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ONEZERO - Ones and zeros

[#bfs \(/problems/tag/bfs\)](/problems/tag/bfs/)

Certain positive integers have their decimal representation consisting only of ones and zeros, and having at least one digit one, e.g. 101. If a positive integer does not have such a property, one can try to multiply it by some positive integer to find out whether the product has this property.

Input

Number K of test cases (K is approximately 1000);
in each of the next K lines there is one integer n ($1 \leq n \leq 20000$)

Output

For each test case, your program should compute the smallest multiple of the number n consisting only of digits 1 and 0 (beginning with 1).

Example

Input:
3
17
11011
17
Output:
11101
11011
11101

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aditya930 (/users/aditya930): 2017-10-20 15:47:04
getting WA can someone help wrong answer code is <https://ideone.com/SMd9dj>



vishesh197 (/users/vishesh197): 2017-10-17 17:11:10
did it using bfsbut used modular arithmetic for checking remainder.....it took me 5.44sec but AC in first go.Can anybody help me with my implementation....



nadstratosfer (/users/nadstratosfer): 2017-10-17 10:37:54
If you come here to practice BFS, look elsewhere. It's basically a bruteforce trial division over binary-looking numbers. People raving about smart-sounding acronyms here remind me of binmen calling themselves "environmental officers".



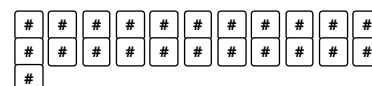
rohit1507 (/users/rohit1507): 2017-09-20 13:28:01
Fcking awesome!!! Question worth giving time!

Added by: Paweł Dobrzycki (/users/ci...)
Date: 2005-05-26
Time limit: 8s
Source limit: 4096B
Memory limit: 1536MB
Cluster: Cube (Intel G860) (/cluster:...)
Languages: All except: NODEJS PERL6 VB.NET
Resource: II Polish Olympiad in Informatics, 1st Stage

Vote requirements

- ✓ be spoj user for at least 5 days
- ✓ solve at least 15 problems
- ✗ solve this problem

Own tags


 Tag name

Ac