**Decision TREE– REGRESSION**

**Without Standardisation:**

**R\_Score value = 0.91837**

**Standardised:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SI.No** | **criterion** | **splitter** | **max\_features** | **r2\_score** |
| **1** | ***squared\_error*** | ***best*** | ***None*** | 0.91527 |
| **2** | ***squared\_error*** | ***Random*** | ***None*** | 0.90292 |
| **3** | ***squared\_error*** | ***Best*** | ***Sqrt*** | 0.58321 |
| **4** | ***squared\_error*** | ***Random*** | ***Sqrt*** | 0.65044 |
| **5** | ***squared\_error*** | ***Best*** | ***log2*** | 0.61477 |
| **6** | ***squared\_error*** | ***random*** | ***log2*** | 0.74182 |
| **7** | ***friedman\_mse*** | ***best*** | ***None*** | 0.90373 |
| **8** | ***friedman\_mse*** | ***Random*** | ***None*** | 0.96359 |
| **9** | ***friedman\_mse*** | ***Best*** | ***Sqrt*** | 0.68468 |
| **10** | ***friedman\_mse*** | ***Random*** | ***Sqrt*** | 0.50700 |
| **11** | ***friedman\_mse*** | ***Best*** | ***log2*** | 0.29687 |
| **12** | ***friedman\_mse*** | ***random*** | ***log2*** | 0.49762 |
| **13** | ***absolute\_error*** | ***best*** | ***None*** | 0.94968 |
| **14** | ***absolute\_error*** | ***Random*** | ***None*** | 0.93439 |
| **15** | ***absolute\_error*** | ***Best*** | ***Sqrt*** | 0.73724 |
| **16** | ***absolute\_error*** | ***Random*** | ***Sqrt*** | -0.91577 |
| **17** | ***absolute\_error*** | ***Best*** | ***log2*** | -0.62046 |
| **18** | ***absolute\_error*** | ***random*** | ***log2*** | 0.26516 |
| **19** | ***Poisson*** | ***best*** | ***None*** | 0.91949 |
| **20** | ***Poisson*** | ***Random*** | ***None*** | 0.89809 |
| **21** | ***Poisson*** | ***Best*** | ***Sqrt*** | 0.59092 |
| **22** | ***Poisson*** | ***Random*** | ***Sqrt*** | 0.85939 |
| **23** | ***Poisson*** | ***Best*** | ***log2*** | 0.64527 |
| **24** | ***poisson*** | ***random*** | ***log2*** | 0.70365 |

SVM Regression using hyper tuning parameter with ***friedman\_mse, Random, None has highest Accuracy of about 0.96***