## Homework 4

https://leetcode.com/problems/unique-email-addresses/ https://leetcode.com/problems/find-and-replace-pattern/ https://leetcode.com/problems/finding-the-users-active-minutes/ https://leetcode.com/problems/jewels-and-stones/

## **Beautiful binary string**

Problem statement: <a href="https://www.hackerrank.com/challenges/beautiful-binary-string/problem">https://www.hackerrank.com/challenges/beautiful-binary-string/problem</a>

## String power

Suppose you have a string s and an integer k. If k is nonnegative, then  $s^k$  is a string resulting in k-fold concatenation of s to itself. If k is negative, then  $s^k$  is a string x such that  $x^{-k}$  is equal to s. Obviously, if k is negative  $s^k$  is not always defined.

Given a string s and an integer k, output  $s^{k}$  if it is defined and the word "undefined" otherwise

| ab 1      | ab           |
|-----------|--------------|
| abc 0     |              |
| abcd 3    | abcdabcdabcd |
| xyzxyz -2 | xyz          |
| xyzxyz -3 | undefined    |
| xyzxyz -1 | xyzxyz       |