

Problem B

Super Number

Input: Standard Input
Output: Standard Output
Time Limit: 3 Seconds

Don't you think **162456723** very special? Look at the picture below if you are unable to find its speciality. (**a | b** means 'b is divisible by a')

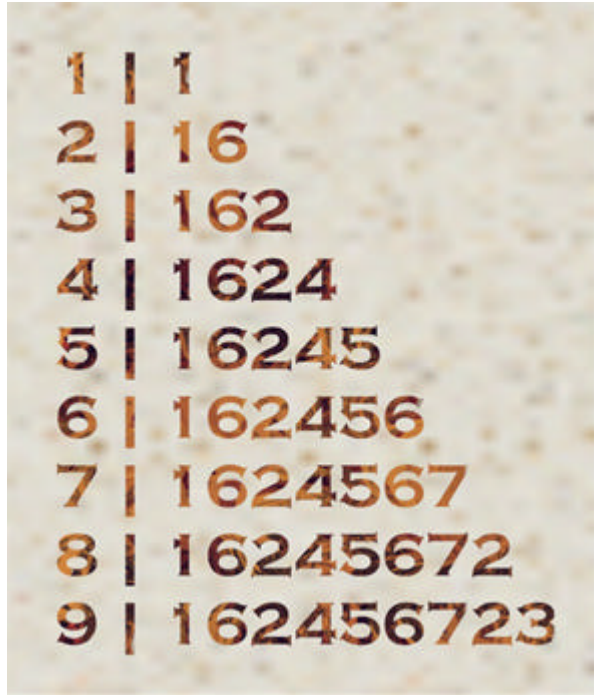


Figure: Super Numbers

Given **n**, **m** ($0 < n < m < 30$), you are to find a **m**-digit positive integer **X** such that for every **i** ($n \leq i \leq m$), the first **i** digits of **X** is a multiple of **i**. If more than one such **X** exists, you should output the lexicographically smallest one. Note that the first digit of **X** should **not** be **0**.

Input

The first line of the input contains a single integer **t** ($1 \leq t \leq 15$), the number of test cases followed. For each case, two integers **n** and **m** are separated by a single space.

Output

For each test case, print the case number and **X**. If no such number, print **-1**.

Sample Input

```
2
1 10
3 29
```

Output for Sample Input

```
Case 1: 1020005640
Case 2: -1
```

Problemsetter: Rujia Liu, Member of Elite Problemsetters' Panel

Special Thanks to:

Monirul Hasan (Alternate solution)

Shahriar Manzoor (Figure Drawing)