JAYPEE UNIVERSITY OF ENGINEERING & TECHNOLOGY, GUNA
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
Software Development Lab (18B17CI171)
B.Tech. (CSE/ECE/MECH/CE/CHE) Semester-I

Lab Experiment-11

C Programs: Array (1D and 2D)

1-D Array

1. WAP to find sum of all the elements in an array.
2. WAP to sort an array.
3. WAP to sort an array and then find median.
4. WAP to find greatest element in an array.
5. WAP to sort and merge two arrays and store it into third array.
6. WAP to read an array then change the array such that its n_{th} value contains the sum of previous n-1 elements.
7. WAP to read an array and insert 0 between every two elements of the array.
8. WAP to read an array and store it. Now change the array by putting the resultant of subtraction of two elements between them

2-D Array

9. WAP to read and write a 2-D array.
10. WAP to transpose a matrix.
11. WAP to check whether matrices is symmetric or not.
12. WAP to find determinant of a matrix.
13. Write a program to input a square matrix M1 and create another matrix M2 with same dimensions and such that the addition of every row of M1 is stored in the orresponding diagonal element of M2. That is, the addition of row 0 of M1 will be stored in the element M2(0, 0), addition of row 1 of M1 will be stored in the element M2(1,1) and so on. Make the other elements of M2 zero.

14. Write a program to input two matrices from the user. Perform the following functions on the matrices :
    a) Addition.
    b) Subtraction.
    c) Multiplication.
    Make the program menu driven with appropriate error handling.