

What happens when you vary the size of a hash table?

Input: oldspeak.txt hatterspeak.txt

Bloom filter load: 1.306514

HashTable Size	100	1000	5000	10000	20000	100000
Seeks	2133	2133	2133	2133	2133	2133
Average seek length	71.62	8.08	2.42	1.72	1.36	1.07
Average Linked List Length:	145.61	14.56	3.07	1.90	1.41	1.07
Hash table load	1.0	1.0	0.95	0.77	0.52	0.14

As the result of the experiment showing above, when the size of a hash table gets bigger, the average seek length, the linked list length, and the average linked list length all get smaller. Because when there are more spaces assigned for the hash table, there will be less chance for hash collision.

What happens when you vary the Bloom filter size?

When the Bloom filter size gets bigger, the probability of getting a false positive gets smaller, the average seek length gets bigger.

Do you really need the move to front rule?

Yes, when using move to front rule, the average seek length for the linked list gets smaller.