



Practice &gt; Python &gt; Numpy &gt; Inner and Outer

# Inner and Outer ☆

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**Problem**

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**inner**

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

```
import numpy

A = numpy.array([0, 1])
B = numpy.array([3, 4])

print numpy.inner(A, B)    #Output : 4
```

**outer**

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

```
import numpy

A = numpy.array([0, 1])
B = numpy.array([3, 4])

print numpy.outer(A, B)    #Output : [[0 0]
                             #          [3 4]]
```

**Task**

You are given two arrays: **A** and **B**.

Your task is to compute their *inner* and *outer* product.

**Input Format**

The first line contains the space separated elements of array **A**.

The second line contains the space separated elements of array **B**.

**Output Format**

First, print the inner product.

Second, print the outer product.

**Sample Input**

```
0 1
2 3
```

**Sample Output**

```
3
[[0 0]
 [2 3]]
```

Author

DOSHI

Difficulty

Easy

Max Score

20

Submitted By

8668

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```
1 import numpy
2 a=numpy.array(list(map(int,input().split())))
3 b=numpy.array([int(i) for i in input().split()])
4 print(numpy.inner(a,b))
5 print(numpy.outer(a,b))
6
7
8
```

Line: 1 Col: 1

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