**Lab #4 cs0401 (Hoffman)**

**THIS LAB WILL BE SCRIPT GRADED FOR A SCORE. MUST BE TURNED IN BY END OF DAY 11:59pm  
TA will help you get started. You must do it legally (with loops, no plinking)**

**Practice with 2D Arrays**

In the following exercise you are not premitted to "plink" values into the matrix with solitary assignment statements. You must always use a loop to initialize a row, col or diagonal in the matrix.

[**Exercise1.java**](http://www.cs.pitt.edu/~hoffmant/401/lab-04/Exercise1.java)

* Do not change main
* Just fill in these methods below main
  + zeros()
  + diagonal\_1()
  + diagonal\_2()
  + border()
* Don't change any other code or write any other methods

**The output of your program should look like this:**

|  |
| --- |
| DIAGONAL\_1  0 0 0 0 4  0 0 0 3 0  0 0 2 0 0  0 1 0 0 0  0 0 0 0 0  ZEROS  0 0 0 0 0  0 0 0 0 0  0 0 0 0 0  0 0 0 0 0  0 0 0 0 0  DIAGONAL\_2  0 0 0 0 0  0 1 0 0 0  0 0 2 0 0  0 0 0 3 0  0 0 0 0 4  ZEROS  0 0 0 0 0  0 0 0 0 0  0 0 0 0 0  0 0 0 0 0  0 0 0 0 0  BORDER  0 1 2 3 4  1 0 0 0 3  2 0 0 0 2  3 0 0 0 1  4 3 2 1 0 |

**In the following exercise you will implement Matrix Addition**

[**Exercise2.java**](http://www.cs.pitt.edu/~hoffmant/401/lab-04/Exercise2.java)

* Do not change main
* Just fill in this method below main
  + addMatricies()
* Don't change any other code or write any other methods

**The output of your program should look like this:**

|  |
| --- |
| MATRIX1  1 2 3  2 4 6  MATRIX2  4 6 8  6 9 12  MATRIX1 + MATRIX2  5 8 11  8 13 18 |