Online on Binary Search Tree + Graphs

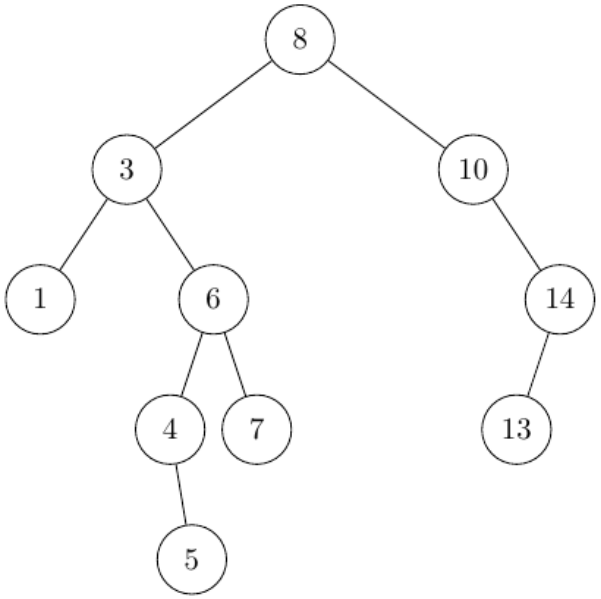
Section: B1 + B2 Time: 40 minutes

Problem: Implement Level-Order traversal in a binary search tree

The function `virtual void print(char traversal_type = 'D') const = 0;` in your abstract class `BST` in the `BST.hpp` file now takes in `'L'` or `'l'` as another `traversal_type` for Level-Order traversal. Implement the corresponding print logic in the `void print(char traversal_type = 'D') const override` function in your implemented `ListBST` class in the `listBST.hpp` file. Modify your `main` function in `task1.cpp` to receive the input command `T Lev`, for which you will output the current tree in level-order.

Note:

1. You are NOT allowed to modify any other existing function in the ListBST class. However, you may add private helper functions if necessary.
2. You are NOT allowed to include/use any STL functions. However, you are free to use any of the code you used in your BST and Graph assignment.
3. Please refer to `in_b.txt` and `out_b.txt` for sample I/O.



The level-order traversal of the above binary search tree (only keys shown) is

`(8:8) (3:3) (10:10) (1:1) (6:6) (14:14) (4:4) (7:7) (13:13) (5:5)`