Special Multiple

You are given an integer N. Can you find the least positive integer X made up of only 9's and 0's, such that, X is a multiple of N?

Update

X is made up of one or more occurences of 9 and zero or more occurences of 0.

Input Format

The first line contains an integer T which denotes the number of test cases. T lines follow.

Each line contains the integer N for which the solution has to be found.

Output Format

Print the answer X to STDOUT corresponding to each test case. The output should not contain any leading zeroes.

Constraints

```
1 \le T \le 10^4

1 \le N \le 500
```

Sample Input

```
3
5
7
1
```

Sample Output

```
90
9009
9
```

Explanation

90 is the smallest number made up of 9's and 0's divisible by 5. Similarly, you can derive for other cases.

Timelimits Timelimits for this challenge is given here