CHEAT SHEET

Decision Trees

Algorithm Name	Decision trees
Description	A framework that solves classification and regression problems.
Applicability	• Classification and regression problems • Makes no assumptions regarding feature representation and works with both continuous-valued and categorical features
Assumptions	Similar inputs have similar labels.
Underlying Mathematical Principles	Entropy and information gain are the criteria used to select features and split values at each non-leaf node.
Hyperparameters	max_depth (often alternatively maximum number of nodes), maximum samples per leaf, splitting criterion (information gain)
Additional Details	The classifier is represented by a binary tree.
Example	Predict whether an individual will default on a loan based on credit score, age, and loan amount.