Preston Stosur-Bassett

CS210 (Data Structures) - Howser

BLAST Lab Report

23.11.14

Pre-Lab:

I expect to be using a lot of the code and logic that I had written in the Indexing Substrings Lab for this Lab, which will help me when I have to iterate and sort through DNA sequences and sub sequences for storing and retrieval. I hope to explore using a hashtable and its uses, and learn how hashtables are used in actual large scale applications. I’m expecting to put together a lot of the concepts we have learned this year thus far into one this one application as a way to bring it all together. I’m not entirely sure how to program the algorithm for searching and expect to encounter some issues when writing that.

Post-Lab:

In this lab I learned just how easy it is to use a hashtable and the speed and efficiency of using a hashtable. While not all the concepts I learned during this quarter were applied, a great many of them were, ranging from Lists’ and Hashtables. I didn’t have many issues when writing the searching algorithm, however I did run into several issues when working with the extending algorithm. My program couldn’t seem to extend any matches against a much longer query. I had several people take a look at it to see if there was something I was missing, and I even changed my algorithm several times to see if it worked better, however with a threshold greater than 11 my program seems to return no results.