# Laboratory Assignment #5 — Operator Overloading

Due: at 5:00 pm on Thursday 3/2

#### **Outcomes**

After successfully completing this assignment, you should be able to:

- Overload an operator in a C++ class

## Set up

Download all files from Files-> Labs -> Lab 5.

Read run matrix.cpp and Matrix.cpp and make sure you understand how the program works.

## **Operator Overloading:**

Write a new function in the Matrix Class that overloads the + operator. This operator should return a new matrix object:

```
C = A + B;
Where C.data[] = A.data[] + B.data[]
```

To test your operator overload function, uncomment lines 23-25 in run\_matrix.cpp. The output should be as follows:

$$A + B =$$
 $2 4 6 8 12.2$ 
 $A + B with overload$ 
 $2 4 6 8 12.2$ 

#### **Getting credit for this Lab**

To earn credit for this lab, submit your modified run\_matrix.cpp Matrix.cpp and Matrix.h files to Canvas under the assignment Lab5.

Submission: 70pts Autograder: 5pts Attendance: 25pts