## 1. Multiple Linear Regression

R2 Value = 0.9358680970046243

## 2. SVM

|      |         |         | R2        |
|------|---------|---------|-----------|
| S.No | Kernel  | С       | 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 |

## 3. Decision Tree

|      |                |              |        |           | R2        |
|------|----------------|--------------|--------|-----------|-----------|
| S.No | Criterion      | MAX_Features | Split  | max_depth | 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 |