Week 6

Posted Apr 7, 2025 12:31 PM

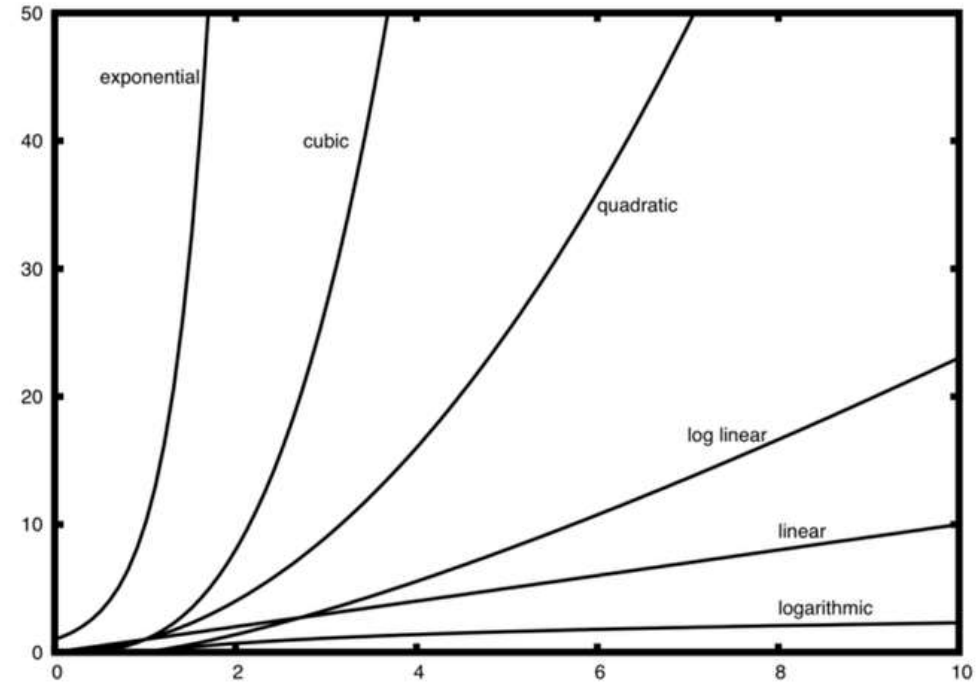

Figure 1: Plot of Common Big-O Functions

This week we will focus on algorithm analysis using big-O notation.

Since Big-O analysis is focused on relative algorithmic running time, we typically throw out any constants in our final answer. In other words, O(7n) is equivalent to O(n). However, when actually running the program, an algorithm that performs 7n comparisons, for example, will run slower than an algorithm that performs n comparisons. They both would be faster than an algorithm that performs n^2 comparisons as the size of n increases.

Here is some time complexity in accessing, insertion, deletion, and searching for elements in the common data structures. 

Reminder:

Project One is due in this module, and Project Two is due in Module Seven. (You need to sign up for a github account to share your project with me. my github account is the same as my email address: c.ling@snhu.edu)

Happy Coding!

C.L.