



Statement

By intercepting messages from Dolan Grump's network, you managed to get the link to a platform that seems to coordinate fake news actions. Unfortunately, the creation of a guest account does not allow you to access the most interesting contents of the site, you will have to be smart to get the right authorizations...

With your amateur hacker talents, you identify a vulnerability in the site: the calculation of a user's ID is done via a simple hash of his pseudonym. By making your hash the same as that of a network admin, you will surely succeed in usurping his identity when calculating permissions!

The hash function of a string S of length N is as follows:

$$\text{hash}(S) = (S_0 * 31^{(N-1)} + S_1 * 31^{(N-2)} + \dots + S_{N-2} * 31 + S_{N-1}) \% 4294967296,$$
where S_i is the ASCII code of the character in S at the index i .

Data

Input

Line 1: a string of characters of length 5 to 50, the pseudonym of the network admin.

Output

A string of length 1 to 100, the nickname you choose so that the hash of your pseudonym is the same as that of the admin.

Constraints

- Input and output strings can only be composed of characters that can be printed without spaces (ASCII codes between 33 and 126 inclusive).
- If several valid answers exist, you can use any of them.

- Your pseudonym must be different from the network admin.

Example

If the network admin has the `BigBoss` pseudonym, his hash is worth $(66 * 31^6 + 105 * 31^5 + 103 * 31^4 + 66 * 31^3 + 111 * 31^2 + 115 * 31 + 115) \% 4294967296 = \mathbf{1548960877}$

By choosing `Coolh4cker0780578` as a pseudonym, your hash will also be 1548960877, this solution is valid indeed (among multiple other).