We have a string `s` of lowercase letters, and an integer array `shifts`.

Call the *shift* of a letter, the next letter in the alphabet, (wrapping around so that `'z'` becomes `'a'`).

For example, `shift('a') = 'b'`, `shift('t') = 'u'`, and `shift('z') = 'a'`.

Now for each `shifts[i] = x`, we want to shift the first `i+1` letters of `s`, `x` times.

Return the final string after all such shifts to `s` are applied.

Example 1:

```
Input: S = "abc", shifts = [3,5,9]

Output: "rpl"

Explanation:

We start with "abc".

After shifting the first 1 letters of S by 3, we have "dbc".

After shifting the first 2 letters of S by 5, we have "igc".

After shifting the first 3 letters of S by 9, we have "rpl", the answer.
```

Note:

1. `1 <= S.length = shifts.length <= 20000`
2. `0 <= shifts[i] <= 10 ^ 9`