**Decision Tree – Model** **Creation**

**Parameters : --criterion**=’***squared\_error’***—

**criterion*{“squared\_error”, “friedman\_mse”, “absolute\_error”, “poisson”}, default=”squared\_error”***

***Hyper Parameter: --* criterion**=’***squared\_error’,*** **splitter=’best’**--

**splitter*{“best”, “random”}, default=”best”***

***For more :*** [***https://scikit-learn.org/stable/modules/generated/sklearn.tree.DecisionTreeRegressor.html***](https://scikit-learn.org/stable/modules/generated/sklearn.tree.DecisionTreeRegressor.html)

***To create model :***

*from sklearn.tree import DecisionTreeRegressor*

*regressor=DecisionTreeRegressor()*

*regressor=regressor.fit(x\_train,y\_train)*

***To check the tree plot :***

*import matplotlib.pyplot as plt*

*from sklearn import tree*

*tree.plot\_tree(regressor)*

*plt.show()*

**Scores**

|  |  |  |  |
| --- | --- | --- | --- |
| **SL.NO** | **criterion** | **splitter** | **R Scores** |
| **1** | ***squared\_error (mse)*** | ***best*** | 0.9056968027158233 |
| **2** | ***squared\_error (mse*** | ***random*** | 0.8827803205765573 |
| **3** | ***friedman\_mse*** | ***best*** | 0.9187732287399306 |
| **4** | ***friedman\_mse*** | ***random*** | 0.827597299991591 |
| **5** | ***absolute\_error (mae)*** | ***best*** | 0.9464718482859379 |
| **6** | ***absolute\_error (mae)*** | ***random*** | 0.8866202025147979 |