

## Problem E. Error detection

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Input file: input.txt

Output file: output.txt

Time limit: 1 sec

Memory limit: 256 Mb

### Statement

FEFU computer scientists use a duplication method to detect errors in network data transfer. Each bit of data is duplicated. The duplicate follows the original bit. Each byte therefore is transferred as a message of two bytes. The first byte of the message encodes high bits of the original byte, the second byte encodes low bits.

For example, a byte 67 is encoded as follows:

1.  $67_{10} = 01000011_2$ ;
2. the sequence 01000011 is encoded as 0011000000001111;
3. the sequence 0011000000001111 is split into 00110000 and 00001111;
4.  $00110000_2 = 48_{10}$ ,  $00001111_2 = 15_{10}$ , so the result is 4815

Scientists received two bytes. Now they need to find out what the original byte was.

### Input file format

Input file contains two integers designating two received bytes.

### Output file format

Output file must contain a single integer — the original byte, or  $-1$  if there was an error during transfer.

### Constraints

Both input integers are in the range from 0 to 255.

### Sample tests

No.	Input file (input.txt)	Output file (output.txt)
1	48 15	67
2	48 7	-1

0.034s 0.010s 9