

## Problems

- A. Covid-19
- B. Statistics
- C. Science Fiction
- D. Social Distancing
- E. Vaccination Against Corona

## Advice, hints, and general information

- The problems are not sorted by difficulty.
- Your solution programs must read input from *standard input* (e.g. System.in in Java or cin in C++) and write output to *standard output* (e.g. System.out in Java or cout in C++). For further details and examples, please refer to your administrator guide and Domjudge documentation.
- For information about which compiler flags and versions are used, please refer to your administrator guide. (Python 2.7.17, Oracle Java 1.8.0\_144, gcc 7.5.0 (C, C++ std14)).
- Your submissions will be run multiple times, on several different inputs. If your submission is incorrect, the error message you get will be the error exhibited on the first input on which you failed.
  - E.g., if your instance is prone to crash but also incorrect, your submission may be judged as either “Wrong Answer” or “Run Time Error”, depending on which is discovered first. The inputs for a problem will always be tested in the same order.
- If you think some problem is ambiguous or underspecified, you may ask the judges for a clarification request through the Domjudge system. The most likely response is “No comment, read problem statement”, indicating that the answer can be deduced by carefully reading the problem statement or by checking the sample test cases given in the problem, or that the answer to the question is simply irrelevant to solving the problem.
- In general, we are lenient with small formatting errors in the output, in particular whitespace errors within reason, and upper/lower case errors are often (but not always) ignored. But not printing any spaces at all (e.g. missing the space in the string “1 2” so that it becomes “12”) is typically not accepted. The safest way to get accepted is to follow the output format exactly.
- For problems with floating point output, we only require that your output is correct up to some error tolerance. For example, if the problem requires the output to be within either absolute or relative error of  $10^{-4}$ , this means that
  - If the correct answer is 0.05, any answer between 0.0499 and .0501 will be accepted.
  - If the correct answer is 500, any answer between 499.95 and 500.05 will be accepted.
- Any reasonable format for floating point numbers is acceptable. For instance, “17.000000”, “0.17e2”, and “17” are all acceptable ways of formatting the number 17. For the definition of reasonable, please use your common sense.

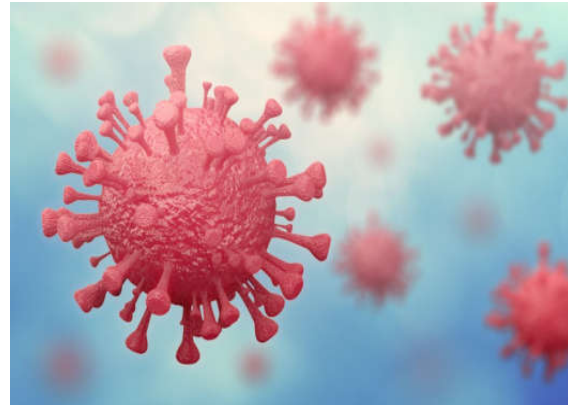
## Problem A

### Covid-19

**Time Limit: 3 seconds**  
**Memory Limit: 512 Megabytes**

#### Problem description

The ministry of health in Foreverland has recently published a colorcoded chart to help people better understand the level of Covid-19 risk in different cities, and take appropriate actions and precautions based on the risk level.



In this chart, each city is colored either red, yellow, or white, based on some indicators showing the coronavirus risk level at that city. After exploring several models, the ministry has reached the following criteria for classifying the cities. For a given city, if the average number of new cases per day over the past two weeks is at most 50 per one million population, and the average number of new hospitalizations per day over the past two weeks is at most 10 in every one million population, then the city is marked as white, meaning that the city is in a low-risk zone.

On the other hand, if the average number of new hospitalizations per day in a city over the past two weeks is more than 30 per one million population, then the city is categorized as high-risk and is color-coded red. All other cities are colored yellow.

While the data for new cases and hospitalizations are publicly available, the ministry does not update its colorcoded chart very frequently. Hana, a curious student, likes to know the risk level of her city at any point of time, before the ministry publishes its updated chart. She can obtain the average number of new cases and new hospitalizations from the Internet, but she needs your help to convert this data to a color code that better demonstrates the risk level at her city.

#### Input

The input consists of two lines.

The first line contains an integer  $p$  ( $0 \leq p \leq 1000$ ), showing the average number of new cases per day in every one million population in Hana's city over the past two weeks.

The second line contains an integer  $q$  ( $0 \leq q \leq 500$ ), showing the average number of new hospitalizations per day in every one million population over the past two weeks in that city. Note that  $q \leq p$ .

## Output

In the output, print the color-code of Hana's city. It must be either White, Yellow, or Red.

Example:

Input	Output
50 7	White

Input	Output
60 40	Red

Input	Output
15 12	Yellow