

1405. Longest Happy String

Description

A string `s` is called **happy** if it satisfies the following conditions:

- `s` only contains the letters `'a'`, `'b'`, and `'c'`.
- `s` does not contain any of `"aaa"`, `"bbb"`, or `"ccc"` as a substring.
- `s` contains **at most** `a` occurrences of the letter `'a'`.
- `s` contains **at most** `b` occurrences of the letter `'b'`.
- `s` contains **at most** `c` occurrences of the letter `'c'`.

Given three integers `a`, `b`, and `c`, return *the longest possible happy string*. If there are multiple longest happy strings, return *any of them*. If there is no such string, return *the empty string* `""`.

A **substring** is a contiguous sequence of characters within a string.

Example 1:

Input: `a = 1, b = 1, c = 7`

Output: `"ccaccbcc"`

Explanation: `"ccbccacc"` would also be a correct answer.

Example 2:

Input: `a = 7, b = 1, c = 0`

Output: `"aabaa"`

Explanation: It is the only correct answer in this case.

Constraints:

- $0 \leq a, b, c \leq 100$
- $a + b + c > 0$

