

6015 Identify the Number

You are given three numbers N , Q and R . You want to find M , such that:

- M is positive.
- The string decimal representation of M is a subsequence of the string decimal representation of N , i.e. M can be obtained from the removal of zero or more digits from the decimal representation of N .
- M gives a remainder of R when divided by Q .
- M is the maximum possible.

Input

Your program will be tested on one or more test cases. The first line of the input will be a single integer T , the number of test cases ($1 \leq T \leq 200$). Next T lines contain the test cases, each on a single line.

Each case contains three integers, separated by single spaces, N , R , Q as described in the problem, in this order ($1 \leq N < 10^{1,000}$, $0 \leq R < Q \leq 1,000$). All numbers in the input will not contain leading zeros.

Output

For each test case, output, on a single line, the number M as described in the problem, with no leading zeros. If no such M can be found, output on a single line "Not found" instead.

Note:

In the first case below, 840 is divisible by 8, thus it is the largest possible value of M .

In the second case, the subsequences of 901 are $\{9, 0, 1, 90, 01, 91, 901\}$. Out of these there is 0 which is not positive and 01 which has a leading zero. Only 91 has a remainder of 3 when divided by 8.

In the third case, there is no subsequence of 123456789 that gives a remainder of 10 when divided by 100.

Sample Input

```
3
840 0 8
901 3 8
123456789 10 100
```

Sample Output

```
840
91
Not found
```