### **Objective**

Today, we're going further with Binary Search Trees. Check out the <u>Tutorial</u> tab for learning materials and an instructional video!

#### **Task**

A level-order traversal, also known as a breadth-first search, visits each level of a tree's nodes from left to right, top to bottom. You are given a pointer, *root*, pointing to the root of a binary search tree. Complete the *levelOrder* function provided in your editor so that it prints the level-order traversal of the binary search tree.

**Hint:** You'll find a queue helpful in completing this challenge.

## **Input Format**

The locked stub code in your editor reads the following inputs and assembles them into a BST: The first line contains an integer, T (the number of test cases).

The T subsequent lines each contain an integer, data, denoting the value of an element that must be added to the BST.

#### **Output Format**

Print the data value of each node in the tree's level-order traversal as a single line of N space-separated integers.

#### **Sample Input**

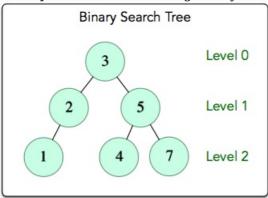
2

**Sample Output** 

3 2 5 1 4 7

# **Explanation**

The input forms the following binary search tree:



We traverse each level of the tree from the root downward, and we process the nodes at each level from left to right. The resulting level-order traversal is  $3 \to 2 \to 5 \to 1 \to 4 \to 7$ , and we print these data values as a single line of space-separated integers.