PES University
Department of CSE
Data Structures and its Application Lab
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Week 10 - Threaded Binary Trees

Implement a double threaded binary tree with the defined operations

1. Insert an element into a double threaded binary tree
2. Print the elements in ascending order
3. Print the elements in descending order

Input Format:

Every new line has one of the following operation codes and any data needed for the operation (For ex: The element that needs to be inserted):

1 x - Insert element ‘x’ into it’s valid position in the double threaded binary tree
2 - Print all the elements of the double threaded binary tree in ascending order
3 - Print all the elements of the double threaded binary tree in descending order
4 - End the program and destroy/free all nodes

Output Format:

While printing the ascending or descending order of elements (operation codes 2, 3 respectively), **print the elements in a single line in a space-separated manner.**
If the tree is empty, then print “Empty”.