SSN College of Engineering, Kalavakkam
Department of Computer Science and Engineering
III Semester - CSE 'A ','B' & 'C'
UCS 1312 Data Structures Lab

Academic Year: 2019-2020 **Batch: 2018-2022**

Exercise 13: Implementation of hash function

1. A. Store the following numbers in 5 buckets using any hash function (use separate chaining to avoid collision)

   35, 26, 12, 24, 43, 38, 37, 41, 22, 11, 15

   B. Search for an element in the hash table.

   C. Delete 38 from hash table.

   D. Display hash table after each operation.

2. Store the strings {"abcdef", "bcdefa", "cdefab" , "defabc" } using the following hash function.

   The index for a specific string will be equal to sum of ASCII values of characters multiplied by their respective order in the string after which it is modulo with 2069 (prime number)

String	Hash_function	Index
abcdef	(97*1 + 98*2 + 99*3 + 100*4 + 101*5 + 102*6)%2069	38
bcdefa	(98*1 + 99*2 + 100*3 + 101*4 + 102*5 + 97*6)%2069	23
cdefab	(99*1 + 100*2 + 101*3 + 102*4 + 97*5 + 98*6)%2069	14
defabc	(100*1 + 101*2 + 102*3 + 97*4 + 98*5 + 99*6)%2069	11