**Ben Joye – Lab 2**

**Requirements Analysis:**

* Functional:
  + The user must be able to input the dimensions of the array
  + The user must be able to input numbers to fill the array
* Non-Functional:
  + The system must be coded in Java
  + The system must be able to run on Unix
  + The array cannot be larger than 10x10
  + The system must transpose the user’s matrix
  + The system must solve for the product of the sums of each row
  + The system must find the average of all numbers in the matrix
  + The system must print the output of all the functions
  + The system must find the sums of all the rows and columns are print them out
  + The system must convert a matrix to a string
  + The system should only print from main
  + The system should have no non-constant data members

**Testing:** I tried different combinations of heights and widths for the array. I tried putting in negative numbers and positive numbers in the array.

**Deployment:**

* Type “javac MatrixApp.java” to compile
* Type “java MatrixApp” to run