Ones and Twos

You are using at most **A** number of 1s and at most **B** number of 2s. How many different evaluation results are possible when they are formed in an expression containing only addition `+` sign and multiplication `*` sign are allowed?

Note that, multiplication takes precedence over addition.

For example, if **A=2** and **B=2**, then we have the following expressions:

- `1`, `1*1` = 1
- `2`, `1*2`, `1*1*2`, `1+1` = 2
- `1+2`, `1+1*2` = 3
- `2+2`, `2*2`, `1+1+2`, `1*2*2`, `1*1*2*2`, `1*2+1*2`, `1*1*2+2`, `1*2+2` = 4
- `1+2+2`, `1+1*2+2` = 5
- `1+1+2+2`, `1+1+2*2` = 6

So there are 6 unique results that can be formed if A = 2 and B = 2.

Input Format

The first line contains the number of test cases T, T testcases follow each in a newline.
Each testcase contains 2 integers A and B separated by a single space.

Constraints

$1 <= T <= 10^5$
0<=A<=1000000000
0<=B<=1000

Output Format

Print the number of different evaluations modulo (%) (10^9+7.)

Sample Input

```
4
0 0
2 2
0 2
2 0
```

Sample Output

```
0
6
2
2
```

Explanation

- When A = 0, B = 0, there are no expressions, hence 0.
- When A = 2, B = 2, as explained in the problem statement above, expressions leads to 6 possible solutions.
- When A = 0, B = 2, we have `2`, `2+2` or `2*2`, hence 2.
- When A = 2, B = 0, we have `1` or `1*1`, `1+1` hence 2.