

PLAY THE DIGITS

Digits are the basic building block of any number. Play the digit is a game played by decomposing a number into digits and performing certain functions on it. These digits can be added, subtracted, multiplied and divided. The functions to be applied will be hierarchical (does not matter for addition and multiplication). In case of subtraction or division the most significant digit will be subtracted/divided by the second most significant digit and their answer will then be subtracted/divided by the next most significant digit and so on. For example: divide for 821 will be 4 (8 divided by 2 then the result 4 divided by 1). In case of digit zero in division and multiplication we will ignore it. For example: Multiply for 302 will be 6 (3 multiply by 2 is 6 and 0 is ignored)

Input:

First line of input contains an integer 't' which is the number of test cases. Followed by 't' lines. First alphabet of each line is the operation (+, -, *, /) followed by an integer.

Output:

For each test case you have to print the resultant after applying the given operation.

Sample:

Input:

3
+367
-954
/903

Output:

16
0
3