

Problem 6—Alien Math

On Saturday nights, Professor Plum takes off his aluminum-foil helmet and tunes his FM radio between two local stations. He is convinced that aliens are broadcasting on that frequency. Somehow he has deducted from listening to the static that the aliens have 4-fingers on each of 3 hands. To prepare for the alien invasion, he wants to practice his base-12 mathematics. He decided to use the digits: 0 – 9, A, and B, and focus only on addition.

Professor Plum wants you to develop a base-12 addition program to check his answers.

INPUT SPECIFICATION

Each line of input contains two base-12 numbers separated by a single space. Each base-12 number will contain at most 50 digits.

OUTPUT SPECIFICATION

The output file should contain one line of output corresponding to each line of input. Each output line contains the corresponding base-12 sum.

SAMPLE INPUT

```
934A5 349
546A 96AB7
55555555555555555555 55555555555555555555
6BAA0A5 4482
```

SAMPLE OUTPUT

```
93832
A0365
AAAAAAAAAAAAAAAAAAAAA
6BB2567
```