# Inner and Outer

## 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]]
```

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### 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]]
```