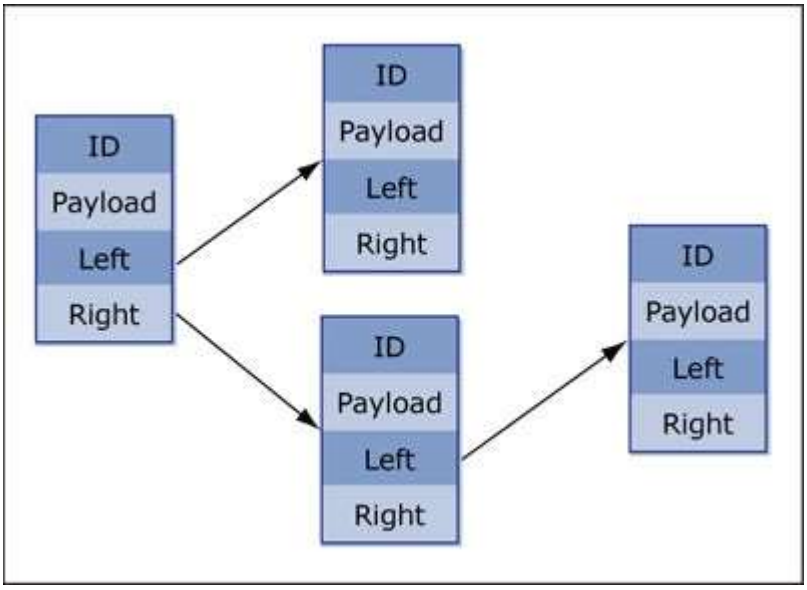
Practical Assignment: CS-108

Note: Attempt any two questions.

P-1: ***Write a program for quick sort. Discuss the complexity of the algorithm in all the cases with sufficient justification and proof.***

P-2

Your job is to implement a binary search tree, a data structure of connected nodes with a tree shape. Each node has a node identifier (a number), data (payload), and 2 children (left and right). The children are other nodes referenced with a pointer, with the constraint that the left node's ID is less than the parent node's ID, and the right node's ID is larger than the parent node ID. No two nodes will have the same identifier. A node can have less than two children; in that case, one or more of its child pointers can be `NULL`***.***



P-3 ***Write a program for Prims and Krushkal algorithms with proper illustrations.***