

PES University
Department of CSE
Data Structures & its Applications Lab
Aug-Dec 2020
Week 9b : Heaps

Implementation of Heap Tree

Input Format:

First Line specifies the size N of the heap. Next x lines are operations with code 1 and the last line has operation code as 2.

1 k - Insert a node with value k

2 - Print the values(k) in ascending order by deleting the min value node from the heap each time and finally exit the program.

Output Format:

In case while inserting an element through operation code 1 k, if the size of the heap is more than **N** print **OVERFLOW** (all caps).

In case of operation code 2 print all the values(k) in ascending order by deleting the min value node from the heap each time and exit, **print each value on a new line**.

Note:

- In the case of inserting an element, the element being inserted is the n+1th element do not insert that element and print **OVERFLOW** in that case.
- In the case of operation code 2 print all the elements in a new line and exit the program.