HYPER TUNNING ASSIGNMENT

SUPPORT VECTOR MACHINE

50\_Startups

|  |  |
| --- | --- |
| kernel | R2 value |
| Poly | 0.6370 |
| sigmoid | -0.0572 |
| Linear | -0.0574 |
| Rbf | -0.0574 |
| **Linear ,C=3000** | **0.8956** |
| Poly, C=3000 | 0.6370 |
| Sigmoid,C=3000 | 0..5913 |

DECISION TREE

|  |  |  |
| --- | --- | --- |
| Criterion | Splitter | R2value |
| Mae | best | 0.9552 |
| Friedman\_mse | best | 0.9291 |
| Friedman\_mse | random | 0.9311 |
| Mae | random | 0.8859 |
| Mae | Random,sqrt | -0.068 |

RANDOM FOREST

|  |  |  |
| --- | --- | --- |
| N\_Estimators | Max\_Features | R2 value |
| 100 | sqrt | 0.7932 |
| 10 | Log2 | 0.8129 |
| 100 | Log2 | 0.8416 |
| 50 | sqrt | 0.7667 |
| 100 | auto | 0.9356 |

|  |  |  |
| --- | --- | --- |
| 100 | Auto,random\_state=0 | 0.9460 |
| 10 | sqrt | 0.8830 |