DATA STRUCTURE

Type	Multidimensional Arrays & Nested Loops	**LAB PERFORMENCE**
Deadline	**IN CLASS**	
Weighting	TBA	**1**

OBJECTIVES

This assessment item is designed to test your skills on multidimensional arrays and nested loops

ASSESSMENT TASK

1. Implement a 2D-array with some random integer values. Display/print the content of your array in a linear fashion.

2. Implement a 2D-array with some random integer values. Display/print the content of your array as Matrix.

3. Declare two Matrices A [2] [3] = {1, 2, 3, 4, 5, 6} & B [2] [3] = {1, 2, 1, 2, 1, 2} and store the summation of A and B into another matrix C [2] [3].

4. Declare two Matrices A [2] [3] = {1, 2, 3, 4, 5, 6} & B [3] [2] = {1, 2, 1, 2, 1, 2} and multiply them and print the resultant matrix.

5. Write a program to search a particular element from a 2D-array and print its position.
   You can assume that A [2] [3] = {10, 25, 17, 28, -45, 14}

   Input:
   Enter key to search: 14
   Output:
   Position: 1 2

6. Write C++ programs to perform the following tasks:

A	B	C	D	E
1	A	B	C	D
0	1	A	B	C
0	0	1	A	B
0	0	0	1	A

Consider the 2D-Array called "**CArray"** right beside

Print the **CArray** as like below shapes:

```
A B C D E      1          A          1          1 A B
A B C D        0 1        ABC        1 0          1 A B
A B C          0 0 1      ABCD       1 0 0          1 A B
A B            0 0 0 1    ABCDE      1 0 0 0 0        1 A B
A              0 0 0 0 1                              1 A B
```

WHAT & HOW TO SUBMIT

You need to upload through your **VUES** account. You can find the upload link under "*Courses/ DATA STRUCTURE/Lab Performance/"*

SUBMISSION STEPS:

1. Create a Directory/Folder as following format:

   <Your ID>*_PERFORMENCE-*< Performence Number>

   Ex: 14-10380-1_PERFORMENCE-1
2. If you update your code then the format should be following:

   <Your ID>*_PERFORMENCE-*< Performence Number>*_UPDATE-*<Update Number>

   Ex: 14-10380-1_PERFORMENCE-1_UPDATE-1
3. Put all the files into that Folder and upload the **zipped** format of that Folder

NOTES

- Your submission will be rejected if uploaded in wrong format
- Only ".zip" file will be accepted.