LAB 5 - HEAP SORT

Using only an array/list/vector (depending on your language of choice), construct a max-heap data structure. Then, read in 10 numbers from the screen, 1 line at a time. Store each one in your max-heap, one at a time. Then, output the numbers in descending order, one line at at time, by repeatedly retrieving and deleting the largest item from the heap.

You must use a max-heap to solve this problem, and you must implement the heap yourself using an array/list/vector. No other data structure will be permitted.