Assignment 2
Computer Systems Lab (CS559)
Department of Computer Science & Engineering
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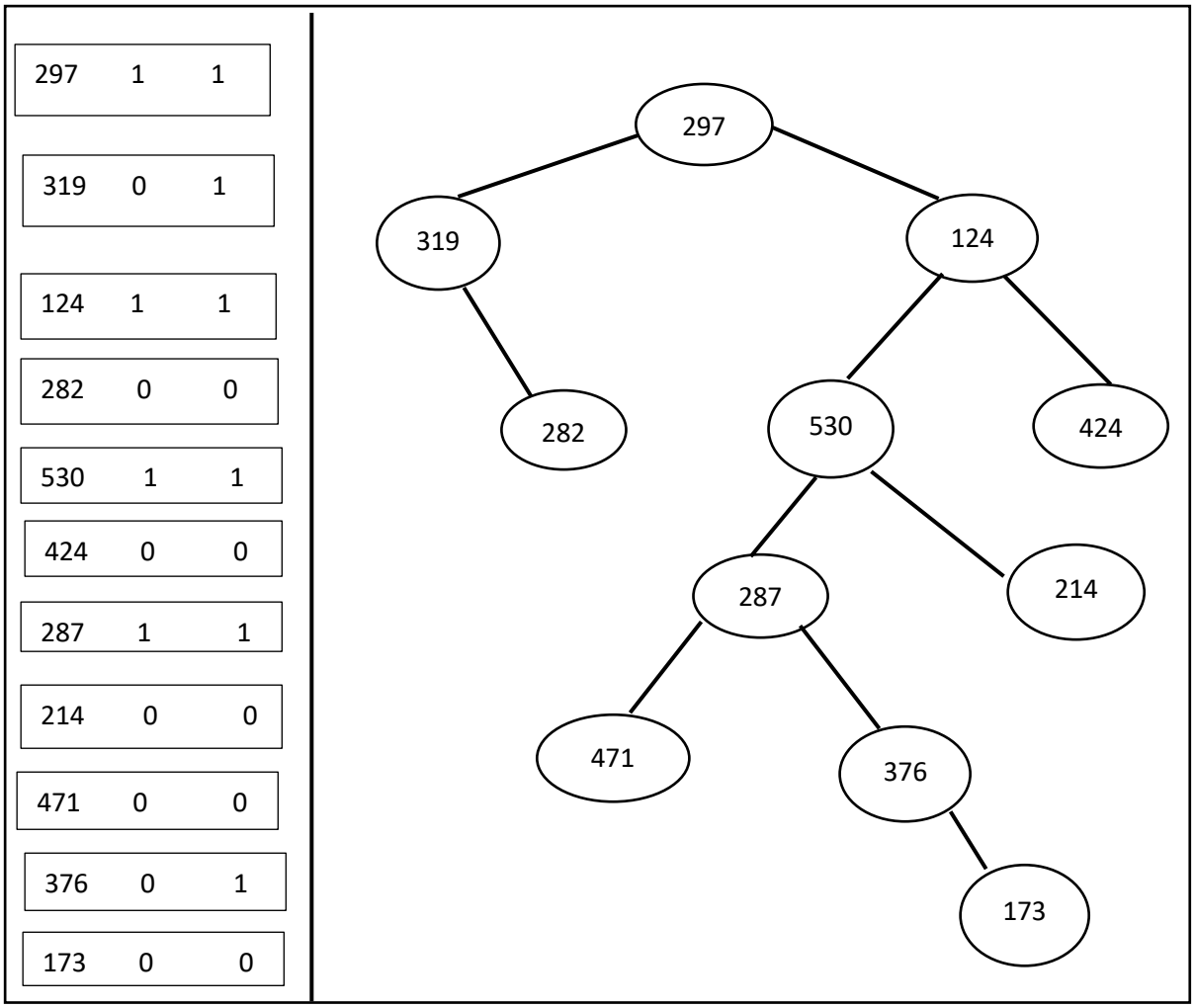
Submission Deadline: 1**0-08-2023, 11:50 AM**

1. Let a binary tree is denoted by Tbt with each node storing a distinct key and two child pointers (L and R). Let n denotes the number of nodes in Tbt, and ht(v) indicates the height of subtree with root node v.

   i) Construct a binary tree from a input file
   Write a code (without using specific library) to construct a binary tree Tbt is to be constructed with input file ip.txt. The user specifies each node by a triple (k; l; r), where k is an integer key to be stored in the node, and l and r are bits (1/0) indicating whether the node has a left child and a right child, or not. The triples are specified in a level-by-level and left-to-right (in each level) fashion. One sample input and its corresponding binary tree is shown as below.



ii) Printing the tree

Write a function printtree() to print a binary tree Tbt using preorder, inorder and post order traversal manner in an output file op.txt.