Sum of Sum of Digits

Input file:	`standard input`
Output file:	`standard output`
Time limit:	0.5 seconds
Memory limit:	1024 megabytes

bribritt wrote the integers from 1 to n, inclusive, on the board.

What is the sum of all digits on the board?

For example, if $n = 12$ then the numbers on the board are:

$$1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.$$

Hence, the digits on the board are

$$1, 2, 3, 4, 5, 6, 7, 8, 9, 1, 0, 1, 1, 1, 2.$$

The sum of these digits is $1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 1 + 0 + 1 + 1 + 1 + 2 = 51$. Thus, for $n = 12$ the answer is 51.

Input

The first line contains an integer t — the number of test cases.

The only line of each test case contains a single integer n — the largest number bribritt writes.

Output

For each test case, output a single integer — the sum of the digits written.

Scoring

For all testcases, $1 \leq t \leq 10^4$ and $1 \leq n \leq 10^{12}$.

Subtask	Score	Additional constraints
1	7	$t = n = 1$
2	26	$t = 1, n \leq 2 \times 10^5$
3	67	$n \leq 2 \times 10^5$
4	0	No additional constraints
5	0	Sample testcase

Example

standard input	standard output
1 12	51