



02 : 47 : 48  
HRS MIN SEC

# March Easy '17

LIVE

Mar 01, 2017, 09:30 PM IST - Mar 02, 2017, 12:30 AM IST

6  
LIVE EVENTS

INSTRUCTIONS

PROBLEMS

SUBMISSIONS

LEADERBOARD

ANALYTICS

JUDGE

← Problems / Micro and Sweet Distribution

## Micro and Sweet Distribution

Max. Marks: 100

It's sweet distribution day in Micro's school. He's very happy. All the students in Micro's class are sitting on chairs which are arranged in a matrix of size  $N \times M$  i.e. there are  $N$  rows of chairs numbered from 1 to  $N$  and in each row there are  $M$  chairs numbered from 1 to  $M$ . Micro is sitting at coordinate  $(D_x, D_y)$  ( $D_y^{th}$  chair of  $D_x^{th}$  row). Teacher gives the box to a student sitting in one of the four corners:  $(1, 1)$ ,  $(1, M)$ ,  $(N, 1)$  or  $(N, M)$ . Students have to take one sweet from the box and pass the box to the next student (student sitting to left, right, front or back). For a student sitting at coordinate  $(x, y)$ , he'll follow the following priority order:

1. If there is a student in the **Right** who has not received sweet, then pass it right  $(x, y + 1)$ .
2. If there is a student in the **Left** who has not received sweet, then pass it left  $(x, y - 1)$ .
3. If there is a student in the **Front** who has not received sweet, then pass it front  $(x - 1, y)$ .
4. If there is a student in the **Back** who has not received sweet, then pass it back  $(x + 1, y)$ .
5. Shout **Over**, meaning that all students have received sweets.

Now, Micro is curious to find out the direction in which he'll have to pass the sweet box. Since there are a lot of students in Micro's class, it will take long for the box to reach him, and you know Micro, he just can't wait. So he asks you to find out the direction in which he'll have to pass the box, or will he have to shout **Over**.

### Input:

First line consists of a single integer,  $T$ , denoting the number of test cases. Each test case consists of three lines.

First line of each test consists of two space separated integer denoting  $N$  and  $M$ .

Second line of each test case consists of two space separated integers  $S_x$  and  $S_y$ , denoting the coordinate of the corner from which sweet distribution starts.

Third line of each test case consists of two space separated integers denoting  $D_x$  and  $D_y$ , coordinates of Micro.

**Output:**

For each test case, print "Left", "Right", "Front", "Back", "Over", depending on whether Micro will pass the box to student in left, right, front or back, or if he'll shout over.

**Constraints:**

$$1 \leq T \leq 10^5$$

$$1 \leq N, M \leq 10^3$$

$$1 \leq D_x \leq N$$

$$1 \leq D_y \leq M$$

$$S_x = 1 \text{ or } S_x = N$$

$$S_y = 1 \text{ or } S_y = M$$

**SAMPLE INPUT**

```
2
3 3
1 1
3 3
2 3
1 3
2 2
```

**SAMPLE OUTPUT**

```
Over
Right
```

**Explanation**

In first test case Micro is the last student to receive sweet box, so he'll shout Over.

In second test case Micro is sitting in middle chair of second row, and there is a student in his right i.e. at (2, 3) who has not received sweet, so he'll pass it right.

**Time Limit:** 1.0 sec(s) for each input file.

**Memory Limit:** 256 MB

**Source Limit:** 1024 KB

**Marking Scheme:** Marks are awarded if any testcase passes.

**Allowed Languages:** C, C++, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, R(RScript), Racket, Ruby, Rust, Scala, Scala 2.11.8, Swift, Visual Basic

**CODE EDITOR**

Enter your code or [Upload your code](#) as file.

[Save](#)

C (gcc 4.8.2) ▼



```
1 #include <stdio.h>
2
3 int main()
4 {
5     printf("Hello World!\n");
6     return 0;
7 }
8
```

6

LIVE EVENTS

1:1

☒ Provide custom input

COMPILE &amp; TEST

SUBMIT

Press Ctrl-space for autocomplete suggestions.r4

POWERED BY code table

**Tip:** You can submit any number of times you want. Your best submission is considered for computing total score.Your Rating: [Like 0](#) [Share](#) [Tweet](#)

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LIVE EVENTS

## EMPLOYERS

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## REACH US

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