

Lab 5 (March 29th)

In the `heap.java` program, the `insert()` method inserts a new node in the heap and ensures the heap condition is preserved. Write a `toss()` method that places a new node in the heap array without attempting to maintain the heap condition. (Perhaps each new item can simply be placed at the end of the array.) Then write a `restoreHeap()` method that restores the heap condition throughout the entire heap. Using `toss()` repeatedly followed by a single `restoreHeap()` is more efficient than using `insert()` repeatedly when a large amount of data must be inserted at one time. See the description of `heapsort` for clues. To test your program, insert a few items, toss in some more, and then restore the heap.