

You're given a string s , you should generate a python code which its output is s .

Your score for each test will be:

$$\max(0, (1 - \frac{\text{your code length}}{|s|+9})) \times 10$$

Notes:

- $|s|$ is the length of s .
- Your generated python code cannot use **import**. the code should use built-in python syntax(check this list).
- You will get wrong answer if your generated python code get any exceptions or errors.
- Your generated python code's output must be s plus an end of line. (see example)
- **You can find tests here. (their order is not the same as judge)**
- Your generated python code should terminates after at most 3 seconds otherwise you will get wrong answer.

Input

First line contains an integer n .

Second line contains a string with length n , s which contains 'a'-'z', '#', '.' and '0'-'9' characters.

$$1 \leq n \leq 1000$$

Output

First print number of your generated python code's lines and then print each code's line.