2103. Rings and Rods

Description

There are `n` rings and each ring is either red, green, or blue. The rings are distributed **across ten rods** labeled from `0` to `9`.

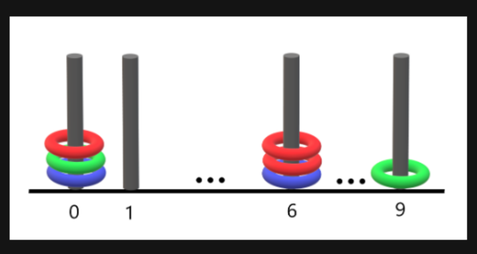
You are given a string `rings` of length `2n` that describes the `n` rings that are placed onto the rods. Every two characters in `rings` forms a **color-position pair** that is used to describe each ring where:

- The **first** character of the `i th` pair denotes the `i th` ring's **color** (`'R'`, `'G'`, `'B'`).
- The **second** character of the `i th` pair denotes the **rod** that the `i th` ring is placed on (`'0'` to `'9'`).

For example, `"R3G2B1"` describes `n == 3` rings: a red ring placed onto the rod labeled 3, a green ring placed onto the rod labeled 2, and a blue ring placed onto the rod labeled 1.

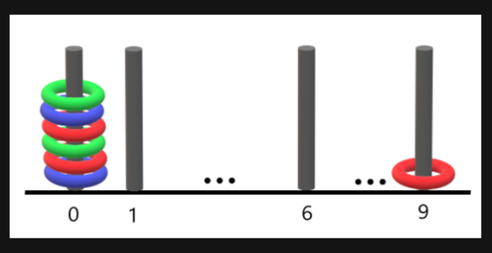
Return *the number of rods that have* ***all three colors*** *of rings on them.*

Example 1:




```
Input: rings = "B0B6G0R6R0R6G9"
Output: 1
Explanation:
- The rod labeled 0 holds 3 rings with all colors: red, green, and blue.
- The rod labeled 6 holds 3 rings, but it only has red and blue.
- The rod labeled 9 holds only a green ring.
Thus, the number of rods with all three colors is 1.
```

Example 2:




```
Input: rings = "B0R0G0R9R0B0G0"
Output: 1
Explanation:
- The rod labeled 0 holds 6 rings with all colors: red, green, and blue.
- The rod labeled 9 holds only a red ring.
Thus, the number of rods with all three colors is 1.
```

Example 3:

```
Input: rings = "G4"
Output: 0
Explanation:
Only one ring is given. Thus, no rods have all three colors.
```

Constraints:

- `rings.length == 2 * n`
- `1 <= n <= 100`
- `rings[i]` where `i` is **even** is either `'R'`, `'G'`, or `'B'` (**0-indexed**).
- `rings[i]` where `i` is **odd** is a digit from `'0'` to `'9'` (**0-indexed**).