Time limit: 1.0s Memory limit: 128M

Sam is given two integers n and k. In one operation, he is allowed to prepend a digit d ($0 \le d \le 9$) to n. As a servant of Sam, you are to determine if there exists a sequence of operations such that at the end n will be divisible by k.

To ensure the integrity of your solution, there may be up to t test cases.

Constraints

- $1 \leq t \leq 10^5$
- $1 \leq n,k \leq 10^9$

Input Specification

The first line contains an integer t, the number of test cases.

The first line of each test case contains 2 integers n and k.

Output Specification

For each test case, output $\forall \text{YES}$ if a sequence of operations exists such that n will be divisible by k, and $\forall \text{NO}$ otherwise.

Sample Input

1 64

Sample Output

YES

Explanation

For the first and only test case, with one operation, we can prepend 1 to 6 making it 16 which is divisible by 4.