

One of the first users of BIT's new supercomputer was Chip Diller. He extended his exploration of powers of 3 to go from 0 to 333 and he explored taking various sums of those numbers.

"This supercomputer is great," remarked Chip. "I only wish Timothy were here to see these results." (Chip moved to a new apartment, once one became available on the third floor of the Lemon Sky apartments on Third Street.)

## Input

The input will consist of at most 100 lines of text, each of which contains a single `VeryLongInteger`. Each `VeryLongInteger` will be 100 or fewer characters in length, and will only contain digits (no `VeryLongInteger` will be negative).

The final input line will contain a single zero on a line by itself.

## Output

Your program should output the sum of the `VeryLongIntegers` given in the input.

## Sample Input

```
123456789012345678901234567890
123456789012345678901234567890
123456789012345678901234567890
0
```

## Sample Output

```
370370367037037036703703703670
```