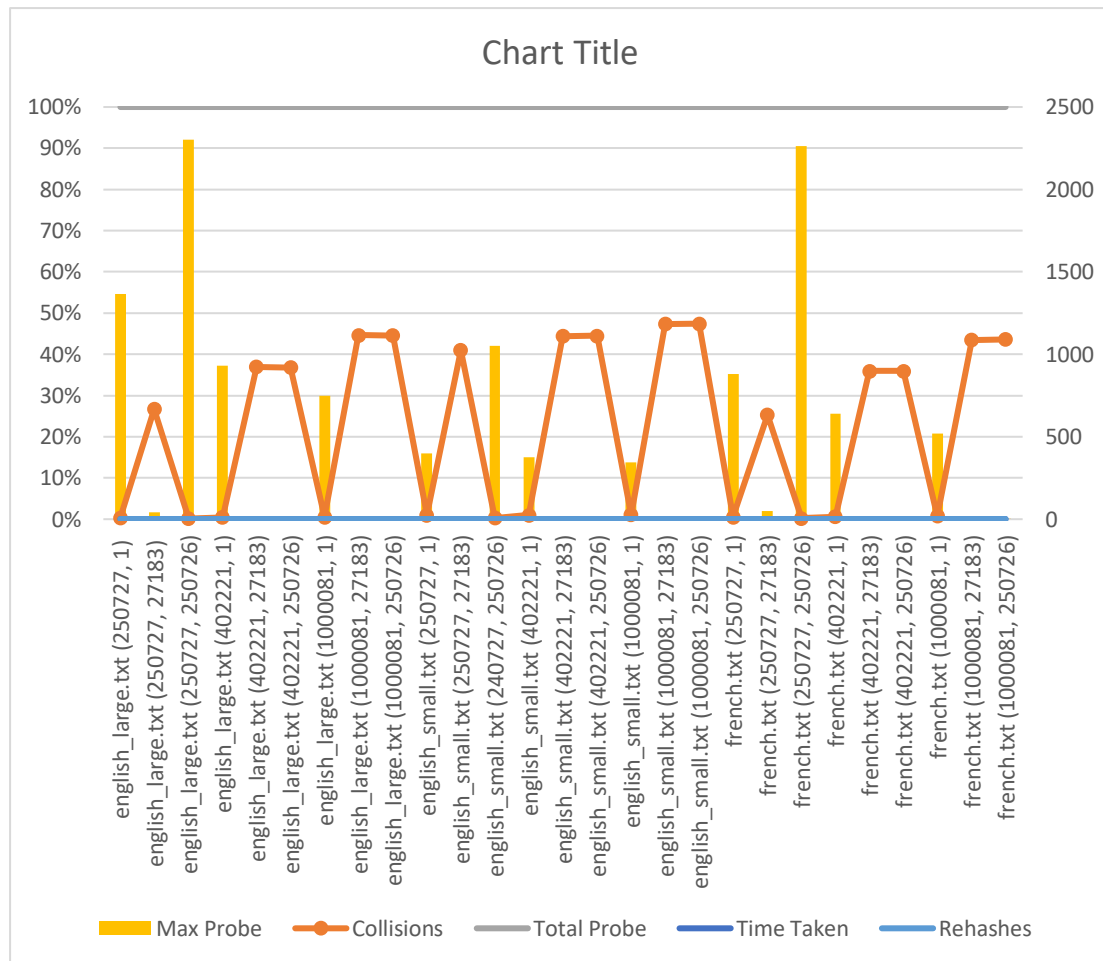


EXPLANATION FOR TASK 4



For this graph, the Total Probe lengths are lower compared to task 3. This is because, quadratic probing is used to resolve collisions. Using quadratic programming reduces the issue of primary clustering by loading keys into the hash table in quadratic powers instead of a linear increase (during collisions). However, the number of collisions and total probe length is still high as quadratic programming leads to secondary clusters i.e., multiple small clusters instead of one large primary cluster.

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.