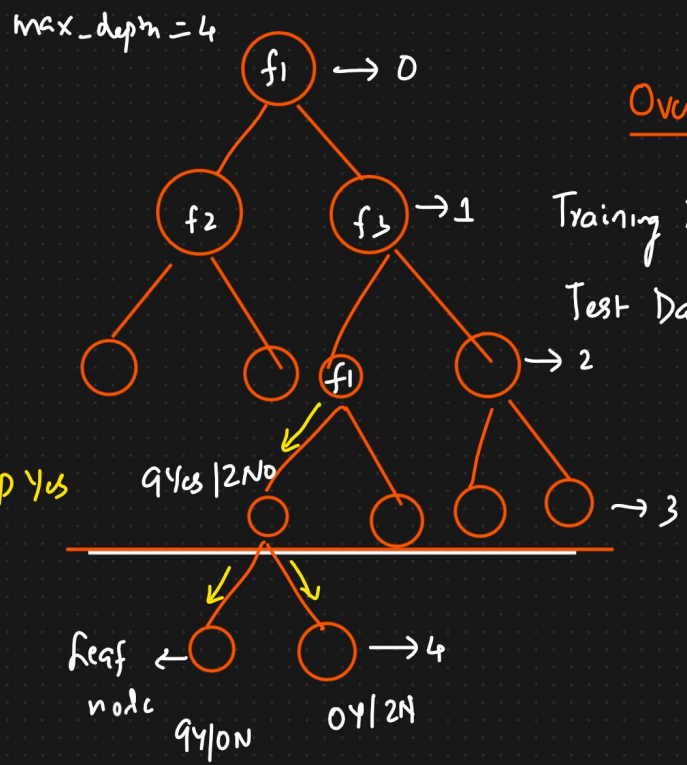
Decision Tree Post Pruning And Pre Pruning [Reduce Overfitting]

Training Data

f1 f2 f3 O/P



Overfitting

Training Data Acc ↑↑

Test Data Acc ↓↓

Generalized Model

Reduce Overfitting

max_depth = 3

① Post Pruning

(i) Construct Entire Decision Tree to complete Leaf Node

(ii) Pruning the Decision Tree

(iii) Smaller Dataset Suitable.

② Pre Pruning

(i) Hyperparameter Tunning to Select the Best parameters