**CSCI 204 Hashing Activity 1**

Student name(s)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Assume an initially empty has table with 11 spots. The primary hashing function is the modulo function, i.e., h(k) = k % 11. Show the contents of the hash table after the following keys are inserted in the given order, assuming the indicated type of probe is used: 67, 815, 45, 39, 2, 901, 34.
   1. Linear probe with c = 1
   2. Linear probe with c = 3
   3. Quadratic probe
   4. Double hashing with hp(k) = (k \* 3) % 7
2. In the above insertions, how many probes are needed to insert the entire sequence of numbers for each different probe functions (a-d)?