Haitang and Math

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Haitang defines the $S(m)$ of a positive integer m as the sum of digits in m.

For example, $S(154) = 1 + 5 + 4 = 10$, $S(147) = 1 + 4 + 7 = 12$.

Given a positive integer n, count the number of positive integers $m \leq n$ such that $n \bmod m = S(m)$.

Input

Each test contains multiple test cases. The first line contains an integer T ($1 \leq T \leq 100$) — the number of test cases. The description of the test cases follows.

The first and only line of each test case contains an integer n ($1 \leq n \leq 10^{12}$).

Output

For each test case, print one line containing an integer — the answer.

Example

standard input	standard output
8 11 45 14 191 9810 20061130 20080520 998244353	1 3 0 3 17 10 3 15