The average comparisions to look for existing key in a hash table using linear probing when load factor is ½ ( half Full ) in my case is ~ 1.49 after doing 100 experiments with 1000 numbers each experiment. It should be 1.5 , from text figure 10.4 which is fairly close.

The average comparisions to look for existing key in a hash table using quadratic probing when load factor is ½ ( half Full ) in my case is ~ 1.43 after doing 100 experiments with 1000 numbers each experiment. It should be 1.4 , from text figure 10.4 which is fairly close.

The average comparisions to look for non-existing key in a hash table using linear probing when load factor is ½ ( half Full ) in my case is 2.49545 after doing 100 experiments with 1000 numbers each experiment. It should be 2.5, from text figure 10.4 which is fairly close.

The average comparisions to look for non-existing key in a hash table using quadratic probing when load factor is ½ ( half Full ) in my case is ~ 2.12 after doing 100 experiments with 1000 numbers each experiment. It should be 2.2, from text figure 10.4 which is fairly close.

The average comparisions to look for existing key in a hash table using double hashing when load factor is ½ ( half Full ) in my case is 1.41538 after doing 100 experiments with 1000 numbers each experiment. It should be 1.4, from text figure 10.4 which is fairly close.

The most common number of comparisions to look for non-existing key in a hash table using double hashing when load factor is ½ ( half Full ) in my case is ~2, from the figure below after doing 100 experiments with 1 Hash Table. It should be 2, from text figure 10.4 which is fairly close. I see some odd results which may be due to weird second hashing function I have.

Hence for both the cases 1 and 2 i.e. if a key exists on the table or it does not, we can say double hashing is better than quadratic probing which is better than linear probing for hash tables when the load factor is 0.5 with having the double hashing bug in my code in mind

Figure 10.4 from text

