POTD47.1. Problem of the Day #47

Download and Extract

An initial setup of files is provided to you via a shell script: Download potd-q47

Using a terminal, extract the initial files by running the shell script you just downloaded (you will need to navigate to the directory where you saved the file):

```
sh potd-q47.sh
```

Your files for this problem will be in the potd-q47 directory.

The Problem

Implement the following function in heap.cpp:

```
vector<int> lastLevel(MinHeap & heap);
```

Given a MinHeap (see MinHeap.h), return a vector containing the leaf nodes at the last level.

Example 1:

Input Heap: [-inf,1,3,5,7,9,11]

Output: [7,9,11]

Visual aid:

```
1
/ \
3    5
/ \ /
7    9    11
```

Example 2:

Input Heap: [-inf,1,3,5,7,9]

Output: [7,9]

Visual aid:

```
1
/ \
3 5
/\
7 9
```

Hint: you can calculate $(\log_2 m)$ as follows:

```
int m, logm;
logm = std::log2(m);
```

NOTE: Our implementation of heaps is 1-based indexing. Think about what the actual size of the heap is based on the size of the array.

Upload Solution

Drop files here or click to upload.

POTD 47

Total points: 0/1

Score: 0%

Question

Value: 1

History:

Awarded points: 0/1

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	Unly the files listed below will be accepted—others will be ignored.
Files	
O level.cpp not uploaded	
Save & Grade	Save only