

OOP Homework #1

Introduction

In this homework, your goal is to **implement a 3x3 matrix class** that enables common matrix operators such as add, minus, multiply, divide, inverse, and determinant (all as you learned in linear algebra course). Specifically, since we can view a 3x3 matrix as 3 3x1 column vectors, the 3x3 matrix class consists of another class, a 3x1 vector class named vector3. Thus, we ask you to **implement a 3x1 vector class first, and then utilize this class to implement the matrix class.**

Requirement

1. Implement all constructors, operators and methods we declared in class vector3 and matrix33. See the attached code for a complete list of functions.
2. Implement them in vetor3.cpp, matrix33.h and matrix33.cpp, respectively.
3. Do **NOT** revise any member we declared including their parameters, return types, etc.
4. However, you can add some functions to help your implementation if necessary.

Grading

We will use a series of test data to judge if you had all functions work correctly. Your score will base on the number of test data your program can process. We have included some test data in the attached file for you to evaluate your program.

Submission

1. Upload the following 4 files to e3: vetor3.h, vetor3.cpp, matrix33.h, matrix33.cpp
2. **MAKE SURE** that the name of your files must be the same as follows: StudentID_vetor3.h, StudentID_vetor3.cpp, StudentID_matrix33.h, StudentID_matrix33.cpp

Deadline

- Normal deadline: 2017/3/10 (Fri.) 23:59:59
- Second deadline: 2017/3/17 (Fri.) 23:59:59 **[WITH PANALTY!]**

Penalty

- Late submission (after 3/10 and before 3/17): 30% discount (your_score = original_score*0.7)
- Wrong file name: minus 10 points
- Copy code from others/internet: you will get a 0 for this homework

If you have any problem about this homework, contact us through e3.