WEEK-2 (13 JAN - 18 JAN)

[CO2]

NOTE: All of the following questions are to be implemented using user defined functions:

Q1. Take input for an integer array and then search for any number “k”. Print it’s all occurrences.

Q2. Take “n” integer inputs from user in ascending order. Look for “k” using binary search.

Q3. Repeat Q1 but this time take 20 words as input and look for a certain word (using strcmp)

Q4. Implement Binary Search taking 10 user input in dictionary order.

Q5. Take “n” inputs from user and sort them using Bubble, Selection and Insertion sort.

Q6. For Q5 compare the swapping occurred in Bubble, Selection and Insertion sort when applied to a same unsorted array of size 10. Repeat if size is 50, 100, and 150 for best, avg and worst cases.

Hint: For Bubble Sort, Assign the following:

A[i] = i for the best case,

A[i] = n - i for the worst case, and

A[i] = rand (100) for the average case