

COURSE: (CL-1004) OBJECT ORIENTED PROGRAMMING LAB

LAB TASK # 5 WEIGHTAGE: 2

**NOTE:**

Only submit .cpp file of each question in a folder. Anyone who submits any other format file will get straight **ZERO.** Each question should have a separate .cpp file. Copy Paste or other UFM will also get **ZERO**. Use the following format for naming the folder Roll#\_Name (P18-1234\_NAME).

**Q No. 1:** Write a C++ program that will find maximum and minimum number in 2D array. Take number from user at run time (Initialize array by taking values from user).

Output should be like that:

Array values are:

28 33 38

1 48 12

44 27 10

Maximum Number is= 48

Minimum Number is= 1

**Q No. 2:** Write a C++ program that will add two 2D arrays elements. Take values from user at runtime. Note display values of 1st, 2nd and their resultant array.

**Hints**: A will be the 1st array, B will be the 2nd array and C will be resultant array.

Note: Follow Mathematics Matrix Addition Rules

Output should be like that:

Enter values for array initialization

a[0][0] =3

b[0][0] =4

a[0][1] =5

b[0][1] =34

a[0][2] =3

b[0][2] =5

a[1][0] =6

b[1][0] =7

a[1][1] =7

b[1][1] =7

a[1][2] =7

b[1][2] =6

a[2][0] =4

b[2][0] =9

a[2][1] =7

b[2][1] =5

a[2][2] =3

b[2][2] =5

Values of Array **a**

3 5 3

6 7 7

4 7 3

Values of Array **b**

4 34 5

7 7 6

9 5 5

Values of Array c (Resultant array) after addition of Array a and b

7 39 8

13 14 13

13 12 8

**Q No. 3:** Write a C++ program that will multiply two 2D arrays elements. Take values from user at runtime. Note display values of 1st, 2nd and their resultant array.

**Hints**: A will be the 1st array, B will be the 2nd array and C will be resultant array.

Note: Follow Mathematics Matrix Multiplication Rules

Output should be like that:

Enter values for array initialization

a[0][0] =3

b[0][0] =4

a[0][1] =5

b[0][1] =34

a[0][2] =3

b[0][2] =5

a[1][0] =6

b[1][0] =7

a[1][1] =7

b[1][1] =7

a[1][2] =7

b[1][2] =6

a[2][0] =4

b[2][0] =9

a[2][1] =7

b[2][1] =5

a[2][2] =3

b[2][2] =5

Values of Array a

3 5 3

6 7 7

4 7 3

Values of Array b

4 34 5

7 7 6

9 5 5

Values of Array c (Resultant array) after multiplication of Array a and b