Problem 1844: Replace All Digits with Characters

Problem Information

Difficulty: Easy
Acceptance Rate: 82.46%
Paid Only: No
Tags: String

Problem Description

You are given a **0-indexed** string `s` that has lowercase English letters in its **even** indices and digits in its **odd** indices.

You must perform an operation `shift(c, x)`, where `c` is a character and `x` is a digit, that returns the `xth` character after `c`.

* For example, `shift('a', 5) = 'f'` and `shift('x', 0) = 'x'`.

For every **odd** index `i`, you want to replace the digit `s[i]` with the result of the `shift(s[i-1], s[i])` operation.

Return `s` __ after replacing all digits. It is **guaranteed** that __`shift(s[i-1], s[i])`__ will never exceed __`'z'`.

Note that `shift(c, x)` is **not** a preloaded function, but an operation _to be implemented_ as part of the solution.

Example 1:

Input: s = "a1c1e1" **Output:** "abcdef" **Explanation:** The digits are replaced as follows: - s[1] -> shift('a',1) = 'b' - s[3] -> shift('c',1) = 'd' - s[5] -> shift('e',1) = 'f'

Example 2:

Input: s = "a1b2c3d4e" **Output:** "abbdcfdhe" **Explanation:** The digits are replaced as follows: - s[1] -> shift('a',1) = 'b' - s[3] -> shift('b',2) = 'd' - s[5] -> shift('c',3) = 'f' - s[7] -> shift('d',4) = 'h'

Constraints:

* `1 <= s.length <= 100` * `s` consists only of lowercase English letters and digits. * `shift(s[i-1], s[i]) <= 'z'` for all **odd** indices `i`.

Code Snippets

C++:

```
class Solution {
public:
string replaceDigits(string s) {


}
};
```

Java:

```
class Solution {
public String replaceDigits(String s) {


}
}
```

Python3:

```
class Solution:
def replaceDigits(self, s: str) -> str:
```