Computer Science II	Lab 03F – MATRIX MATH	Lab Value - 120

Lab Goal : The lab was designed to teach you more about parameters.

Lab Description : Read in matrices and perform math operations on them.

Sample Output :

```
How many matrices do you wish to enter? :: 3


What is the size of matrix 0 : 2

Enter a value for spot 0 - 0 :: 1
Enter a value for spot 0 - 1 :: 1
Enter a value for spot 1 - 0 :: 1
Enter a value for spot 1 - 1 :: 1

ThreeDRay before setting mat at spot 0
mat 0
mat 1
mat 2


ThreeDRay after setting mat at spot 0
mat 0
        row 0   1  1
        row 1   1  1
mat 1
mat 2









What is the size of matrix 1 : 2

Enter a value for spot 0 - 0 :: 2
Enter a value for spot 0 - 1 :: 2
Enter a value for spot 1 - 0 :: 2
Enter a value for spot 1 - 1 :: 2

ThreeDRay before setting mat at spot 1
mat 0
        row 0   1  1
        row 1   1  1
mat 1
mat 2



ThreeDRay after setting mat at spot 1
mat 0
        row 0   1  1
        row 1   1  1
mat 1
        row 0   2  2
        row 1   2  2
mat 2
```

Files Needed ::
ThreeDRay.java
Lab03f.java

BONUS OPTION – Matrix Multiplication

```
Matrix Multiplication Logic
[ 1 2 ]       X     [ 5 6 ]
[ 3 4 ]             [ 7 8 ]

[ 1 * 5 + 2 * 7 ] [ 1 * 6 + 2 * 8  ]
[ 3 * 5 + 4 * 7 ] [ 3 * 6 + 4 * 8  ]
```

Final Matrix

```
[ 19  22 ]
[ 43  50 ]

for loop r - rows
   for loop c - cols
     for loop i - inside
```

```
What is the size of matrix 2 : 3

Enter a value for spot 0 - 0 :: 3
Enter a value for spot 0 - 1 :: 3
Enter a value for spot 0 - 2 :: 3
Enter a value for spot 1 - 0 :: 3
Enter a value for spot 1 - 1 :: 3
Enter a value for spot 1 - 2 :: 3
Enter a value for spot 2 - 0 :: 3
Enter a value for spot 2 - 1 :: 3
Enter a value for spot 2 - 2 :: 3

ThreeDRay before setting mat at spot 2
mat 0
        row 0   1  1
        row 1   1  1
mat 1
        row 0   2  2
        row 1   2  2
mat 2



ThreeDRay after setting mat at spot 2
mat 0
        row 0   1  1
        row 1   1  1
mat 1
        row 0   2  2
        row 1   2  2
mat 2
        row 0   3  3  3
        row 1   3  3  3
        row 2   3  3  3







Adding matrix at 0 and matrix at 1

3 3
3 3
```