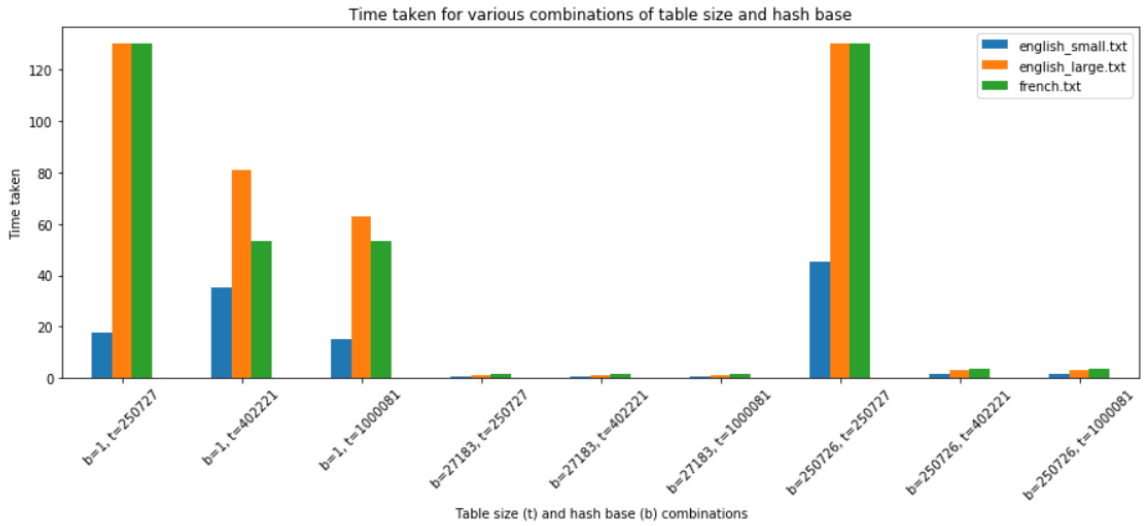
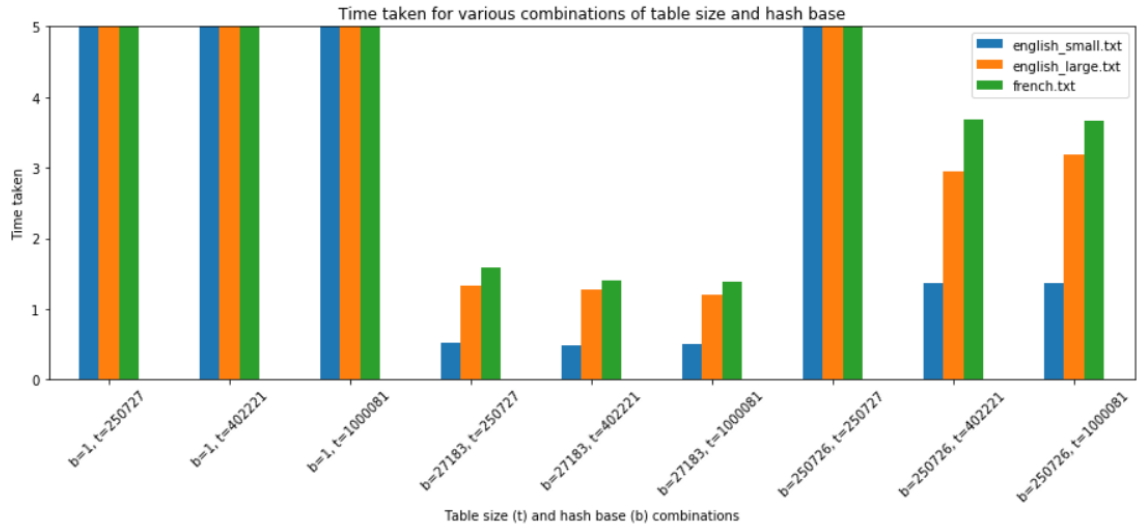
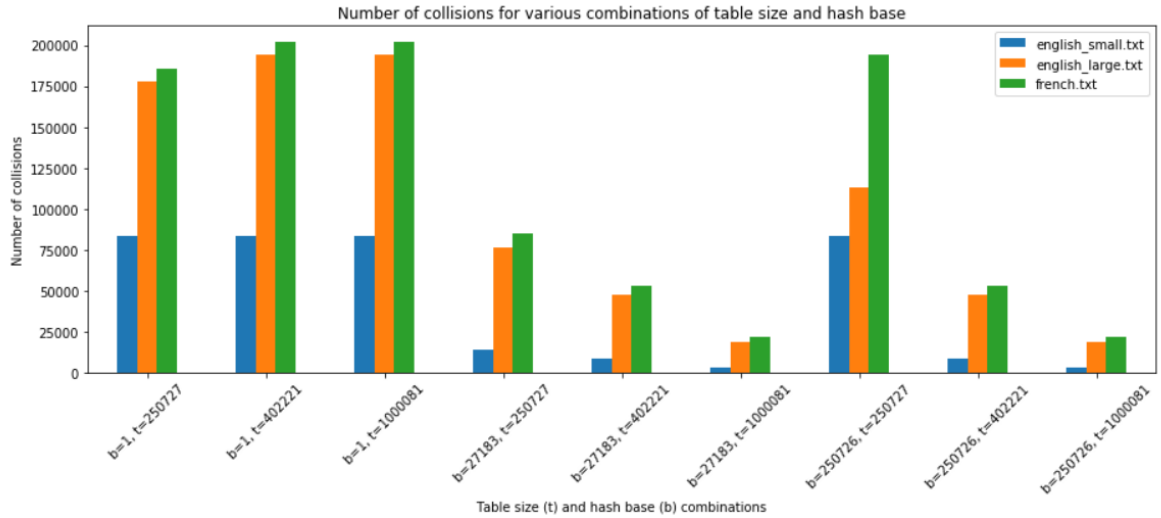
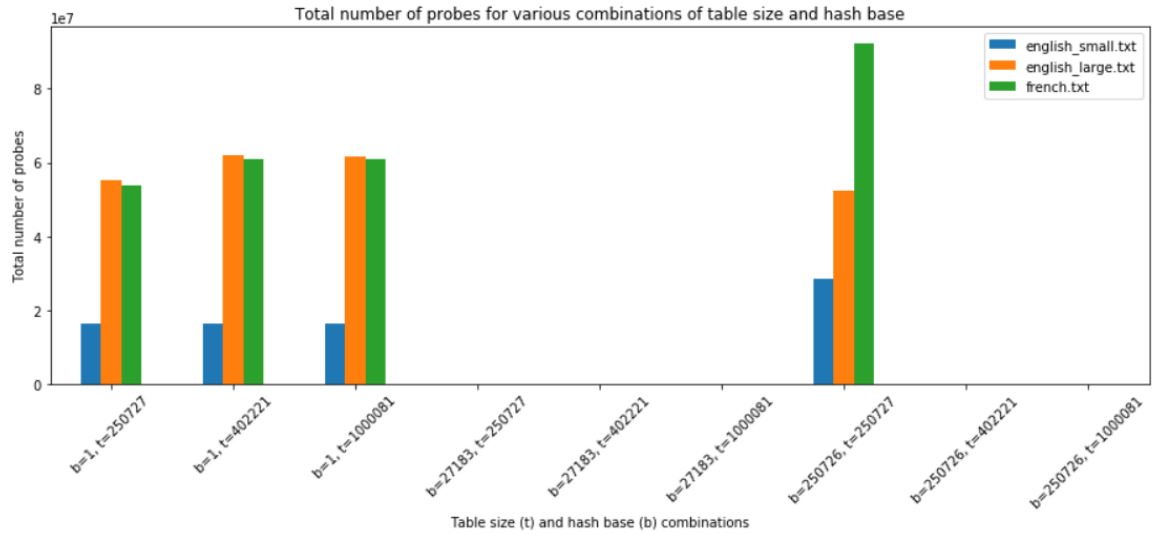
TASK 4



