
Input file: **standard input**
Output file: **standard output**
Time limit: 2 seconds
Memory limit: 64 megabytes

You are given integer number N , guaranteed that the number has exactly 4 bits in binary representation. reverse the number in binary representation and print out it.

Input

One integer number N

Output

Reversed number

Examples

standard input	standard output
12	3
11	13
13	11
9	9
10	5

Note

reverse example: 12 in binary representation is 1100, 0011 is reversed number, it means you should output 3.