

## 11256 Repetitive Multiple

An integer is said to be repetitive if it can be written as a concatenation of several copies (at least two) of another non-zero-leading integer. For example, 11, 123123, 454545 are all repetitive integers.

Since zero-leading integers are not allowed, 101 can not be considered as 0101. Therefore, 101 is not repetitive.

Given a positive integer  $n$ , what is the smallest repetitive integer which is a multiple of  $n$ .

### Input

The input begins with an integer  $N$  ( $\leq 100$ ) which indicates the number of test cases followed. Each of the following test cases consists of a positive integer  $n$ , where  $n$  will be less than  $10^9$ .

### Output

For each test case, print out the smallest repetitive multiple of  $n$  in a single line.

### Sample Input

```
5
7
101
123
999999
6339673
```

### Sample Output

```
77
1010
33333
999999
114114114
```