

Fast Multiplication

Multiply the given numbers.

Input

n [the number of multiplications ≤ 1000]

$/1 /2$ [numbers to multiply (at most 10000 decimal digits each)]

Text grouped in [] does not appear in the input file.

Output

The results of multiplications.

Example

Input:

```
5
4 2
123 43
324 342
0 12
9999 12345
```

Output:

```
8
5289
110808
0
123437655
```

Warning: large Input/Output data, be careful with certain languages