# **Practice Problem<sup>1</sup>: Find Multiples**

Given an integer value  $\mathbf{n}$  ( $\mathbf{0} < \mathbf{n} < 1000$ ), followed by a list of integers, all of which are greater than 0 and less than 10000, report whether or not a given number in the list is a multiple of  $\mathbf{n}$  (that is,  $\mathbf{n}$  divides into that number without remainder at least one time).

## Input (from file practice.in)<sup>2</sup>

On the first line in the file is the value of which you are to find multiples. Following this, on a line by line basis, will be single integer values, each greater than 0 and less than 10000, which are to be examined as possible multiples of the first number. Input is terminated when a value of 0 is encountered. NOTE: There will be at least one non-zero value following the initial number in the file.

### Output (to stdout)<sup>3</sup>

Write to stdout each value and whether or not it is a multiple of the initial value as shown in the sample below. Be sure you precisely follow the format given in the output.

#### Sample Input

#### Sample Output

1 is NOT a multiple of 3. 7 is NOT a multiple of 3. 99 is a multiple of 3. 321 is a multiple of 3. 777 is a multiple of 3.

<sup>&</sup>lt;sup>1</sup> Do not use this problem for frivolous submissions, clarifications, or testing how judges will respond. Doing so may disqualify your team from the contest.

<sup>&</sup>lt;sup>2</sup> All input for each problem in the contest will come from an input file whose name is the problem letter followed by the extension .in (e.g. a.in).

<sup>&</sup>lt;sup>3</sup> All output for each problem in the contest will be written to stdout / cout / System.out (the monitor!)