3406 - Help with the Homework

Description

Anita goes to elementary school and she is a very curious girl who likes to play with her friends and having fun in school. But Anita has a very strict father who forces her to do extensive homework and until the poor girl does not end, he won't let her go out and play with her friends. For this reason, Anita has asked for your help to meet the challenge that her father has given her this day, and to go out and play.

To solve the task first the father explained the girl a function that should dominate:
C (n) = nn (This is the concatenation of the number n after the same number again)
An example would be C (9) = 99, C (145) = 145145, and in this way for any value of n.
After explaining that, the father asked her, What is the final result of evaluating the following formula?
C (n) -n
As the number was very large, Anita has been trying for so long and she could not solve the problem, do you think you can help the girl before it gets dark, so she can go out and play with her friends?

Input specification

The first line contains an integer 1 <T <= 1000 which is the amount of numbers that Anita's father sent her to calculate. The next T lines contain a positive integer N, where N <= 10^1000.

Output specification

For each case , show a single line with the result of evaluating **C(n)-n**.

Sample input

```
2
9
145
```

Sample output

```
90
145000
```

Hint(s)

Source	Guillermo González Jimenez
Added by	**WIL**
Addition date	2015-11-19
Time limit (ms)	10000
Test limit (ms)	2000
Memory limit (kb)	1073741824
Output limit (mb)	64
Size limit (bytes)	10000
Enabled languages	Bash C C# C++ C++11 Java JavaScript-NodeJS Pascal Perl PHP Prolog Python Ruby Text