Assignment 2 – Updates

1. Questions 1, 3, 4, 5, 7 are mandatory, which carries 90% of the total weightage. Attempt any one of questions 2 or 6, which carries the remaining 10% weightage. Question 8 can be submitted along with Assignment 3.

2. Question 2:
   Implement it as a menu driven program.
   Input format: For termination: character 'e' to represent the end of the input.
   Sample Input: append with a new line containing character 'e'
   The location of the root node with a particular index should print that index followed by a hyphen (–) without space in between them.
   Sample Input1:
   i
   Ram Kumar F 18-05-2022 CSED 6.3
   l
   Ram Kumar
   i
   Ram Charan F 19-07-2022 CSED 6.3
   u
   Ram Charan 6.9
   u
   Ram Kiran 7.3
   l
   Ram Charan
   i
   Ram Balu M 20-05-2022 CSED 7.3
   d
   Ram Charan
   e
   Sample Output1:
   0
   17-
   1
   1
   -1
   17-L
   2
   1

3. Question 3:
   Assume that the given two Arrays contains positive integers in the range [1-10^5] and the array size n<=1000.

4. Question 4:
   Consider all Integers as positive integers.
   Note that the number of keys to be inserted is less than or equal to the table size.
   h(k) = k mod N, where N is the table size, 3<=N<1000 and N is prime.
   In linear probing: h′(k) = (h(k) + i) mod N, where N is the table size.
   In quadratic probing: h′(k) = (h(k) + i^2) mod N, where N is the table size.

Whenever an integer is unable to be inserted into the hash table, ‘E’ may be printed instead of the locations obtained during probing.

Announcement: Assignment 2 evaluation will be conducted on February 20, 2023, Monday, for both batches during P1 and P2 slots.