Problem L. Problem with a ridiculously long name but with a ridiculously short description

Input:	standard
Output:	standard
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All of us hate loooooong 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 $(66^n) \mod 100$.

Example

Input	Output
4	1
0	66
1	56
2	36
999999999999999999999	