

WIA2005 Algorithm Design & Analysis
Semester 2, 2016/17
Tutorial 8

1. Demonstrate what happens when we insert the keys 19, 26, 13, 47, 17 into a hash table with the following strategy. Let the table have 7 slots, and let the hash function be $h(k) = k \bmod 7$.
 - a. Chaining
 - b. Open addressing with linear probing
 - c. Open addressing with quadratic probing
 - d. Open addressing with double hashing with second hash function $h(k) = 5 - (k \bmod 5)$
2. Which hash table is more appropriate when the load factor of the hash table is high?
3. What is a cryptographic hash function? Give 3 examples of cryptographic hash function and its brief introduction.
4. What is the different between hash table and hash map?