13216 Problem with a ridiculously long name but with a ridiculously short description

All of us hate looooong descriptions, so here goes one short: Calculate $(66^n) \mod 100$ for the given n.

Input

First line of input contains T, the number of test cases $(1 \le T \le 5000)$. Then, there are T lines, one for each case, containing $n \ (1 \le n \le 10^{1000})$.

Output

Print one line per case, the solution of $(66^n) \mod 100$.

Sample Input

4 0 1 2 999999999999999999999999999999

Sample Output