

### 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.