

CS 331 Lab: Heaps

Fall, 2010

0.1 Objectives

In this lab you will create a heap implementation of a priority queue.

1 Given Files

You are given 2 files for this lab. They are in the `heap-lab` directory. Do a `git pull` in your repository to download it.

Inside you will find the following files:

- `Heap.java`
- `Makefile` — the scripts needed to compile your files and run the tests. It supports the following targets:

compile Compiles everything.

tests Tests everything.

You will need to create the test case file; please name it `TestHeap.java`.

2 Your Work

constructor we need to create them, after all!

int left(int), int right(int), int parent(int) Given an index for a node, these return the corresponding index of the left, right, and parent nodes, respectively.

int size()

void enqueue(E elt)

E dequeue()

E top()

3 Handing In

To hand in your code, commit your final changes to the repository. We will test your code with our own `JUnit` tests. It is nominally due in one week, the current due target is November 12.