

Priority Queues

In the class, we showed that a more efficient technique to the implementation of the priority queue can be carried out using the binary heap ADT. In this homework, you will continue exploring implementation of binary heaps and you will use your knowledge to implement a priority queue.

You have been given the interface of the priority queue ADT in the given header file, `priority_queue.h`. You will need to write the implementation file, `priority_queue.c`.

Please pull the starter code from the class github repo.

You will also need to write a suitable main program, `priority_queue_main.c`, that tests the opaque object.

Note that your implementation file should implement the priority queue using the binary heap data structure.

Submissions that implement the priority queue without using a heap will not receive any credit.

Before submission, make certain that you have tested the code in the Khoury servers and then push your code to your github repo.

What to push to your github repo:

- Submit the `priority_queue.h` (given as part of starter code)
- Submit `priority_queue.c`
- Submit a `priority_queue_main.c`