

Report – Hamza Hameed

This experiment showed how effective the various algorithms we have learned about in this class are, specifically the build and find functions for all three types of hash table. Some observations I noticed after running the program are

- All the hash tables complete their functions relatively fast despite being large sized
- Open hashing's find function was faster than its insert function generally
 - I think this is because to insert, you must create a new Node, whereas when you use Find, you only have to traverse through a list
- Both closed hashing's build functions were incredibly fast
 - But their find times were a little bit slower
 - I think this is because when you inserted a number, since the number of elements in the hash table is less than half the size, every element can be inserted.
 - But find is more difficult because it might have to keep traversing the table since it has already been made

Conclusion:

Closed hashing is generally a faster way to store and find information though more difficult to implement. Both double hashing and quadratic probing seem relatively even on speed.