## Hi everyone,

Here are a quick heads-ups on activities for next week.

- 1. When answering exercise 1.a. on the homework, you do not need to rewrite the functions or show work. For example, if f1 and f2 have the same asymptotic growth rate, simply write {f1, f2}.
- 2. The homework assignment must be submitted at the beginning of class in hard copy format. Do not email me a digital (soft) copy of your homework. If you are absent, have someone drop it off in class, at the beginning of class, for you. Typing your homework is not required; a handwritten answers will do.
- 3. The second programming project will be assigned on Tuesday. This will be our first data structures program. It will be due on February 17.
- 4. I have posted two additional sets of programming tips to Moodle. You will use some of the syntax in them in your next programming project. Some of the syntax will likely be new to you: for example, defining comparators and lambda functions. You may have seen others in your introductory programming courses and may have forgotten.
- 5. On Tuesday, we will discuss the heap data structure and its related priority queue abstract data
- 6. On Thursday, we begin the first of a two-part lecture in which we review the binary search tree (BST) abstract data type. The variant that we will discuss is an extensible parametric implementation. At the top of the lecture we will discuss trees more broadly and discuss the classification of trees based on their structure. We will also discuss basic terms related to trees. We will review insertion into a BST and various traversal algorithms. We will complete our review of BST on 2/11. We are reviewing BSTs as a prelude to our AVL trees lectures. The AVL tree is a binary search tree with additional special properties.

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