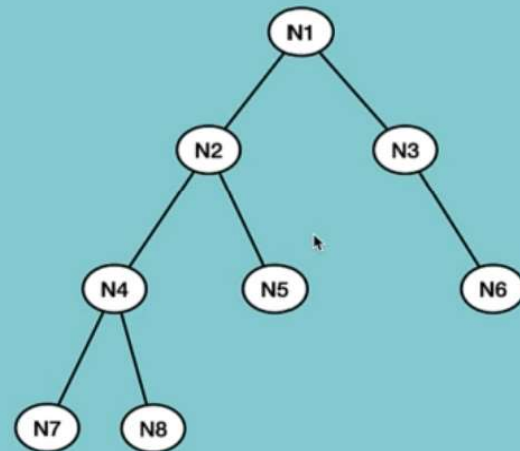# 13-1 BINARY TREE

Saturday, June 4, 2022   11:08 AM

Binary Tree

– Binary trees are the data structures in which each node has at most two children, often referred to as the left and right children
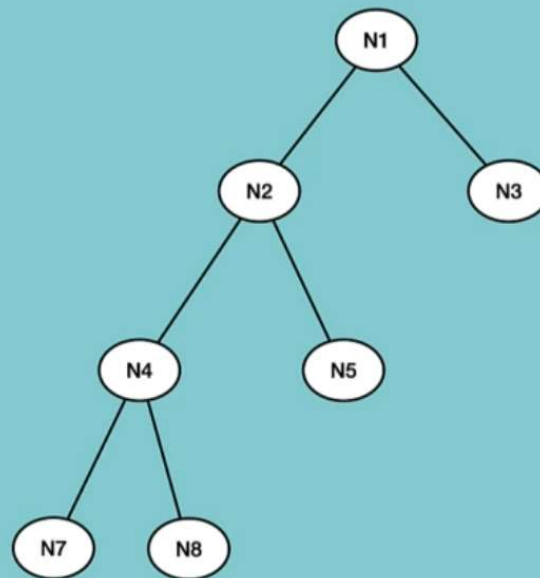

Why Binary Tree?

– Binary trees are a prerequisite for mode advanced trees like BST, AVL, Red Black Trees

– Huffman coding problem , heap priority problem and expression parsing problems can be solved efficiently using binary trees,
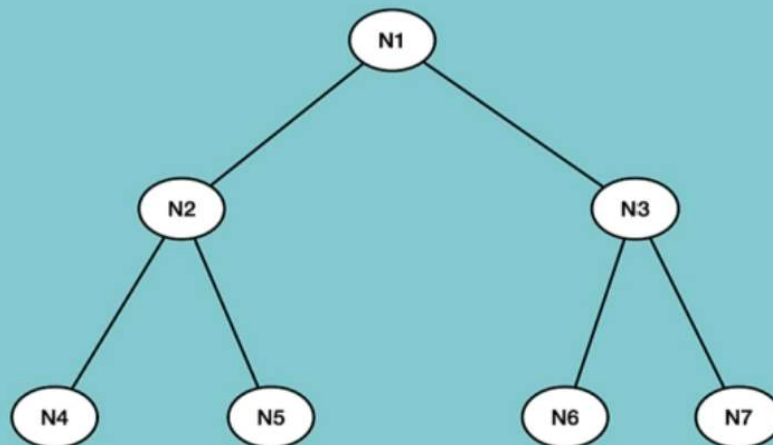
Types of Binary Tree
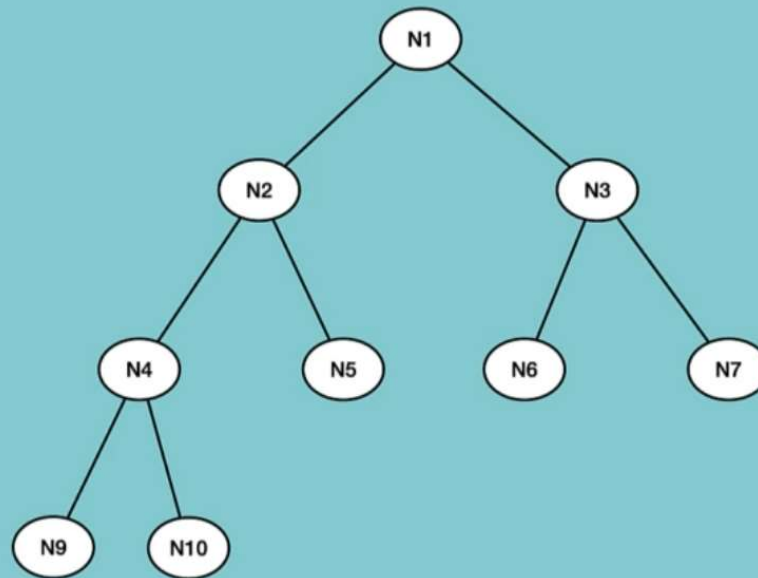
Full Binary Tree

EVERY NODES HAVE EVER O OR 2 CHILDS - (NOT ONLY ONE)
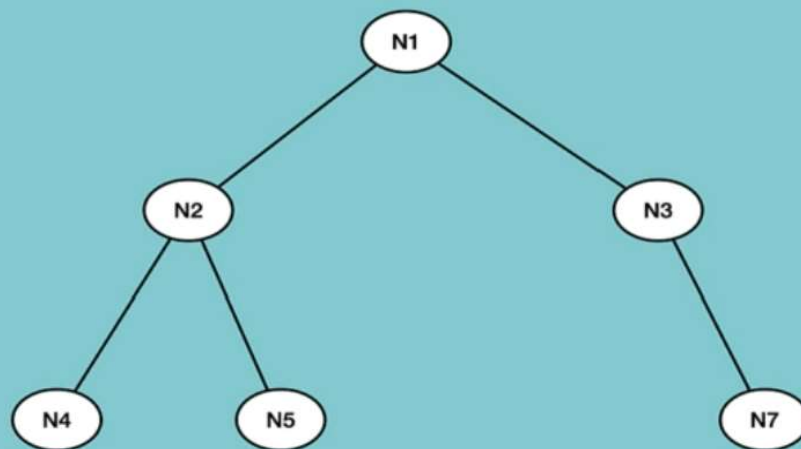
Perfect Binary Tree

ALL NON-LEAVE NODES HAVE TWO CHILDS AND ALL LEAVE-NODES ARE AT THE SAME LEVEL

Complete Binary Tree

ALL LEVEL ARE COMPLETE EXCEPT THE LAST LEVEL.

Balanced Binary Tree

ALL LEAVE NODES ARE AT THE SAME DISTANCE AS THE ROOT NODE