Dot and Cross

dot

The *dot* tool returns the dot product of two arrays.

```
import numpy

A = numpy.array([ 1, 2 ])
B = numpy.array([ 3, 4 ])

print numpy.dot(A, B)      #Output : 11
```

cross

The *cross* tool returns the cross product of two arrays.

```
import numpy

A = numpy.array([ 1, 2 ])
B = numpy.array([ 3, 4 ])

print numpy.cross(A, B)     #Output : -2
```

Task

You are given two arrays A and B. Both have dimensions of NxN. Your task is to compute their matrix product.

Input Format

The first line contains the integer N.
The next N lines contains N space separated integers of array A.
The following N lines contains N space separated integers of array B.

Output Format

Print the matrix multiplication of A and B.

Sample Input

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

Sample Output

```
[[ 7 10]
 [15 22]]
```