CSE225 Data Structures

PROJECT #2

Binary Search Trees

This project is a programming assignment in C which aims at developing an algorithm that builds a *binary search tree* (BST) from a given sequence and attempts to find other sequences that yield the same BST topology.
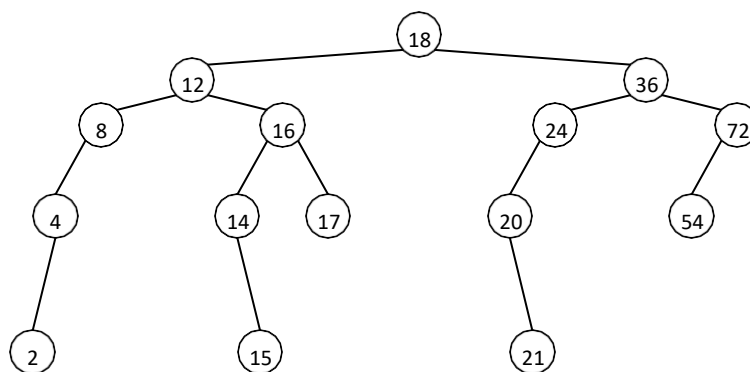
Example:

a) Take an input sequence from user:

For instance; let us assume that user will enter the following input sequence:

18 12 8 4 2 16 14 15 17 36 24 20 21 72 54

b) Build BST topology:

Be careful that input sequence will be entered by the user and may be of arbitrary length.

c) Find how many different sequences yield the same BST topology and list these sequences. Please note these sequences need be composed of exactly as many keys as those in the input sequence.