Peter L Kim

Heaps Assignment

* What are the advantages/disadvantages of your design above?

Depending on the size of your data it cuts the amount of work to find your data by a third compared to a binary heap. Considering it will be less nodes to count going down the tree compared to a binary heap. A disadvantage is that there are more decisions to make when percolating down a tree slowing percolate down.

* Would you use a ternary heap or binary heap in your own code? Why?

When I want to sort data or to use it as a priority queue. For example I have data coming in randomly and I want to order it by priority even if something very important comes in when the heap size is 2 million I want it to quickly see that is important and percolate it up in log N time.

* What is the big-oh for each of the operations on a ternary heap? How is the big-oh estimation for these functions different from the estimates for a binary heap.

add() = O(Log n)

peek() = O(1)

remove( ) = O(Log n)

size() = O(1)

clear() = O(1)