | ***kernel*** | ***linear*** | ***poly*** | ***rbf*** | ***sigmoid*** |
| 1 | C10 | -0.039651324 | 0.053673623 | -0.056814038 | -0.054726019 |
| 2 | C50 | 0.026095499 | -0.038509777 | -0.054105185 | -0.043717188 |
| 3 | C100 | 0.106458267 | -0.019808325 | -0.050732472 | -0.030465265 |
| 4 | C500 | 0.592899529 | 0.11467113 | -0.024330042 | 0.070562288 |

1. Decision Tree

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| ***s no*** | **criterion** | **splitter** | **max\_features** | **R2\_Score** |
| 1 | squared\_error | best | sqrt | 0.563709733 |
| 2 | friedman\_mse | best | sqrt | 0.717715392 |
| 3 | absolute\_error | best | sqrt | -0.009086044 |
| 4 | poisson | best | sqrt | 0.375059302 |
| 5 | squared\_error | Random | sqrt | -0.294361951 |
| 6 | friedman\_mse | Random | sqrt | 0.233401313 |
| 7 | absolute\_error | Random | sqrt | 0.761057262 |
| 8 | poisson | Random | sqrt | 0.191444591 |
| 9 | squared\_error | best | log2 | 0.791938835 |
| 10 | friedman\_mse | best | log2 | 0.648047037 |
| 11 | absolute\_error | best | log2 | 0.716651923 |
| 12 | poisson | best | log2 | 0.818171475 |
| 13 | squared\_error | Random | log2 | 0.511557716 |
| 14 | friedman\_mse | Random | log2 | 0.699493976 |
| 15 | absolute\_error | Random | log2 | 0.123020667 |
| 16 | poisson | Random | log2 | 0.758902377 |
| 17 | squared\_error | best | None | 0.913518461 |
| 18 | friedman\_mse | best | None | 0.925733239 |
| 19 | absolute\_error | best | None | 0.926952018 |
| 20 | poisson | best | None | 0.928306065 |
| 21 | squared\_error | Random | None | 0.824764387 |
| 22 | friedman\_mse | Random | None | 0.948162088 |
| 23 | absolute\_error | Random | None | 0.71688119 |
| 24 | poisson | Random | None | 0.861457663 |
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