

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 1^{st} , 2^{nd} 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
353
677
473
Values of Array b
4 34 5
776
955
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 1^{st}, 2^{nd} and their resultant array.
Hints: A will be the 1<sup>st</sup> array, B will be the 2<sup>nd</sup> 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

677

473

Values of Array b

4 34 5

776

955

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