To find the R2 score by passing Criterion, Max Features and Splitter in DecisionTreeRegressor function

Decision Tree:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.No | Criterion | Max Features | Splitter | R score |
| 1 | squared\_error | auto | best | 0.9023 |
| 2 | squared\_error | auto | random | 0.9508 |
| 3 | squared\_error | sqrt | best | 0.3359 |
| 4 | squared\_error | sqrt | random | 0.8702 |
| 5 | squared\_error | log2 | best | 0.6242 |
| 6 | squared\_error | log2 | random | 0.2766 |
| 7 | friedman\_mse | auto | best | 0.9138 |
| 8 | friedman\_mse | auto | random | 0.8427 |
| 9 | friedman\_mse | sqrt | best | 0.7704 |
| 10 | friedman\_mse | sqrt | random | 0.5464 |
| 11 | friedman\_mse | log2 | best | 0.8606 |
| 12 | friedman\_mse | log2 | random | 0.0871 |
| 13 | absolute\_error | auto | best | 0.9533 |
| 14 | absolute\_error | auto | random | 0.9071 |
| 15 | absolute\_error | sqrt | best | 0.5346 |
| 16 | absolute\_error | sqrt | random | 0.4440 |
| 17 | absolute\_error | log2 | best | 0.6929 |
| 18 | absolute\_error | log2 | random | -0.1087 |
| 19 | poisson | auto | best | 0.6780 |
| 20 | poisson | auto | random | -0.4015 |
| 21 | poisson | sqrt | best | 0.5814 |
| 22 | poisson | sqrt | random | 0.2142 |
| 23 | poisson | log2 | best | 0.5481 |
| 24 | poisson | log2 | random | -0.4084 |

Get **R** score near to 1 (Absolute\_error,Auto,Best)= **0.9533**