Data Structures and Algorithms, COSC-2336
Assessment of Hashing

Exercise 1. Let us consider an empty hashtable with 17 positions indexed from 0 to 16 which uses the hashcode function given by h(k) = k % 17. ***Illustrate the content of the hashtable*** after inserting the elements 4, 10, 38, 21, 5, and 27, in this order, for each of the following probing techniques*:* ***linear hashing***, ***quadratic hashing***, and ***double hashing*** using a secondary function given by h'(k) = k % 11.

Exercise 2. Let us consider an empty hashtable with 17 positions indexed from 0 to 16 which uses the hashcode function given by h(k) = k % 17, using the ***separate chaining scheme***. ***Illustrate the content of the hashtable*** after inserting the elements 4, 10, 38, 21, 5, and 27, in this order.