## **Training Day-8 Report:**

## **Decision Tree:**

## **Decision Tree Regression**

A Decision Tree is the most powerful and popular tool for classification and prediction. Decision Tree is a flowchart-like tree structure, where each internal node denotes a test on an attribute, each branch represents an outcome of the test, and each leaf node (terminal node) holds a class label. There is a non-parametric method used to model a decision tree to predict a continuous outcome.

Here is the code for simple demonstration of the Decision Tree regression approach.

## Python

```
from sklearn.tree import DecisionTreeRegressor

# Create a decision tree regression model

model = DecisionTreeRegressor()

# Fit the model to the data
model.fit(X, y)

# Predict the response for a new data point
y_pred = model.predict(X_new)
```

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