

Matrix Multiplication!!

Problem Statement

Matrix multiplication is one of the fundamental operations in linear algebra. Given two matrices **A** and **B**, your task is to compute their **product matrix C**, where each element $C[i][j]$ is calculated as the **sum of the products of elements** from the i -th row of A and the j -th column of B.

You must ensure that the number of **columns in Matrix A** equals the number of **rows in Matrix B** — otherwise, matrix multiplication is not possible.

Input Format

- The first line contains two integers R1 and C1, representing the number of rows and columns of the first matrix.
- The next R1 lines contain C1 space-separated integers, representing the elements of Matrix A.
- The next line contains two integers R2 and C2, representing the number of rows and columns of the second matrix.
- The following R2 lines contain C2 space-separated integers, representing the elements of Matrix B.

Constraints

- $1 \leq R1, C1, R2, C2 \leq 10$
- $-100 \leq \text{Array Element} \leq 100$
- Multiplication is possible only if $C1 = R2$

Output Format

- If matrix multiplication is possible, print the resultant matrix, where each row is printed on a new line with space-separated integers.
- If matrix multiplication is not possible, print "Matrix multiplication not possible".

Sample Input 0

```
2 2
1 2
3 4
2 2
5 6
7 8
```

Sample Output 0

```
19 22
43 50
```

