1. **Multiple Linear Regression**

R2 Value = 0.9358680970046243

1. **SVM**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Kernel** | **C** | **R2 Value** |
| 1 | linear | 0.2 | 0.9348284 |
| 2 | Rbf | 0.2 | -0.057452 |
| 3 | sigmoid | 0.2 | -0.057489 |
| 4 | Poly | 0.2 | -0.056163 |
| 5 | linear | 1 | 0.8950779 |
| 6 | linear | 0.1 | 0.9375217 |
| 7 | linear | 0.02 | 0.934431 |
| 8 | linear | 0.00002 | 0.9337406 |

1. **Decision Tree**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.No** | **Criterion** | **MAX\_Features** | **Split** | **max\_depth** | **R2 Value** |
| 1 | absolute\_error |  | best | 7 | 0.9646358 |
| 2 | absolute\_error |  | best | None | 0.9520042 |
| 3 | absolute\_error |  | random | 7 | 0.8664745 |
| 4 | absolute\_error |  | random | None | 0.6957566 |
| 5 | squared\_error |  | best | 7 | 0.9291232 |
| 6 | squared\_error |  | random | 7 | 0.4665793 |
| 7 | squared\_error |  | best | None | 0.9225871 |
| 8 | squared\_error |  | random | None | 0.9035741 |
| 9 | friedman\_mse |  | best | 7 | 0.9139423 |
| 10 | friedman\_mse |  | best | None | 0.9193582 |
| 11 | friedman\_mse |  | random | 7 | 0.4073715 |
| 12 | friedman\_mse |  | random | None | 0.6849865 |
| 13 | poisson |  | best | 7 | 0.917633 |
| 14 | poisson |  | best | None | 0.9201282 |
| 15 | poisson |  | random | 7 | 0.8610389 |
| 16 | poisson |  | random | None | 0.7596212 |
| 17 | squared\_error | sqrt | random | None | -0.257275 |
| 18 | squared\_error | log2 | best | None | 0.830334 |
| 19 | absolute\_error | sqrt | best | None | 0.7566098 |
| 20 | absolute\_error | log2 | best | None | 0.7766612 |
| 21 | friedman\_mse | sqrt | best | None | 0.5666383 |
| 22 | friedman\_mse | log2 | best | None | 0.5231352 |