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Multiply two integer matrices

 locked

Problem

Submissions

Leaderboard

Discussions

Refer [this](#) video if you do not know how to perform multiplication of two matrices

Input Format

Input will contain $2 + m + x$ lines.

First line will contain dimensions of first matrix (m by n)

Second line will contain dimensions of second matrix (x by y).

Next m lines will contain rows of first matrix; one row of first matrix per line, and each line would have n integers separated by tab.

Next x lines will contain rows of second matrix; one row of second matrix per line, and each line would have y integers separated by tab.

Constraints

$0 < m, n, x, y \leq 100$

$-100000 < \text{each element of input matrices} \leq 100000$

Output Format

If multiplication is possible, output file should have $1 + p$ lines.

First line should have dimensions of resultant matrix (p by q).

Next p lines should have rows of resultant matrix; one row of resultant matrix per line, and each line should have q integers separated by tab.

If multiplication is not possible, output file should have one line containing following text in capital letters.

MULTIPLICATION NOT POSSIBLE

Sample Input 0

```
1 1
1 1
1
1
```

Sample Output 0

```
1 1
1
```

Sample Input 1

```
1 2
1 2
3 4
4 4
```

Sample Output 1

```
MULTIPLICATION NOT POSSIBLE
```

Sample Input 2

```
1 2
2 1
4 5
7
8
```

Sample Output 2

```
1 1
68
```

Sample Input 3

```
2 1
1 2
7
8
4 5
```

Sample Output 3

```
2 2
28 35
32 40
```

Sample Input 4

```
4 3
3 4
1 5 9
20 -6 10
3 71 -75
4 88 98
79 12 24 11
19 34 1 0
-5 -19 23 57
```

Sample Output 4

```
4 4
129 11 236 524
1416 -154 704 790
1961 3875 -1582 -4242
1498 1178 2438 5630
```

Sample Input 5

```
1 2
2 2
4 -5
3 -2
-4 7
```

Sample Output 5

```
1 2
32 -43
```

Sample Input 6

```
2 2
1 2
3 -2
-4 7
4 -5
```

Sample Output 6

MULTIPLICATION NOT POSSIBLE

Sample Input 7

```
2 2
2 1
3 -2
-4 7
4
-5
```

Sample Output 7

```
2 1
22
-51
```

[f](#) [t](#) [in](#)


Submissions: [140](#)


Max Score: 10

Difficulty: Medium

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C



```
1▼ #include <stdio.h>
2  #include <string.h>
3  #include <math.h>
4  #include <stdlib.h>
5
6▼ int main() {
7
8▼     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
9     return 0;
10 }
11
```

Line: 1 Col: 1

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