Justin Marion

**Prof Long** 

CSE 13S

0.745

0.74

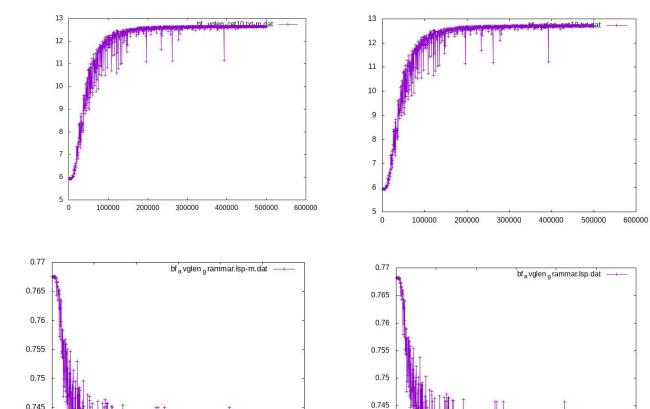
0.735

100000

June 6, 2021

## Asgn 7 Writeup

Here we can see the different effects that different inputs can have on the avg seek length of the program. Some inputs that have a more random distribution and therefore the avg seek length seems to be more random. The graphs below display the average seeks length over different ht and bf sizes, with both mtf enabled as well as disabled.



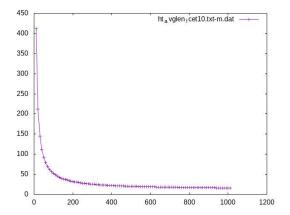
600000

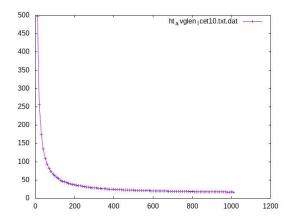
0.74

0.735

300000

400000





As you can see in the above graphs, the mtf flag difference is shown, while the curve of the graph itself does not actually change you can see that with the mtf argument enabled, the maximum amount of average seek length is decreased.

In the graphs below you can see that changes in the size of the bloom filter and the hash table will decrease the amount of lookups as the hash table length increases. However interestingly, the hashtable remains constant so the program can leave the amount of lookups constant.

