Problem
Mars Mission

Input File: MarsIn.txt
Output File: MarsOut.txt
Program File: Mars

You are part of the NASA team formed to photograph Mars. Since no member of the team wanted to make the journey a photographic robot, Amanda, was sent. Amanda will fly by the planet, take monochromatic pictures with a digital camera and then transmit the digital images back to earth. One problem: the image bit stream is so long, she will be out of range before the transmission is complete.

Your job is to write a program for Amanda's on-board computer to compress the digital data prior to its transmission. Since the image data is made up of long sequences of 1's and 0's, a "count compression" technique will be used which has the potential to compress 127 image bits into one byte. In this technique the image bits are processed sequentially and compressed into eight bit groups. The left bit of the group indicates the value of the compressed sequential bits (1 or 0). The remaining seven bits form a binary number representing the number of consecutive image bits (all with the same value) compressed using this byte. For example, if the transmission begins with one hundred zeros, then the first compressed byte transmitted back to earth would be: 01100100.

Inputs
The inputs to the program will be the uncompressed image bit stream, a sequence of 1's and 0's all on one line of the file.

Outputs
Your program should output a sequence of 1's and 0's, which is the compressed version of the digital image transmitted to earth.

Sample input
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11111111111111111111111111111111000000000000000001111111111111100000000000000000
```

Sample output
```
10100001000100011000111100010011
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