T1P12 – TOP SECRET!

Mr.P needs to send the information to Mr.Z. Due to the situation of the Cool War, they need to secure their message by encrypting the data that only them (and you) know how to decrypt it.

These are the procedures they use together.

1. Pick the number in the 4th, 11th, 18th, 25th and 32nd (leap by 7) as the 1st number.
2. Pick the number in the 8th, 13th, 18th, 23rd and 28th (leap by 5) as the 2nd number.
3. Summarize number that you get from 1) and 2) together and add more 10000 on top of that.
4. Pick the number in 2nd to 4th digit from 3) and summarize each of them together.
5. Pick only the last digit from 4) and add one on top of that.
6. Convert the number from 5) to the alphabet in English (1 = A, 2 = B, and so on)
7. The final number that we use to send is the number from 4) with the letter from 6)

Example;

Input: 92813912398100282033745980018127

1) The first number => 928**1**391239**8**100282**0**33745**9**80018**12**7 => 18087
2) The second number => 9281391**2**39810**0**0282**0**33745**9**800**1**8127 => 20051
3) 18087 + 20051 + 10000 = 48138
4) 4**813**8 => 813
5) 813 => 8 + 1 + 3 = 1**2** => 2 + 1 = 3
6) 3 => C

The result is **813C**

Testcases

All inputs are integers in 32 digits.

Sample Testcase

Input	Output
00000000000000000000000000000000	000A
99999999999999999999999999999999	999H
92813912398100282033745980018127	813C