Course Code: CS-115
Course Title: Computer Programming
<u>**Assignment 01**</u>
FE Batch 2019, Fall Semester 2019

Problem Statement:
Build a Matrix Calculator, capable of performing basic mathematical operations on matrices.

<u>Design Constraints</u>
- The application should offer a menu to the user to select the operation from.
- A user-friendly mechanism should be used to input values in a matrix from user.
- The output should be printed in matrix outlook.
- Implement at least three arithmetic operations namely addition, subtraction and multiplication.
- You can refer to any web resources or books. Do refer the resource(s) in your assignment.
- You can add any other feature to enhance the application and make it different from others.
- You can only use the built-in packages; no other package or module (like numpy) is allowed.

<u>Deliverables</u>
Attach the following documents:
1. Summary of implementation (500 words at maximum) in .pdf format, highlighting the key features of the application. Do not forget to mention all the references (books or web links) used for help.
2. Python Code, the .py file.
3. .pdf showing at least three test runs.

<u>Sample Test Run</u>
```
Enter number of rows/column for the square matrix: 3

OPERATIONS MENU:
    1. Addition
    2. Subtraction
    3. Multiplication
    4. Exit
Enter option number: 1
Enter values for matrix 1 row 1 separated by commas: 1,2,3
Enter values for matrix 1 row 2 separated by commas: 4,2,7
Enter values for matrix 1 row 3 separated by commas: 6,0,1
Enter values for matrix 2 row 1 separated by commas: 8,-2,3
Enter values for matrix 2 row 2 separated by commas: 1,12,-3
Enter values for matrix 2 row 3 separated by commas: 1,2,3
The answer is:
9    0    6
5    14   0
7    2    4

OPERATIONS MENU:
    1. Addition
    2. Subtraction
    3. Multiplication
    4. Exit
Enter option number: 4
```