Problem Statement 9:

Given two big-Integers A[] and B[]. Perform the product of these two numbers and print the resultant. Use the following function protoypes.

```
void product(char A[], char B[], char result[]);
void scalarProduct(char A[], int x, char result[]);
void appendZerosRight(char B[], int k, char result[]);
void addBigIntegers(char A[], char B[], char result[]);
```

Input:

First line specifies t, the number of test cases. Next t lines consists of a two space separated big integers A[] and B[].

Output:

For each test case print the product of A and B.

Constraints:

1 <= t <= 100

1<=length of A, B<=100

Sample Input:

3

123 2

Sample Output:

1111111111111111111111111111100

0

246