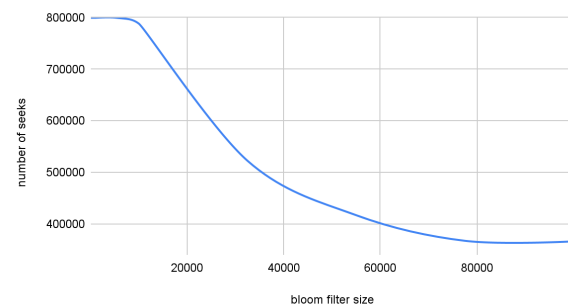


# Writeup

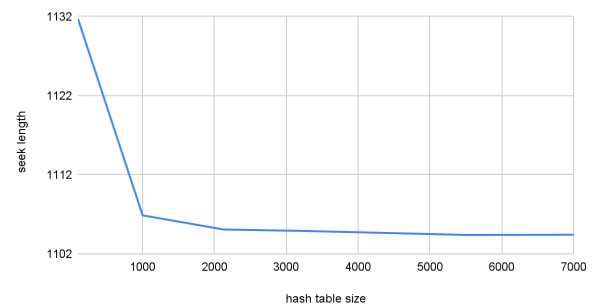
This shows as the bloom filter increases there are less chances for false positives. Therefore if a false positive is triggered the program still traverses the linked list even though the data does not exist. Hence, **larger bloom filter size infers less lookups.**

number of seeks vs. bloom filter size



Seek length get's lower as the hash table size increases. Therefore, the **linked lists get longer** when the size of the hash table is sufficiently decreased.

seek length vs. hash table size



The trend in the graph is expected especially in bigger files due to words that are more commonly traversed being in front of the linked list. I'm sure there is a relation to file size and the bible.txt shows two orders of magnitude difference. **The number of links followed is large without using the move to front rule compared to the number of links followed using the rule.**

mtf off vs mtf on

