Problem E: Secret Pandemics

Description

There has been rumors that alien civilizations have been exchanging secret messages of pandemics happening in their worlds. Several such messages have been intercepted and your goal is to extract the secret name of the pandemic. Fortunately, government analysts have already figured out key details of the pattern and criteria for the names. For the pattern, each name:

- 1. Contains only uppercase letters (A, B, ..., Z), digits (0, 1, ..., 9) and one of five special characters ('-', '+', '?', ',',')
- 2. Begins with letters, ends with digits, and a special character separating the two (e.g. COVID-19, COG?99)

Input

The first line of the input contains the criteria that analysts have figured out: the total count of letters and digits in the name. The second line contains the intercepted message (not exceeding 1000 characters).

Output

Print out the name of the secret pandemic on its own line. It is guaranteed that only a single name meets the criteria for each set of inputs.

NB: Kindly note that your solution will be run at least five times. Each time, it will be tested against a different set of input. The first few test cases are given below to help you check your solution. The remaining tests can be seen from the contest page for this problem or the results page after you submit your solution.

Test 1

Input	Output
5 2	COVID-19
LOREMIPSUMDOLORSCOVID.9GITAMET, CO456NS7ECTETU7RAD-19IPISCINCOVID-19QUIDZENO?QUO	

Test 2

Input	Output
7 4	COGSARS.1024
LOREMIPSUMDOLORSCOVID?998GITAMET- CO456NS7ECCOGSARS.10246TETU7RAD,19IPISCINCOVID- 19HOCDIFFER	

Test 3

Input	Output
7 3	RSCOVID?998
LOREMIPSUMDOLORSCOVID?998GITAMET-CP456NS7ECCOGSARS.14TETU7RAD,19IPISCINCOVID919HOCDIFFER	