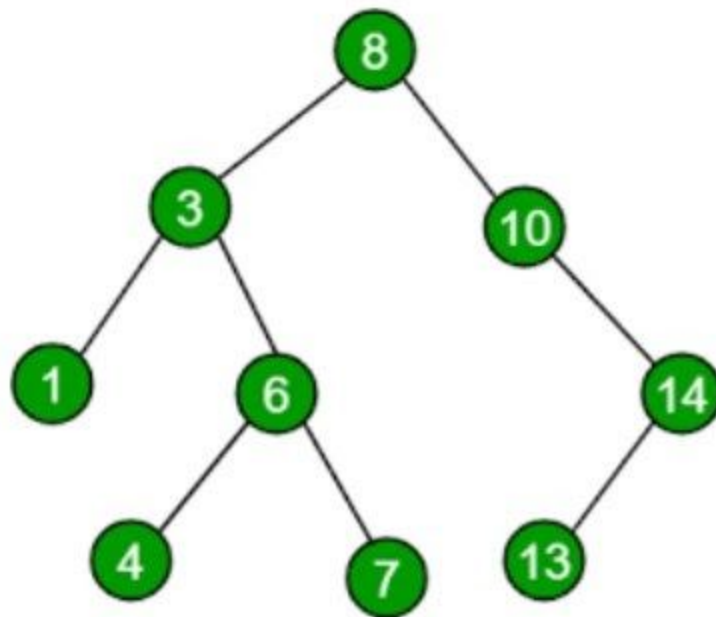


Data Structure
Assessment Sheet 1

Q1. Design a menu driven Program for the following operations on Binary Search Tree (BST) of Integers

- a). Create Binary Search Tree
- b). Traverse the BST in Inorder, Preorder and Post Order
- c). Search the BST for a given element (KEY) and report the appropriate message (Search for 7 and 11)
- d). Exit



Q2. India can be represented by N no of cities connected using N-1 roads or paths. There exists an edge between the city (i, i+1) for all i from 1 to n-1. Akash has to set up a connection for water supply. Akash set this in one city and water gets transported from it to other cities using road transport. Certain cities are blocked which means that water cannot pass through this city. Akash has to find out the maximum number of cities to which water can be supplied. Help Akash to solve this problem (Hint- Graph Traversing Problem)