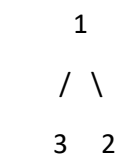
Binary Tree to CDLL

Given a **Binary Tree** of **N** edges. The task is to convert this to a **Circular Doubly Linked List (CDLL)** in-place. The **left and right pointers** in nodes are to be used as **previous and next pointers** respectively in **CDLL**. The order of nodes in **CDLL** must be same as **Inorder** of the given **Binary Tree**. The first node of **Inorder traversal** (left most node in **BT**) must be **head node** of the **CDLL**.

Example 1:

Input:



Output:

3 1 2

2 1 3

Explanation: After converting tree to CDLL

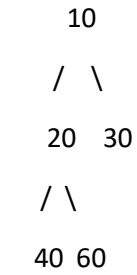
when CDLL is is traversed from head to

tail and then tail to head, elements

are displayed as in the output.

Example 2:

Input:



Output:

40 20 60 10 30

30 10 60 20 40

Explanation: After converting tree to CDLL,

when CDLL is is traversed from head to

tail and then tail to head, elements

are displayed as in the output.

Your Task:
You don't have to take input or print anything. Complete the function **bTreeToCList()** that takes root as a parameter and **returns** the **head of the list**. The driver code prints the linked list twice, first time in the **right order**, and another time in **reverse order**.

Constraints:
$1 <= N <= 10^3$
$1 <=$ Data of a node $<= 10^4$

Expected time complexity: O(N)

Expected auxiliary space: O(h) , where h = height of tree