Ankara University
Computer Engineering
COM2067 LAB 1
2024-2025 Fall

In this lab, a two-dimensional 5x5 integer matrix will be taken from the user.The sum of each row will be added to all elements of the relevant column (the sum of the i^{th} row to the elements of the i^{th} column). Then, the sum of each column will be added to the relevant row (the sum of the i^{th} column to the elements of the i^{th} row).

A simple example is shown in the figure below.

1 2 3 1 3
1 2 3 1 3
1 2 3 1 3
1 2 3 1 3
1 2 3 1 3

First, the sum of the 1st row will be 10 and this value will be added to all elements of the first column, your new first column will be:

11
11
11
11
11

The program will continue to calculate in this way and will complete the process. Examine output.txt for the output the program will produce.

Submission:

Name your source file as <StudentID>.c. For example, if your ID is 22290777, then you will submit 22290777.c file. For the correct output format, carefully examine the sample input and output files provided to you. You can perform the following operations to check the correctness of your program.

Testing:

We provide a sample input/output text file pairs for you to test your codes at Ubuntu. Please carefully review the sample input and output files given to you for the correct output format.

We recommend you to use input redirection mechanism of your operating system to test your programs. For example, if your executable is called as Lab1, redirect the input.txt file to standard input using < operator and redirect your outputs to a file using > operator such as:

> ./Lab1 < input1.txt > output1.txt

This kind of execution enables your programs to read inputs from a file without writing any file related functions. In other words, scanf reads data from the redirected files instead of the std. input in this way (e.g. keyboard).

Automatically compare your own output with the expected output by using the diff myOutput1.txt output1.txt command. If a warning as shown below does not appear on the screen after executing this command, this means that your program is working correctly. If you see a warning in the command system after executing the command, this indicates that there is a problem with your output.

Test your program for different inputs that you will create yourself. Please note that the input files given to you and the input files used during the evaluation may differ from each other.