Hyper Tuning parameters

1. **Multiple linear regression**

score = 0.9358680970046241 (93.5%)

1. **SVM-Regression(SVR)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **kernal** | **gamma** | **C** | **epsilon** | **score** |
| linear |  | 0.1 | 0.001 | -0.0573067125278254 |
| rbf | scale | 0.1 | 0.001 | -0.057479500462478406 |
| poly | scale | 0.1 | 0.001 | -0.057448043785840675 |
| sigmoid | scale | 0.1 | 0.001 | -0.05745859458004343 |
| linear |  | 100 | 0.1 | 0.10646819600577351 |
| rbf | scale | 100 | 0.1 | 0.05072602278128757 |
| poly | scale | 100 | 0.1 | -0.019802139315272305 |
| sigmoid | scale | 100 | 0.1 | -0.03045351486430925 |
| linear |  | 0.1 | 0.1 | -0.05730671252782549 |
| rbf | auto | 0.1 | 0.001 | -0.057479500462478406 |
| poly | auto | 0.1 | 0.001 | -0.057448043785840675 |
| sigmoid | auto | 0.1 | 0.001 | -0.05745859458004343 |
| linear |  | 100 | 0.001 | 0.10646670404722458 |
| rbf | auto | 100 | 0.1 | -0.05072602278128757 |
| poly | auto | 100 | 0.1 | -0.019802139315272305 |
| sigmoid | auto | 100 | 0.1 | -0.03045351486430925 |

1. **Decision tree**

|  |  |  |
| --- | --- | --- |
| **criterion** | **splitter** | **score** |
| squared\_error | best | 0.951436254534337 |
| friedman\_mse | best | 0.9119779060183644 |
| absolute\_error | best | 0.9483147024183727 |
| poisson | best | 0.9362050837246554 |
| squared\_error | random | 0.951436254534337 |
| friedman\_mse | random | 0.921530468845889 |
| absolute\_error | random | 0.9302097539559248 |
| poisson | random | 0.7273262909073148 |