

ANKARA UNIVERSITY
COMPUTER ENGINEERING DEPARTMENT
Computer Programming II
Spring 2022-23

Lab6 Quiz
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Date: 07/04/2023
Duration : 90 mins.

Task: You should print the given 2 dimensional matrix as shown in the picture. The matrix size must be adjusted dynamically. You should use malloc , pointer and function.

Matrix:

```
  1 → 2 → 3 → 4 ↓
  5 → 6 → 7 ↓ 8
  ↑ 10 ← 11 ↓ 12
  9 13 ← 14 ← 15 ← 16
```

Output:

```
1, 2, 3, 4, 8, 12, 16, 15, 14, 13, 9, 5, 6, 7, 11, 10
```

Input format example:

```
2 3 // matrix row and column size
1 2 3 //matrix 1. rows
6 7 8 //matrix 2. rows
```

Warning: Any form of code copying, including the copies from the internet, is strictly prohibited. If we determine similarities between your codes with any other students in the class, it will be treated as cheating and will be punished. So, you would increase the risk of cheating when you see somebody else's code directly or see a solution in the internet (i.e. somebody else might have also copied the same code from the internet like you, so both of these codes will be evaluated as copies, since they both copy from an external source. Such attempts will always be considered as cheating). You are supposed to write the program by yourselves.

Testing:

As usual, use *input redirection* mechanism of your operating system to test your programs. For example, if your executable is called as Lab6, redirect the input1.txt file to standard input using < operator and redirect your outputs to a file using > operator such as:

```
> ./lab6<input1.txt>myOutput1.txt
```

Then compare your outputs file with the given output files such as:

```
>diff myOutput1.txt output1.txt
```

Repeat this steps for all the given input and output files. In addition, create and try your own input outputs.

Submission:

Before submission, rename your source file name as StudentNumber.c.