

# LAB211 Assignment

Type:  
Code:  
LOC:  
Slot(s):

Short Assignment  
J1.S.P0074  
100  
2

## Title

Write a calculator program (from DCPS's project)

## Background

NA

## 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.

- Prompt users input number of row, number of column of 2 matrixes.
- 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.

## Expectation of User interface:



## Guidelines

Students need to create a Matrix class with row and column attributes and an array of m rows and n columns

### Student must implement methods

- additionMatrix
- subtractionMatrix
- multiplicationMatrix

in startup code.

### Function 1: Addition matrixes

- Implement function: public Matrix additionMatrix (Matrix matrix2)

- Input:
  - matrix2: The second matrix.
- Return values: The result is a Matrix.

**Function 2: Subtraction matrixes**

- Implement function: `public Matrix subtractionMatrix (Matrix matrix2)`
  - Input:
    - matrix2: The second matrix.
  - Return values: The result is a Matrix.

**Function 3: Multiplication Matrixes**

- Implement function: `public Matrix multiplicationMatrix((Matrix matrix2)`
  - Input:
    - matrix2: The second matrix.
  - Return values: The result is a Matrix.