

Problem: Rubik's Blueshift

Meet **Gabe Grayscale**, an enthusiastic 9-year-old Rubik's Cube speedcuber! He loves solving **2x2 Rubik's Cubes** as fast as he can — but there's a twist. Gabe is **colorblind** and can't tell the difference between **green** and **blue**. So when he looks at a cube, **both green and blue appear as blue** to him.

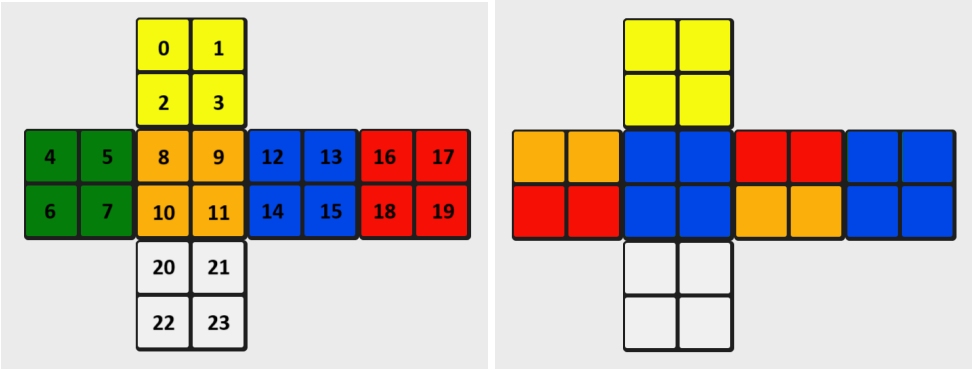
You are given **20 scrambled 2x2 cubes**, each encoded as a **24-character string**. For each string, compute the **minimum number of moves** Gabe needs to return the cube to a solved state.

A single move can be to:

1. Rotate any face 90° clockwise
2. Rotate any face 90° counter-clockwise
3. Rotate any face 180°

Input:

- 20 lines, each with exactly **24 characters**, representing a 2x2x2 cube from Gabe's point of view.



Solved state.

Sample scenario as seen by Gabe.

Each sticker is marked with the first letter of its color:

- Y = Yellow
- O = Orange
- R = Red
- W = White
- B = Blue or Green (Gabe sees both as the same!)

Example:

```
YYYYBBBB0000BBBBRRRRWWWW
YYYYOORBBBBRROBBBBWWWW
```

Output:

- A single line with **20 integers separated by commas**, each the minimum number of moves to solve the corresponding cube.

Example:

0,1

The first cube is already in a solved state, so no moves are needed. Notice that other orientations of the solved cube are also possible, but the colors relative positions will always be the ones shown.

The second cube can be solved in a single move, by rotating the top face 180 degrees.

Full Input

```
OYROWBWYWBBWYBOBOBYBRBRR
ROOBWBRRYRBBWWOYBBOWYWB
BBOWRBYBWBOYORORWYWBYSRB
YWYBBOWWBRBWYROYBROBOBRB
WOBROYOWRBBWWBRBYBYOBBR
OBBOWWRBRBWYYROBYBRWOBBY
BBORWBRYWBROWOYBYOWBBBYR
RBWYBBOBRBRBOWWBOYRBWOYY
WROYBWBWBRBYBWOBRYOYBOR
BROBRBYBWOWYYBBBYWWRORO
OBRRWWBYBBOWYRBOYBYOBRWB
BWOBRRBYRRBWOWRBWYOBOYB
YORBBWRBBOWWYBBBYRYBOOWR
WRBOBROWWYOBBBOYRRBBWYB
RWBBBWROYYBRBYWOWBYBOBO
ORORBBBYYWYWBBSBYWYWRORO
OBBBRYOYYWBRWYBRWOBBOBR
OBOYYBWWBOWORRRYBYRBBB
BBYRRRBOBYBBBROWWBOYWO
YBOORWBBYORBYWRRBBYWBOW
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