## Problem 2 – Text to Number

You are given a text and a number (M). This text can contain **digits**, **Latin letters** (both capital and letter case) and **any other symbols**, **except for '@'**. The number is used to the parsing of the text.

Your task is to go through all characters of the text and, starting from RESULT = 0, to perform the following operations:

* If the current character is '@', stop the program and print the RESULT
* If the current character is a digit (0-9), then multiply the RESULT by this digit
* If the current character is a letter, add its number from the Latin alphabet to RESULT. 'A' is with number 0
* If the current character is a symbol, that is different from the ones above, create module of the RESULT by the provided number (M)

### Input

The input data is given at the standard input.

It consists of two lines:

* The first one contains the number M, that is used for the module of the result
* The second line contains the text

The input will be valid, in the specified format, within the constraints given below. There is no need to check the input data explicitly.

### Output

Print the result from the parsing (RESULT)

### Constraints

* M will always be between 2000 and 10 000
* The length of the text will always be less than 100 000
* Allowed working time for your program: 0.5 seconds.
* Allowed memory: 16 MB.

### Example

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Description** |
| 2001  Hello .NET 5! My name is Peter 8-)@ | 518 | RESULT = 0 + 7(H) = 7  RESULT = 7 + 4(e) = 11  RESULT = 11 + 11(l) = 22  RESULT = 22 + 11(l) = 33  RESULT = 33 + 14(o) = 47  RESULT = 47 % 2001( ) = 47  RESULT = 47 % 2001(.) = 47  RESULT = 47 + 13(N) = 60  RESULT = 60 + 4(E) = 64  RESULT = 64 + 19(T) = 83  RESULT = 83 % 2001( ) = 83  RESULT = 83 \* 5(5) = 415  RESULT = 415 % 2001(!) = 415  RESULT = 415 % 2001( ) = 415  RESULT = 415 + 12(M) = 427  RESULT = 427 + 24(y) = 451  RESULT = 451 % 2001( ) = 451  RESULT = 451 + 13(n) = 464  RESULT = 464 + 0(a) = 464  RESULT = 464 + 12(m) = 476  RESULT = 476 + 4(e) = 480  RESULT = 480 % 2001( ) = 480  RESULT = 480 + 8(i) = 488  RESULT = 488 + 18(s) = 506  RESULT = 506 % 2001( ) = 506  RESULT = 506 + 15(P) = 521  RESULT = 521 + 4(e) = 525  RESULT = 525 + 19(t) = 544  RESULT = 544 + 4(e) = 548  RESULT = 548 + 17(r) = 565  RESULT = 565 % 2001( ) = 565  RESULT = 565 \* 8(8) = 4520  RESULT = 4520 % 2001(-) = 518  RESULT = 518 % 2001()) = 518 |
| 2222  Starwars 4, 5 and 6 are better that 1, 2 and 3@ | 1332 | RESULT = 0 + 18(S) = 18  RESULT = 18 + 19(t) = 37  RESULT = 37 + 0(a) = 37  RESULT = 37 + 17(r) = 54  RESULT = 54 + 22(w) = 76  RESULT = 76 + 0(a) = 76  RESULT = 76 + 17(r) = 93  RESULT = 93 + 18(s) = 111  RESULT = 111 % 2222( ) = 111  RESULT = 111 \* 4(4) = 444  RESULT = 444 % 2222(,) = 444  RESULT = 444 % 2222( ) = 444  RESULT = 444 \* 5(5) = 2220  RESULT = 2220 % 2222( ) = 2220  RESULT = 2220 + 0(a) = 2220  RESULT = 2220 + 13(n) = 2233  RESULT = 2233 + 3(d) = 2236  RESULT = 2236 % 2222( ) = 14  RESULT = 14 \* 6(6) = 84  RESULT = 84 % 2222( ) = 84  RESULT = 84 + 0(a) = 84  RESULT = 84 + 17(r) = 101  RESULT = 101 + 4(e) = 105  RESULT = 105 % 2222( ) = 105  RESULT = 105 + 1(b) = 106  RESULT = 106 + 4(e) = 110  RESULT = 110 + 19(t) = 129  RESULT = 129 + 19(t) = 148  RESULT = 148 + 4(e) = 152  RESULT = 152 + 17(r) = 169  RESULT = 169 % 2222( ) = 169  RESULT = 169 + 19(t) = 188  RESULT = 188 + 7(h) = 195  RESULT = 195 + 0(a) = 195  RESULT = 195 + 19(t) = 214  RESULT = 214 % 2222( ) = 214  RESULT = 214 \* 1(1) = 214  RESULT = 214 % 2222(,) = 214  RESULT = 214 % 2222( ) = 214  RESULT = 214 \* 2(2) = 428  RESULT = 428 % 2222( ) = 428  RESULT = 428 + 0(a) = 428  RESULT = 428 + 13(n) = 441  RESULT = 441 + 3(d) = 444  RESULT = 444 % 2222( ) = 444  RESULT = 444 \* 3(3) = 1332 |
| 9999  My nickname, when I was 25, was Pencho8473848399 ;-)@ | 2943 | RESULT = 0 + 12(M) = 12  RESULT = 12 + 24(y) = 36  RESULT = 36 % 9999( ) = 36  RESULT = 36 + 13(n) = 49  RESULT = 49 + 8(i) = 57  RESULT = 57 + 2(c) = 59  RESULT = 59 + 10(k) = 69  RESULT = 69 + 13(n) = 82  RESULT = 82 + 0(a) = 82  RESULT = 82 + 12(m) = 94  RESULT = 94 + 4(e) = 98  RESULT = 98 % 9999(,) = 98  RESULT = 98 % 9999( ) = 98  RESULT = 98 + 22(w) = 120  RESULT = 120 + 7(h) = 127  RESULT = 127 + 4(e) = 131  RESULT = 131 + 13(n) = 144  RESULT = 144 % 9999( ) = 144  RESULT = 144 + 8(I) = 152  RESULT = 152 % 9999( ) = 152  RESULT = 152 + 22(w) = 174  RESULT = 174 + 0(a) = 174  RESULT = 174 + 18(s) = 192  RESULT = 192 % 9999( ) = 192  RESULT = 192 \* 2(2) = 384  RESULT = 384 \* 5(5) = 1920  RESULT = 1920 % 9999(,) = 1920  RESULT = 1920 % 9999( ) = 1920  RESULT = 1920 + 22(w) = 1942  RESULT = 1942 + 0(a) = 1942  RESULT = 1942 + 18(s) = 1960  RESULT = 1960 % 9999( ) = 1960  RESULT = 1960 + 15(P) = 1975  RESULT = 1975 + 4(e) = 1979  RESULT = 1979 + 13(n) = 1992  RESULT = 1992 + 2(c) = 1994  RESULT = 1994 + 7(h) = 2001  RESULT = 2001 + 14(o) = 2015  RESULT = 2015 \* 8(8) = 16120  RESULT = 16120 \* 4(4) = 64480  RESULT = 64480 \* 7(7) = 451360  RESULT = 451360 \* 3(3) = 1354080  RESULT = 1354080 \* 8(8) = 10832640  RESULT = 10832640 \* 4(4) = 43330560  RESULT = 43330560 \* 8(8) = 346644480  RESULT = 346644480 \* 3(3) = 1039933440  RESULT = 1039933440 \* 9(9) = 9359400960  RESULT = 9359400960 \* 9(9) = 84234608640  RESULT = 84234608640 % 9999( ) = 2943  RESULT = 2943 % 9999(;) = 2943  RESULT = 2943 % 9999(-) = 2943  RESULT = 2943 % 9999()) = 2943 |