Introduction to Computing Laboratory
Assignment No. – 8

1. Write a program in C to populate an array in ***ascending / descending*** order with some integer numbers and accept a key value from the user. Now perform ***binary search*** to check whether the key element is present in the array or not. If it is in the array print the index of the element in the array. Otherwise print the failure message.

2. Write a program in C to populate a 10 x 10 matrix 'A' with integers and perform the following operation.

   A[i][j]=1 if A[i][j]>=T

   = 0 Otherwise for i,j=0,1,2…9 and T is an user's input.

3. Write a menu driven program in C which has the following options:
   1) Convert a decimal number to its binary equivalent
   2) Convert a binary number to its decimal equivalent
   3) Exit.

   The program terminates if the user selects the option 3; otherwise the menu reappears automatically.

4. Write a menu driven program in C where the menu is as follows:
   1) Transpose of a matrix
   2) Addition of two matrices
   3) Multiplication of two matrices