CIS 256 – College of San Mateo

Data Structures and Algorithms in Java

Hash Functions & Hash Tables Bonus Assignment

Due Date: Monday, May 11, 2015 by midnight
(No late submissions will be accepted)

Weight: 5% Bonus

Assignment: Do all of the following four exercises.

To draw diagrams, you may use Word, Power Point, Visio, or any other document maker; however, please convert to PDF and submit your work only in PDF form.

Please do not submit scanned handwritten papers with hand-drawn diagrams!

Given input { 66, 28, 43, 29, 44, 69, 19 } and a hash function $h(x) = x \bmod 10$, show the resulting hash table:

1) Using Separate Chaining
2) Using Linear Probing
3) Using Quadratic Probing
4) Using Rehashing with second hash function $h_2(x) = 7 - (x \bmod 7)$: