

## A. Vasya and Coins

time limit per test: 1 second  
 memory limit per test: 256 megabytes  
 input: standard input  
 output: standard output

Vasya decided to go to the grocery store. He found in his wallet  $a$  coins of 1 burle and  $b$  coins of 2 burles. He does not yet know the total cost of all goods, so help him find out  $s$  ( $s > 0$ ): the **minimum** positive integer amount of money he **cannot** pay without change or pay at all using only his coins.

For example, if  $a = 1$  and  $b = 1$  (he has one 1-burle coin and one 2-burle coin), then:

- he can pay 1 burle without change, paying with one 1-burle coin,
- he can pay 2 burle without change, paying with one 2-burle coin,
- he can pay 3 burle without change by paying with one 1-burle coin and one 2-burle coin,
- he cannot pay 4 burle without change (moreover, he cannot pay this amount at all).

So for  $a = 1$  and  $b = 1$  the answer is  $s = 4$ .

### Input

The first line of the input contains an integer  $t$  ( $1 \leq t \leq 10^4$ ) — the number of test cases in the test.

The description of each test case consists of one line containing two integers  $a_i$  and  $b_i$  ( $0 \leq a_i, b_i \leq 10^8$ ) — the number of 1-burle coins and 2-burles coins Vasya has respectively.

### Output

For each test case, on a separate line print one integer  $s$  ( $s > 0$ ): the minimum positive integer amount of money that Vasya cannot pay without change or pay at all.

### Example

input	Copy
5 1 1 4 0 0 2 0 0 2314 2374	
output	Copy
4 5 1 1 7063	

### Note

- The first test case of the example is clarified into the main part of the statement.
- In the second test case, Vasya has only 1 burle coins, and he can collect either any amount from 1 to 4, but 5 can't.
- In the second test case, Vasya has only 2 burle coins, and he cannot pay 1 burle without change.
- In the fourth test case you don't have any coins, and he can't even pay 1 burle.

### Codeforces Round #780 (Div. 3)

Finished

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