

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 occurrences of 9 and zero or more occurrences 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

$$1 \leq T \leq 10^4$$

$$1 \leq N \leq 500$$

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](#)