

HOMEWORK: 1 (10 points)  
DUE DATE: Tuesday January 27, 2015

**Description:**

You are to add two class methods to the Matrix class (*in files folder*):

1. Provide a class methods **multiplication**:  $A = B * C$  and  $A = c * B$ , where A, B, and C are matrices, and c scalar value.
2. Provide a class method **addition**:  $A = B + C$
3. Throw invalid dimensions as **IllegalArgumentException**.
4. Provide a class method **main** to verify 1, 2, and 3.

Use the example shown as one of the test cases for multiplication:  $\begin{bmatrix} 1 & 3 & 5 & 7 \\ 2 & 4 & 6 & 8 \end{bmatrix} \times \begin{bmatrix} 1 & 8 & 9 \\ 2 & 7 & 10 \\ 3 & 6 & 11 \\ 4 & 5 & 12 \end{bmatrix}$

**Turn in:**

1. Print out of Javadoc for your methods and output.
2. Print out of the source code in landscape mode using non-proportional fonts (eg. Courier).
3. Email the source code with the file name **flast-Matrix.java** (ex. `nguyen-Matrix.java`) to `tvnguyen7@cpp.edu` with the subject: **cs240w15 hw1**. **Don't** name your class `flast-Matrix`. Rename the file before submitting.

**Grading Guide:**

- 10%: Javadoc and project output.
- 80%: Program correctness
- 10%: Coding – efficiency, style, comments, formats

**Notes:**

1. The following information is required in the beginning of every source file.

```
//  
// Name: Last, First  
// Homework: #  
// Due: date  
// Course: cs-240-02-w15  
//  
// Description:  
// A brief description of the project.  
//
```

2. The submission **must** be legibly printed.