

Programming assignment 5

Implement Priority queue

Input (Standard input)

Each line of input consists of at most three integers.

If the first number of input is 0, print the output and terminate the program.

If the first number of input is 1, insert the second integer.

If the first number of input is 2, extract maximum number.

If the first number of input is 3, replace the element of the index of second number to the third integer.

Assume that the index of the priority queue starts from 1.

The maximum index of the priority queue is 100000.

Output (Standard output)

In the first line, print the extracted elements.

In the second line, print the current heap.

[Example]

Input	Output
1 16	16 14
1 15	10 8 9 4 7 1 3 2
1 10	
1 14	
1 7	
1 9	
1 3	
1 2	
1 8	
1 1	
3 2 4	
2	

2	
0	

Description

- 1. File name must be Priorityqueue.cpp**
- 2. Make the comment of student ID, name and class in the first line of the source code.**
ex) 2008601028_Honggildong_A or 2008601028_홍길동_A
- 3. Please keep the source code that you have submitted for unexpected accident.**