5544. Lexicographically Smallest String After Applying Operations

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User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

You are given a string `s` of **even length** consisting of digits from `0` to `9`, and two integers `a` and `b`.

You can apply either of the following two operations any number of times and in any order on `s`:

- Add `a` to all odd indices of `s` **(0-indexed)**. Digits post `9` are cycled back to `0`. For example, if `s = "3456"` and `a = 5`, `s` becomes `"3951"`.
- Rotate `s` to the right by `b` positions. For example, if `s = "3456"` and `b = 1`, `s` becomes `"6345"`.

Return *the **lexicographically smallest** string you can obtain by applying the above operations any number of times on* `s`.

A string `a` is lexicographically smaller than a string `b` (of the same length) if in the first position where `a` and `b` differ, string `a` has a letter that appears earlier in the alphabet than the corresponding letter in `b`. For example, `"0158"` is lexicographically smaller than `"0190"` because the first position they differ is at the third letter, and `'5'` comes before `'9'`.

Example 1:

```
Input: s = "5525", a = 9, b = 2
Output: "2050"
Explanation: We can apply the following operations:
Start:  "5525"
Rotate: "2555"
Add:    "2454"
Add:    "2353"
Rotate: "5323"
Add:    "5222"
Add:    "5121"
Rotate: "2151"
Add:    "2050"
There is no way to obtain a string that is lexicographically smaller then "2050".
```

Example 2:

```
Input: s = "74", a = 5, b = 1
Output: "24"
Explanation: We can apply the following operations:
Start:  "74"
Rotate: "47"
Add:    "42"
Rotate: "24"
There is no way to obtain a string that is lexicographically smaller then "24".
```

Example 3:

```
Input: s = "0011", a = 4, b = 2
Output: "0011"
Explanation: There are no sequence of operations that will give us a lexicographically smaller string than "0011".
```

Example 4:

```
Input: s = "43987654", a = 7, b = 3
Output: "00553311"
```

Constraints:

- `2 <= s.length <= 100`
- `s.length` is even.

- `s` consists of digits from `0` to `9` only.
- `1 <= a <= 9`
- `1 <= b <= s.length - 1`

JavaScript

```
/**
 * @param {string} s
 * @param {number} a
 * @param {number} b
 * @return {string}
 */
var findLexSmallestString = function(s, a, b) {

};
```

Custom Testcase Use Example Testcases

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