Problem H. International Olympiad

Time limit 1000 ms
Mem limit 262144 kB

International Abbreviation Olympiad takes place annually starting from 1989. Each year the competition receives an abbreviation of form `IAO'y`, where y stands for some number of consequent last digits of the current year. Organizers always pick an abbreviation with non-empty string y that has never been used before. Among all such valid abbreviations they choose the shortest one and announce it to be the abbreviation of this year's competition.

For example, the first three Olympiads (years 1989, 1990 and 1991, respectively) received the abbreviations `IAO'9`, `IAO'0` and `IAO'1`, while the competition in 2015 received an abbreviation `IAO'15`, as `IAO'5` has been already used in 1995.

You are given a list of abbreviations. For each of them determine the year it stands for.

Input

The first line of the input contains a single integer n ($1 \le n \le 1000$) — the number of abbreviations to process.

Then n lines follow, each containing a single abbreviation. It's guaranteed that each abbreviation contains at most nine digits.

Output

For each abbreviation given in the input, find the year of the corresponding Olympiad.

Sample 1

Input	Output
5 IAO'15 IAO'2015 IAO'1 IAO'9 IAO'0	2015 12015 1991 1989 1990

Sample 2

Input	Output
4 IAO'9 IAO'99 IAO'999 IAO'9999	1989 1999 2999 9999