Sequence full of colors

You are given a sequence of N balls in 4 colors: *red, green, yellow and blue*. The sequence is *full of colors* if and only if all of the following conditions are true:

- There are as many red balls as green balls.
- There are as many yellow balls as blue balls.
- Difference between the number of red balls and green balls in every *prefix* of the sequence is at most 1.
- Difference between the number of yellow balls and blue balls in every *prefix* of the sequence is at most 1.

Your task is to write a program, which for a given sequence prints `True` if it is *full of colors*, otherwise it prints `False`.

Input
In the first line there is one number T denoting the number of tests cases.
T lines follow. In each of them there is a sequence of letters $\{R, G, Y, B\}$ denoting the input sequence (R - red, G - green, Y - yellow, B - blue).

Output
For each test case, print `True` if this is a sequence *full of colors*, otherwise print `False`.

Constraints
$1 \leq T \leq 10$
Sequence will only consists of letters $\{R, G, Y, B\}$.
Sum of length of all sequences will not exceed 10^6.

Notes
A prefix of a string $T = t_1 \dots t_n$ is a string $\widehat{T} = t_1 \dots t_m$, where $0 \leq m \leq n$.

Sample Input

```
4
RGGR
RYBG
RYRB
YGYGRBRB
```

Sample Output

```
True
True
False
False
```

Explanation
In the first two test cases, all four conditions are satisfied.
In the third test case, condition #1 fails as there are more red balls than green balls and condition #3 also fails for prefix "RYR" as the difference between the number of red and green balls is more than 1. In the fourth test, for a prefix "YGYG" condition 4^{th} fails.

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