

- [Challenges](#)
- [Submissions](#)
- [Leaderboard](#)
- [Discuss](#)
- [FAQ](#)

•

•

**NoException** \_

- [Announcements](#)
- [Logout](#)

## IEEE Xtreme Programming Challenge

- [Challenges](#) /
- AU

Ends in: 0 Days 02:26:06

- Rank: 33 Score: 801.14

Solving this puzzle will improve your rank to **25**

## Traffic Light Checker



A three-color traffic light must switch lights in the following order: red, green, yellow, red. To indicate when crossing slowly without a stop is permitted, the yellow signal may be flashed. To indicate when crossing immediately after a full stop is permitted, the red signal may be flashed. Either flash sequence may only be started after the red light is lit and must be followed with a red. All lights are initially off. All sequences must begin a red light. Lighting any light causes all other lights to turn off. No color may be repeated: e.g., red, red is not allowed.

For example, here are some valid sequences:

- Red, Green, Yellow, Red, Green, Yellow, Red
- Red, Green, Yellow, Red, Pause

Here are some invalid sequences:

- Red, Green, Yellow, Red, Yellow
- Green, Caution, Red, Green, Yellow, Red

- Red, Green, Yellow, Yellow, Red, Red

## Task

Write a program that checks a sequence of light codes and determines if that sequence follows or violates the traffic light rules.

## Input

Read from STDIN a sequence of the follow codes: R (red), Y (yellow), G (Green), P (Pause - flash red), C (Caution - flash yellow), and X (off). Each code must be separated with a space. The entire sequence is submitted by an end-of-line (e.g., pressing the Enter key.) A sequence must have no more than 15 codes in total.

## Output

Write to STDOUT an evaluation of the sequence:

*ACCEPT*            The entire input sequence meets all rules.

*REJECT*            The input sequence violates any sequence constraint; for example G Y.

*ERROR*            The input is malformed – undefined code, too short, too long, etc.

## Example

Input	Output	Note (reference only)
R G Y R C R G Y R	ACCEPT	
G Y R G Y R	REJECT	Doesn't start with R
R Y G P	REJECT	Invalid sequence
RGY	ERROR	Undefined code
X 8 S	ERROR	Undefined codes
R G Y R C R P R G Y R G Y R G Y R	ERROR	Too many codes

[Download sample testcases as zip](#)

[click here to see sample code snippet](#)

Pick your language

[C](#) [C++](#) [Java](#) [C#](#) [Python](#) [PHP](#) [Perl](#) [Ruby](#)

1



Keyboard Shortcuts Available

☐ Use custom testcase as input for Compile & Test

Compile & Test Submit Code

Upload File



```
/* Enter your code here. Read input from STDIN. Print output to STDOUT */
```