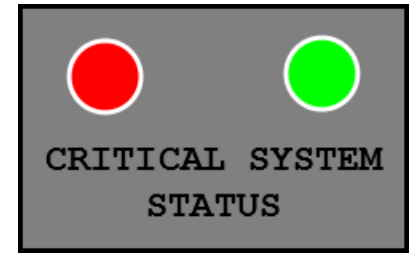


Problem 75: Space Station Repair Lights

Difficulty: Easy

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Problem Background

You've been hired to work on a systems diagnostic unit for the International Space Station. This unit will monitor four critical systems – a Battery, a Heat Exchanger, a Water Pump, and a Temperature Sensor – to determine if they are working or not. However, space is at a premium on the ISS, and so you will only have room for two LED lights for the astronauts to see!

Problem Description

Your team has come up with a design that will allow the astronauts to determine which systems, if any, are broken based on the colors of the two LED lights. Each system you're monitoring is given a numerical value based on how critical it is to the operation and safety of the station:

- Battery: 8
- Heat Exchanger: 4
- Water Pump: 2
- Temperature Sensor: 1

Whenever the unit runs, it will add the values of any broken systems together and light up the LEDs to indicate the resulting number. Each LED has four states, each representing a number – off (0), red (1), green (2), and blue (3). The astronauts will multiply the left LED's value by four, then add it to the right LED's value, in order to determine the correct error code. For example, if the left LED is red and the right LED is green, the astronauts would calculate the error code as $(1 * 4) + 2 = 6$.

Your task is to write the logic that controls the LEDs.

Sample Input

The first line of your program's input, received from the standard input channel, will contain a positive integer representing the number of test cases. Each test case will include:

- A single line with four words separated by spaces, each either WORKING or BROKEN. These represent the statuses of the Battery, Heat Exchanger, Water Pump, and Temperature Sensor, respectively.

```
3
WORKING WORKING WORKING WORKING
WORKING BROKEN BROKEN WORKING
BROKEN BROKEN BROKEN BROKEN
```

Sample Output

For each test case, your program should print out the correct color (in lowercase) of the two LED lights; first the left LED's color, then a space, then the right LED's color. If an LED is off, print "off."

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off off  
red green  
blue blue
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