

Problem A. IPs

Input file: standard input
Output file: standard output
Time limit: 2 seconds
Memory limit: 256 megabytes

February is so close and it's time to hire some new interns in Eonics, so it is going to be a busy time for the Human Resources team and also for Jan Peter to do all the interviews with the candidates. **Jan Peter** has a very busy agenda and adding more long interviews to it will drive him crazy, so to keep them short he decided to give each candidate a small technical test just before the meeting and discuss it later during the interview.

You were one of the candidates and your task was to write a program to convert a given IP address to the binary system.

Any IP address is in the form of $a.b.c.d$ where $0 \leq a, b, c, d \leq 255$.

Input

The first line contains the number of test cases T .

Each of the next T lines contains one IP address. It is guaranteed that the given IP address is valid.

Output

For each test print the same IP address in the binary system (see sample output).

Example

standard input	standard output
2	11110010.00001111.00101111.01101111
242.15.47.111	01111111.00000000.00000000.00000001
127.0.0.1	