

[Home](#) » [Compete](#) » [April Challenge 2016](#) » Chef And Coloring

Chef And Coloring

 | Problem Code: **COLOR**[Tweet](#) [Like](#) [Share](#) Sign Up to see what your friends like.

All submissions for this problem are available.

Read problems statements in [Mandarin Chinese](#), [Russian](#) and [Vietnamese](#) as well.

After a long time, Chef has finally decided to renovate his house. Chef's house has **N** rooms in it numbered from 1 to **N**. Each room is currently painted in one of the red, blue or green colors. You are given configuration of colors of his house by a string **S** consisting of **N** characters. In this string, color red will be denoted by 'R', green by 'G' and blue by 'B'.

Chef does not like current painting configuration that much and would like to repaint the house such that each room has same color.

For painting, Chef has all the 3 color paints available and mixing any 2 color paints will result into 3rd color paint i.e

- $R + B = G$
- $B + G = R$
- $G + R = B$

For example, painting a room having red color before with green color paint will make the color of room blue.

Also, Chef has many buckets of paint of each color. Simply put, you can assume that he will not run out of paint.

Being extraordinary lazy, our little chef does not want to work much and therefore, he has asked you to find the minimum number of rooms he has to repaint (**possibly zero**) in order to have all the rooms with same color. Can you please help him?

Input

First line of input contains a single integer **T** denoting the number of test cases. First line of each test case contains an integer **N** denoting the number of rooms in the chef's house. Next line of each test case contains a string **S** denoting the current color

All Submissions

Successful Submissions



We use cookies to personalise your experience, to provide social media features and to analyse our traffic. We also share information about your use of our site with our social media, advertising and analytics partners who may combine it with other information that you've provided to them or that they've collected from your use of their services. You consent to our cookies if you continue to use our website.

Read our [Privacy Policy](#) and [Terms](#) to know more.

Save my Cookies

For each test case, Print the minimum number of rooms need to be painted in order to have all the rooms painted with same color i.e either red, blue or green.

Constraints

- $1 \leq T \leq 10$
- $1 \leq N \leq 10^5$
- $S_i = \{'R','G','B'\}$

Scoring

- Subtask 1 (40 points) : $1 \leq N \leq 10$
- Subtask 2 (60 points) : **original constraints**

Example

Input

```
3
3
RGR
3
RRR
3
RGB
```

Output

```
1
0
2
```

Explanation:

- **Test 1:** Chef prefers to paint room 2 with blue color such that the resulting color will be red and all the rooms have same color i.e red.
- **Test 2:** Given configuration has all the rooms painted with red color and therefore, chef does not need to do painting work at all.
- **Test 3:** One possible way of renovation is to paint room 1 with green color, room 2 with red color such that all rooms have same color i.e blue.

Author: [3★ ma5termind](#)

Tester: [6★ xcwgf666](#)

Editorial: <http://discuss.codechef.com/problems/COLOR>

Tags: [april16](#), [cakewalk](#), [ma5termind](#)

Date Added: 11-03-2016

Time Limit: 1 secs

Source Limit: 50000 Bytes

Languages: C, CPP14, JAVA, PYTH, PYTH 3.5, PYPY, CS2, PAS fpc, PAS gpc,

RUBY, PHP, GO, NODEJS, HASK, SCALA, D, PERL, FORT,
WSPC, ADA, CAML, ICK, BF, ASM, CLPS, PRLG, ICON, SCM qobi,
PIKE, ST, NICE, LUA, BASH, NEM, LISP sbcl, LISP clisp, SCM
guile, JS, ERL, TCL, PERL6, TEXT, SCM chicken, CLOJ, FS

Comments ►

[CodeChef is a non-commercial competitive programming community.](#)

[About CodeChef](#) | [About Directi](#) | [CEO's Corner](#) | [C-Programming](#) | [Programming Languages](#) | [Contact Us](#)

© 2009 [Directi Group](#). All Rights Reserved. CodeChef uses SPOJ © by [Sphere Research Labs](#)
In order to report copyright violations of any kind, send in an email to copyright@codechef.com

Directi
Intelligent People. Uncommon Ideas.
The time now is: 07:43:05 AM
Your IP: 169.54.6.221

CodeChef - A Platform for Aspiring Programmers

CodeChef was created as a platform to help programmers make it big in the world of algorithms, **computer programming** and **programming contests**. At CodeChef we work hard to revive the geek in you by hosting a **programming contest** at the start of the month and another smaller programming challenge in the middle of the month. We also aim to have training sessions and discussions related to **algorithms**, **binary search**, technicalities like **array size** and the likes. Apart from providing a platform for **programming competitions**, CodeChef also has various algorithm tutorials and forum discussions to help those who are new to the world of **computer programming**.

Practice Section - A Place to hone your 'Computer Programming Skills'

Try your hand at one of our many practice problems and submit your solution in a language of your choice. Our **programming contest** judge accepts solutions in over 35+ programming languages. Preparing for coding contests were never this much fun! Receive points, and move up through the CodeChef ranks. Use our practice section to better prepare yourself for the multiple **programming challenges** that take place through-out the month on CodeChef.

Compete - Monthly Programming Contests and Cook-offs

Here is where you can show off your **computer programming skills**. Take part in our 10 day long monthly coding contest and the shorter format Cook-off **coding contest**. Put yourself up for recognition and win great prizes. Our **programming contests** have prizes worth up to INR 20,000 (for Indian Community), \$700 (for Global Community) and lots more CodeChef goodies up for grabs.

Programming Tools

[Online IDE](#)

[Upcoming Coding Contests](#)

[Contest Hosting](#)

[Problem Setting](#)

[CodeChef Tutorials](#)

[CodeChef Wiki](#)

Practice Problems

[Easy](#)

[Medium](#)

[Hard](#)

[Challenge](#)

[Peer](#)

[School](#)

[FAQ's](#)

Initiatives

[Go for Gold](#)

[CodeChef for Schools](#)

[Campus Chapters](#)