# **LAB211 Assignment**

Type: **Short Assignment** Code:

J1.S.P0023

LOC: 100 Slot(s): 2

# **Title**

Write a calculator program (from DCPS's project)

# **Background**

N/A

# **Program Specifications**

Write a calculator program have functions: addition, subtraction, multiplication functions for matrix.

#### **Function details:**

**Function 1:** Display a menu and ask users to select an option.

- Users run the program. The program prompts users to select an option.
- Users select an option, perform Function 2.

**Function 2:** Perform function based on the selected option.

- o Prompt users input number of row, number of column of 2 matrixes.
- o Prompt users input values of matrixes must be the number. If users input values that are not a number, display notification on the screen: "Values of matrix must be the number".
- Option 1: Addition matrixes
  - Display result.
- Option 2: Subtraction matrixes
  - Display result.
- Option 3: Multiplication matrixes
  - Display result.
- Option 4: Exit program.

### **Guidelines**

#### Student must implement methods

additionMatrix subtractionMatrix multiplicationMatrix

#### in startup code.

# Function 1: Addition matrixes

- Implement function: public int[][] additionMatrix (int[][] matrix1, int[][]matrix2)
  - Input:
    - matrix1: The first matrix.
    - matrix2: The second matrix.
  - Return values: The result.

# Function 2: Subtraction matrixes

- o Implement function: public int[][] <a href="mailto:subtractio">subtractio</a>nMatrix (int[][] matrix1, int[][]matrix2)
  - Input:
    - matrix1: The first matrix.
    - matrix2: The second matrix.
  - Return values: The result.

# Function 3: Multiplication Matrixes

- Implement function: public int[][] multiplicationMatrix(int[][] matrix1, int[][]matrix2)
  - Input
    - matrix1: The first matrix.
    - matrix2: The second matrix.

Return values: The result.

# Expectation of User interface:\_\_\_\_\_