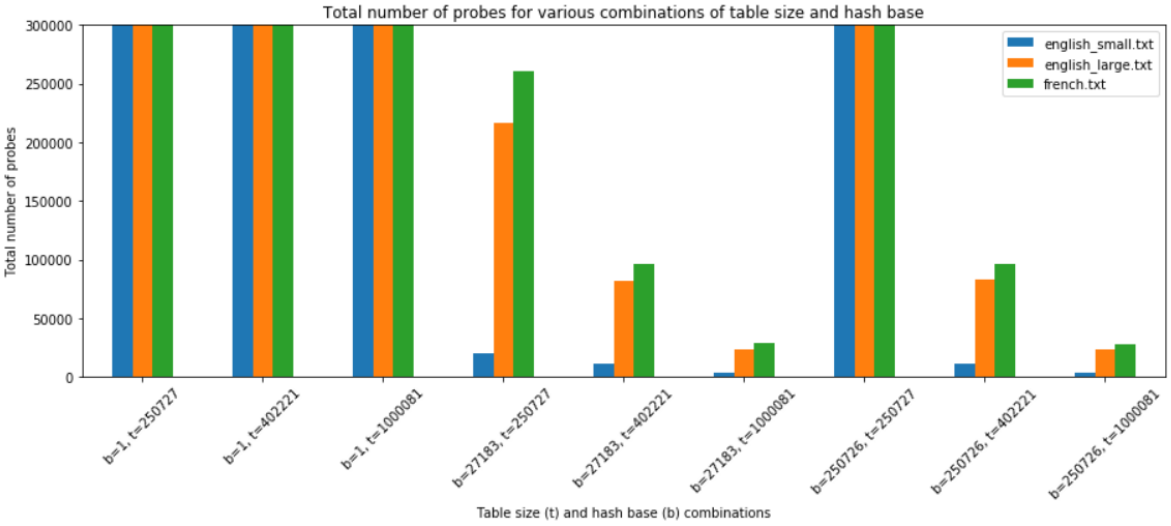
A closer look for runtime (y-axis is from 0 to 5):

