

README

Part 1

In this part, what I do is to implement the table, and make this Lab works. According to how hash table works, I implement three methods: insert, find and remove to make the whole finding DNA story succeed.

Part 2

1.

In order to record the hash value, we need to create a variable in the record file. Then, we can use hash value to decrease the running time. For example, in the find operation, comparing two strings needs longer time than just comparing two numbers. So, by adding hash value into the record, we can reduce the running time. One thing I need to mention is that we can not just compare the hash values, because hash values can be the same even with different strings. But, we can still reduce the running time by using hash value.

2.

I construct the dynamic hash table whose size can be doubled when the load factor is over $\frac{1}{4}$.