

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

[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	<i>squared_error (mse)</i>	<i>best</i>	0.9056968027158233
2	<i>squared_error (mse)</i>	<i>random</i>	0.8827803205765573
3	<i>friedman_mse</i>	<i>best</i>	0.9187732287399306
4	<i>friedman_mse</i>	<i>random</i>	0.8275972999991591
5	<i>absolute_error (mae)</i>	<i>best</i>	0.9464718482859379
6	<i>absolute_error (mae)</i>	<i>random</i>	0.8866202025147979

