# **Matrix Multiplication**

## **ZPRAC-16-17-Lab10**

[30 points]

You are given two integer matrices. Your job is to multiply the two given matrices and display the resultant matrix.

If matrix multiplication is not possible display "INVALID INPUT"

#### **INPUT FORMAT:**

-----

A B --- two integers representing row and column dimensions of first matrix

(A x B integers) --- elements of first matrix

C D --- two integers representing row and column dimensions of second matrix

(C x D integers) --- elements of second matrix

#### **OUTPUT FORMAT:**

-----

(A x D integers) --- the resultant matrix

OR

INVALID INPUT --- if matrices cannot be multiplied

#### **EXAMPLE**:

-----

#### INPUT:

23

123

456

3 2

78

9 10

11 12

#### **OUTPUT**:

58 64

139 154

### INPUT:

22

12

- 3 4
- 3 1
- 1
- 2
- 3

OUTPUT:

**INVALID INPUT**