

Overview: Interactively simulate a petty catfight.

Description: Ugh. Steve Rogers and Tony Stark are fighting again, over whose costume is more impressive. Thor, naturally, is convinced that these humans are being so silly. Don't they know that nobody can beat his flowing red cape and protective scaly armor? Fortunately, he's invented a clever game to settle this dispute once and for all.

Steve's shield has  $h$  scratches. Tony's suit's right arm has  $r$  scratches, and his left arm has  $l$  scratches.

The rules of this game are as such: the Capt'n and Iron Man will take turns attacking each other's costume props with their own. Each time they attack, with Thor's magic, the same number of scratches on the prop used to attack (shield or arm) will magically appear on the opponent's prop that was attacked! When either party has accumulated 7 or more scratches on a prop, their costumes will be deemed unsuitable for the superhero work environment and the other party will win pride, dignity, and honor.

Your task is to write a program simulating Steve's role in this game. Thor has magnanimously agreed to repair all damage, so it is not necessary that you simulate the optimal strategy for Steve. Have fun!

Filename: nov02.{java, cpp, c, cc, py}

Input: This is an interactive problem. This means that your program will receive input based on the output your program produces.

When your program starts, you will be provided three integers  $h$   $l$   $r$ , where  $h$  represents the number of scratches on Steve's shield, and  $l$  and  $r$  represent the number scratches on Tony's right and left suit arms, respectively. Then, for each turn during normal gameplay, your program should output a single character `L` or `R`, indicating which of Tony's two arms you choose to scratch. In response, your opponent (Tony) will give you a single character `L` or `R`, indicating which hand he used to scratch your shield. If you have 7 or more scratches after Tony's move, your program should output `Lose` and quit. If either of Tony's arms would have 7 or more scratches after your move, your program will follow the output of `L` or `R` with a space and the word `Win` in the same line, and quit.

You MUST output a new line character and flush the output stream after each output:

In C, use `printf("\n"); fflush(stdout);`

In C++, use `cout << endl << flush;`

In Java, use `System.out.println(); System.out.flush();`

In Python, use `sys.stdout.write("\n"); sys.stdout.flush()`

Assumptions:  $1 \leq h \leq 6$   
 $1 \leq l \leq 6$   
 $1 \leq r \leq 6$

Your program does not need to play according to an optimal strategy, nor should you assume that your opponent plays optimally.

Sample Sequence #1: COMPUTER 3 1 1  
 YOU R (Counts: 3 1 4)  
 COMPUTER L (Counts: 4 1 4)  
 YOU R **Win** (Counts: 4 1 8)

Sample Sequence #2: COMPUTER 1 1 2  
 YOU R (Counts: 1 1 3)  
 COMPUTER L (Counts: 2 1 3)  
 YOU L (Counts: 2 3 3)  
 COMPUTER L (Counts: 5 3 3)  
 YOU R **Win** (Counts: 5 3 8)

Sample Sequence #3: COMPUTER 3 1 2  
 YOU L (Counts: 3 4 2)  
 COMPUTER L (Counts: 7 4 2)  
 YOU **Lose**