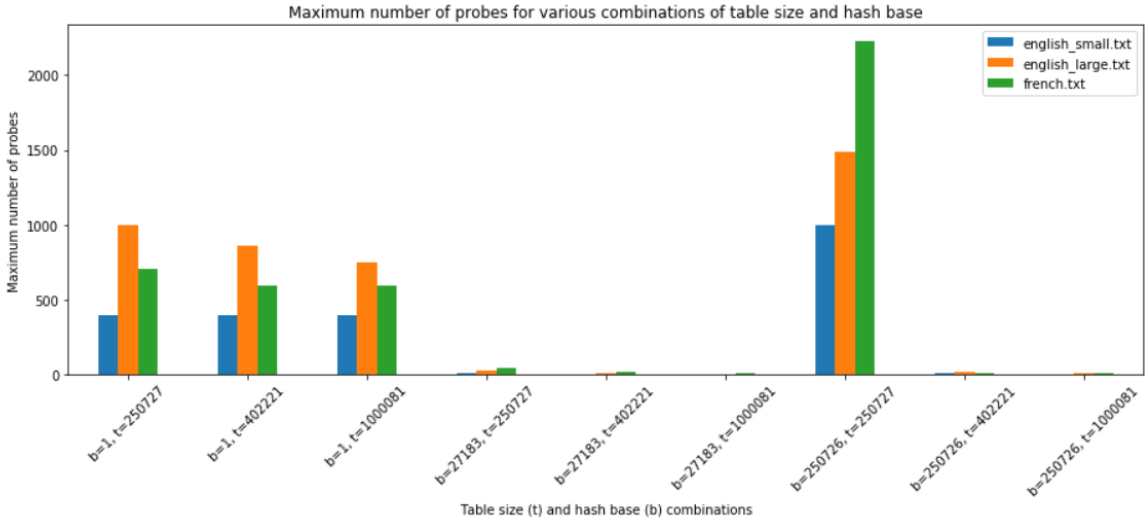




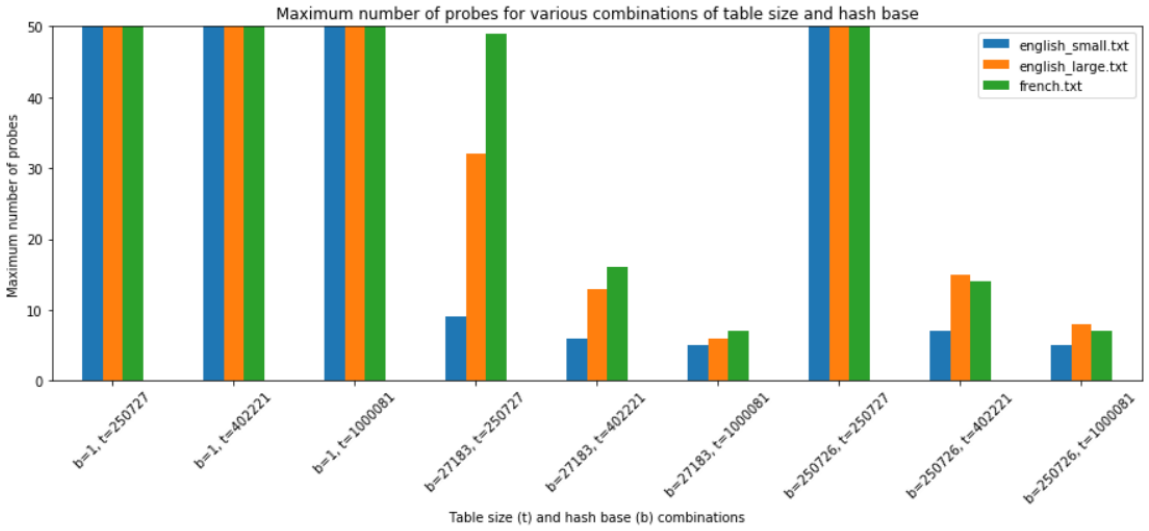


A closer look for total number of probes (y-axis is from 0 to 300 000):





A closer look for maximum number of probes (y-axis is from 0 to 50):



Generally, quadratic probing is more efficient than linear probing and takes less time to run. There are less timeouts than there were with linear probing. But the results for each combination of hash base and table size is similar meaning it takes more time to compute the same combinations. This could be due to there being far less collisions and probing with quadratic probing than there is with linear probing. rehash_count is still 0 for all because in my code, I let it probe until the hash table is full and the table size is quite large, so it never becomes full. If I had let it rehash before the table becomes full, it would probably become faster.