1592 - The Size is Not Important

Description

In many programming languages available integer types only can represent data within a limited range due to the constraints of its internal representation. The use of real data types sometimes can represent data from a wider range, but losing precision in the calculations. Therefore, it may be necessary to seek alternative methods of representation of integers when we want to manipulate very large values.

We want to multiply large integers without causing calculation errors or incorrect results, without using real numbers.

Input specification

The first line contains the number 1 <= m <= 10 of multiplications to be performed.

The following 2m lines (from 2 to 2m + 1) contain each a whole number represented as a string of at most 50 characters (characters between '0 'and '9' - possibly preceded by the sign '-').

Output specification

The line k of the output represents the multiplication of integers contained in 2k and 2k + 1 lines in the input. Integers are represented as well as a string of characters (digits possibly preceded by the sign '-'). The results can not be superfluous zeros to the left.

Sample input

```
3
-0124576679
10859687
00345
42
```

```
0
23
```

Sample output

```
-1352863741439473
14490
0
```

Hint(s)

Source	
Added by	**ymondelo20**
Addition date	2011-11-15
Time limit (ms)	1000
Test limit (ms)	1000
Memory limit (kb)	130000
Output limit (mb)	64
Size limit (bytes)	30000
Enabled languages	C C# C++ Java Pascal Perl PHP Python Ruby Text