**Random Forest:**

50\_Startups.csv is input for this program.

To found the best model in random forest algorithm by passing different parameter.

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Criterion** | **max\_features** | **R2\_score** |
| 1 | squared\_error | sqrt | 0.6830022367685868 |
| 2 | squared\_error | log2 | 0.6830022367685868 |
| 3 | squared\_error | None | 0.944633639431341 |
| 4 | absolute\_error | sqrt | 0.7222351871476136 |
| 5 | absolute\_error | log2 | 0.7222351871476136 |
| 6 | absolute\_error | None | 0.9401935247161504 |
| 7 | friedman\_mse | sqrt | 0.6889182130535486 |
| 8 | friedman\_mse | log2 | 0.6889182130535486 |
| 9 | friedman\_mse | None | 0.9388957628188894 |
| 10 | poisson | sqrt | 0.720862466757838 |
| 11 | poisson | log2 | 0.720862466757838 |
| 12 | poisson | None | 0.9463549705311108 |

Highlighted model is best model based on r2\_score value.