

Exercise 23

2D Array

Tasks:

1. Write a program that performs matrix multiplication. Ask the user to input the dimensions of two matrices and their values given in the form of the below format. Calculate and display the resulting matrix. Use 2D arrays to store the matrices.

```
##############################
     Matrix Calculator #
        Multiply
#############################
Enter the dimensions of the first matrix:
Rows: 2
Columns: 2
Enter the dimensions of the second matrix:
Rows: 2
Columns: 2
Enter values for the first matrix:
Enter element at position (1,1): -3
Enter element at position (1,2): 0
Enter element at position (2,1): 1
Enter element at position (2,2): 4
Enter values for the second matrix:
Enter element at position (1,1): 4
Enter element at position (1,2): 5
Enter element at position (2,1): 6
Enter element at position (2,2): 7
Resultant matrix after multiplication:
[ -12, -15 ]
[ 28, 33 ]
```