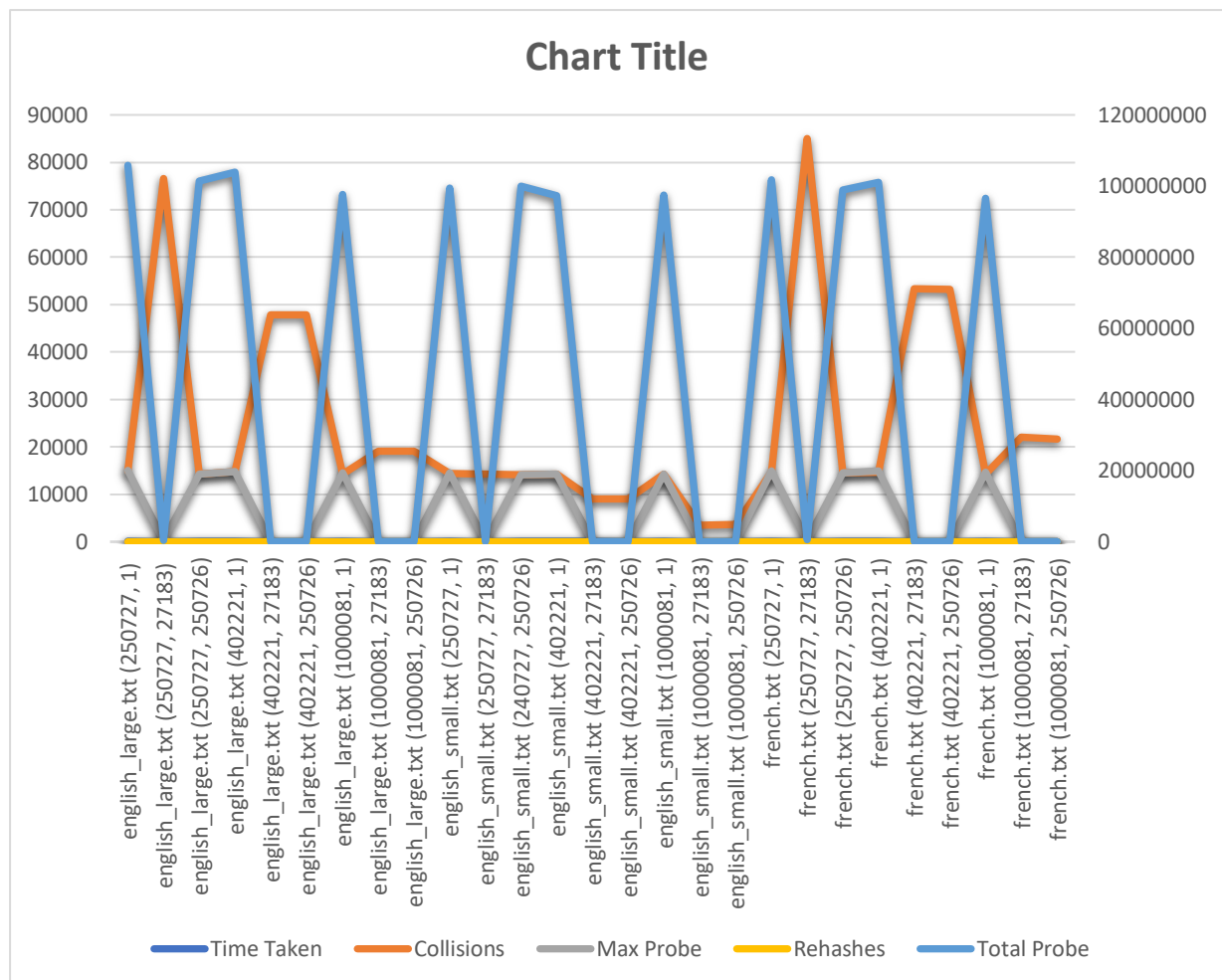


EXPLANATION FOR TASK 3



From the current graph, the total probe length is large for a lot of the combinations of table size and hash base values. This is considered as one of the disadvantages of linear probing since, linear probing leads to the formation of clusters. Every hash value generated in the cluster leads to an increase in the probe length. It is also known that,

Total Probe Length is directly proportional to runtime complexity of the Hash Table and hence, an extremely high total probe length value leads to the violation of our promise of $O(1)$ time complexity.

Rehash Count is 0 in all runs because the initial table size provided, supplied enough buckets to fit all keys in the table, not requiring the rehash function to execute and increase the table size.