UESTC 2016 Summer Training #13 Div.2

1:59:39 5:00:00

Overview | Problem | Status | Rank | Discuss

A B C D E F G H I

C - C

Time Limit:2000MS **Memory Limit:**262144KB **64bit IO Format:**%I64d & %I64u

Submit Status

Description

standard input/output

Your team was exploring an ancient city. Suddenly you found an old scroll with 2 integer numbers N and K, which encrypts the secret code to open a treasure box. Considering a transformation on an integer X described as follows:

$X = X + X \, mod \, 100,$

the secret code can be obtained by applying the above-described transformation K times successively to N.

Input

The input file consists of several datasets. The first line of the input file contains the number of datasets which is a positive integer and is not greater than 500.

Each dataset has two space-separated positive integers N and $K(1 \le N \le 10^9, 1 \le K \le 10^9)$ written on a single line.

Output

For each dataset, write on a single line the secret number decrypted from N and K.

Sample Input

Input
2 31102014 2 10101 10
Output
31102056 10324

Anything about the OJ, please ask in the forum, or contact author:Isun
Server Time: 2016-07-25 13:59:38