

Computing Lab (CS 1171)

Assignment – 3

(Points: 60)

Assigned date: 26-Feb-2021

Submission date: 4-Mar-2021

1. Write a C program to search a data-item in the array, if it exists in the array, print the index.
2. Write a C programme that can print the binary equivalent of a decimal integer. Here decimal integer is a user input.
3. 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 falls into any of the following special cases:
 - a. Symmetric, $A_{ij} = A_{ji}$ for all i, j .
 - b. Lower Triangular, $A_{ij} = 0$ when $i < j$.
 - c. Diagonal, $A_{ij} = 0$ when $i \neq j$.

Also find the sum of two diagonals.

4. Write a C program that can add two matrices, X and Y and store the result in another matrix, Z . Display the result.
5. 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.
6. Write a C program to convert string in upper case and lower case.
7. Write a C program to check whether an input string is palindrome or not.
8. Write a C program that can take two strings as input, concatenate these and store it in another character array and display it (do not use standard library function for string operations).