

Dora Learns Multiplication

Dora the Explorer's exciting adventures take a surprising twist when she ends up in quarantine due to a big COVID-19 situation in the country. Stuck at home with her father, who's a Computer Engineer, Dora's usual outdoor escapades turn into lessons in numbers. Her father, making the most of the situation, decides to teach her about multiplication. But math is like a tough jungle for Dora, quite different from her usual outdoor explorations. Luckily, she has Isa, a clever iguana, by her side to help her out.

As Dora navigates through basic multiplication, her father springs a series of multiplication riddles upon her. He secretly wants to stop her from exploring the outdoors, and instead focus on becoming a skilled Computer Engineer as himself. He hopes Dora will struggle with these problems, so that he can force her to stop going outdoors and focus more on studying. He's also aware that her friend, Isa the iguana, is excellent at solving problems and will likely assist her.

Dora is undeterred and turns to you, Isa, for help. Can you guide her through these tricky problems and help her conquer this math challenge?

Input Format

The first line contains an integer t , the number of test cases.

Each of the next t pairs of lines contains two integers, A_i and B_i .

Constraints

$$A_i, B_i \in \mathbb{Z}^+$$

For the first ~20 testcases, $100 \leq \lfloor \log_{10}(A_i) \rfloor + \lfloor \log_{10}(B_i) \rfloor \leq 10^5$

For the rest of the testcases, except the last three, $10^5 < \lfloor \log_{10}(A_i) \rfloor + \lfloor \log_{10}(B_i) \rfloor \leq 10^6$

The last three testcases contain integers such that $10^6 < \lfloor \log_{10}(A_i) \rfloor + \lfloor \log_{10}(B_i) \rfloor \leq 10^7$ as an extra challenge!

Output Format

t lines containing the answer, $A_i \times B_i$, for each test case.

Sample Input 0

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3
12345
67890
67328
365122
923178
174369
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Sample Output 0

838102050
24582934016
160973624682