

Assembly Language programming Project

Project Title: - "Matrix addition and multiplications."

Description: - User enters two $n \times n$ matrices and asks the kit to get their addition or multiplication.

Details: -

- First the user will be asked to enter the matrices **dimensions n**.
- Then the user will be asked to give the kit the **first matrix** row by row, each row will be some **signed** numbers separated by **comma**.
- Then the user will be asked to give the kit the **second matrix** row by row, each row will be some **signed** numbers separated by **comma**.
- Then the user will be asked to enter the operation he/she wants; either an **addition** or **multiplication** operation will be selected.
- Finally the final result should be presented row by row.
- **Bonus:** Add an option after completion of the addition/multiplications to calculate the **L2 Norm** of the result matrix.

Example:

The input screen

Enter First matrix dimensions:
2,2
Enter row:
1,1
Enter row:
1,1
Enter second matrix dimensions:
2,2
Enter row:
1,1

1,1

Enter row:

Press 1 for addition and 2 for multiplication:

1

Output will be row by row

2,2

And when next button is pressed, it will get the next row

2,2

You will submit:-

- A complete flow chart for your program
- Procedures description that contains
 - Task accomplished by the procedure
 - List of input parameters and their usage
 - Description of any value calculated/returned by the procedure
 - Preconditions that must be satisfied before the procedure is called