CSCE 145: Algorithmic Design I

Lab – 7

Problem:

- Write a Java program that computes the sum of two matrices.

Instructions:

- Allow the user to enter the dimensions of both matrices
- Checks the dimensions to see if they match.
  - If there is a dimension mismatch, enter an appropriate message and allow the user to re-enter the dimensions of the second matrix until they match the dimensions of the first matrix.
- Once the dimensions of both the matrices match, allow the user to enter the values of the first matrix and the second matrix.
- Add the matrices and display the result on the console.

Sample Result:

1	**22**		**10**	**56**		**11**	**78**
-4	**5**	**+**	**7**	**31**	**=**	**3**	**36**
-7	**3**		**-2**	**23**		**-9**	**26**

Lab Submission:

- At the beginning of your program, insert your full name as a comment.
- Include comments in your program wherever necessary.
- Upload the .java file on Dropbox.

Lab Report Submission:

- First, download the Lab Report Template document on Dropbox.
- Use this template to complete your lab report.

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- Proposed Solution:
  - In the proposed solution section of your lab report, draw a flow chart based on your lab solution.
    - Make sure to put decisions in diamonds, actions/statements in boxes, and draw arrows showing the flow of the program.
    - Arrows coming from decisions must have the “TRUE” and “FALSE” branches clearly labeled.
- Additional Questions:

1. (5 pts) What is a ragged array?

2. (15 pts) Write a code snippet to compare the equality of 2 arrays as shown below:

```
int[] arrayA = new int[10];

int[] arrayB = new int[10];

// write your code here

//to accept values from the user and check if both arrays are equal
```

- Upload your Lab Report solution as a PDF on Dropbox.