Name: _____   Section: _____

COSC 311: ALGORITHMS
MINI 1
Due Friday, September 13 in class

1. Read the syllabus!

(a) Where and when are your section instructor's office hours?

(b) Suppose you're stuck on a homework assignment. You've read through your class notes and the textbook, but you still have questions. What are three things you can do to get help?

(c) Under what circumstances are you allowed to get an extension on mini homework?
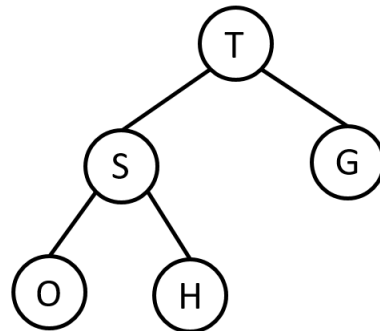
(d) Suppose Kathleen has used up 1 late day already. The next homework assignment is due Friday in class, and Kathleen submits it on Sunday at 5pm. How many penalty-free late days does she have left, and what is the maximum score she can receive on this assignment?

2. Heapify. Here's an unsorted array. Draw the array and the corresponding partially-heapified tree after each iteration of the `heapify` algorithm we wrote in class (include the initial unheapified tree, and leave blank any boxes you don't need). (NOTE: this relies on Monday's class)

R	H	G	T	I	O	A	M	L

Before any iterations:	After iteration 1:	After iteration 2:

After iteration 3:	After iteration 4:	After iteration 5:

After iteration 6:	After iteration 7:	After iteration 8:

3. Heapsort. Here is a picture of a heap and an array in which the heap is stored. Draw a picture of the heap and the array after each step of heapsort (there should be five pictures). (NOTE: this relies on Monday's class)

Array: | T | S | G | O | H |

1.	2.	3.
4.	5.	