C++ Project Description

It is required to develop a console application that performs different operations on matrices. The application should support:

- Addition of two matrices.
- Subtraction of two matrices.
- Multiplication of two matrices.
- Division of two matrices.
- Calculation of determinant of a matrix.

The program needs to be interactive, it asks the user first to supply dimensions of the matrices, then fill values in each. Then the user of the program is asked to choose the type of operation or choose to quit, then displays the calculated output based on the user's choice. The program keeps asking the user for inputs until the user decides to quit.

Deliverables:

- This project is an individual project. Each student must work on this individually and submit their own work. **Plagiarism detection will be applied and all participants will receive 0 grade for their project, even if you are the source of the code that others copied and even if the plagiarism was partial. Please make sure to not share any part of your source code with anyone.**
- Each student should submit their source code on codeforces contest: https://codeforces.com/group/jcnOqIruJ7/contest/380966 Please follow the description in the problem statement. Please note that your submission will be run against a partial test set for immediate feedback and not the final test set that will be used for grading. You need to think of corner cases yourself. The partial test set is a subset of the final test set so you need to make sure you get Accepted when you submit.
  You should submit your code in all the problems to receive a full grade.

- Each student should submit on lms the following **compressed file** containing the following deliverables:
    - Source code files. (Project folder)
    - A report in one PDF file containing:
        1. Flow charts of the main flow of the program.
        2. Screenshots of the program while running.

Grading:

- Report: 1 mark
- Addition & Subtraction:
    - 3 x 3: 1 mark
- Multiplication:
    - 3x3: 2 marks.
    - Y x Z: 1 mark.
- Determinant:
    - 3x3: 3 marks.
    - Y x Z: 2 marks.
- Division (Bonus):
    - 3x3: 3 marks.
    - Y x Z: 2 marks.

Total: 10 Marks + 5 Bonus.

You get the mark of the problem if it passes the final test set.

Deadline: 3 June 2022 11:59 PM