

| SNO | criterion | splitter | max_features | R^2 value |
|-----|----------------|----------|--------------|-----------|
| 1 | squared_error | best | None | 0.912 |
| 2 | squared_error | best | auto | 0.875 |
| 3 | squared_error | best | sqrt | 0.407 |
| 4 | squared_error | best | log2 | -0.059 |
| 5 | squared_error | random | auto | 0.842 |
| 6 | squared_error | random | sqrt | 0.517 |
| 7 | squared_error | random | log2 | 0.641 |
| 8 | friedman_mse | best | auto | 0.854 |
| 9 | friedman_mse | random | sqrt | 0.630 |
| 10 | friedman_mse | best | log2 | 0.472 |
| 11 | friedman_mse | random | auto | 0.863 |
| 12 | absolute_error | best | auto | 0.929 |
| 13 | absolute_error | random | sqrt | 0.661 |
| 14 | absolute_error | best | log2 | -0.552 |
| 15 | absolute_error | random | log2 | 0.644 |
| 16 | poisson | best | auto | 0.765 |
| 17 | poisson | random | sqrt | 0.629 |
| 18 | poisson | best | log2 | 0.741 |
| 19 | poisson | random | auto | 0.811 |

The best decision tree model is when hyperparameters are set as criterion="absolute_error", splitter="best", max_features="auto", R^2 value achieved is 0.92 (i.e 92%)