Programming assignment 3

Heap sort

Input (Standard input)

      The number of input keys N ($1 \le N \le 100,000$), and an integer k are

      given ($1 \le k \le 30$) in the first line

      In the next N lines, a key is given in each line.

Output (Standard output)

      In the first line, print k biggest elements in decreasing order.

      In the second line, print the heap after extracting k biggest elements.

[Example]

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

Description

1. File name must be Heapsort.cpp

2. Make a comment of your student ID, name and class in the first line of the source code.

      ex) 2008601028_Honggildong_A or 2008601028_홍길동_A

3. Back up your submitted source code for an unexpected accident.