Department of Computer science and Technology,
Indian Institute of Engineering, Science and Technology, Shibpur,
Introduction To Computing Lab

Assignment - 4

1. Write a C program that can store n elements in an one dimensional array and find the minimum and maximum elements from the set of data items.

2. Write a C program that can compare two input strings are similar or not without using strcmp().

3. Write a C program that takes a string as input and then prints the number of occurrence(s) of each vowel of the English alphabets in the string.

4. Write a c program to check whether a input string is palindrome or not.

5. Write a C program that can capitalize all the letters of a string.

6. write a C program to count number of words in a string.

7. Write a C program that can take two strings as input, concatenate these and store it in another character array and display it.

8. Write a C program that can add two matrices, A and B and store the result in another Matrix, C. Display the result.

9. Write a C program that first reads, row by row, a 2 Dimensional array of size $n \times n$, where n is an input parameter. The program should then determine whether the array just read falls into any of the following special cases:

   (a) Symmetric, $A_{ij} = A_{ji}$ for all i, j.
   (b) Lower Triangualr, $A_{ij} = 0$ when $i < j$.
   (c) Diagonal, $A_{ij} = 0$ when $i \neq j$.

   Also compute the sum of two diagonals