UW ACM-ICPC Qualifier

10/22/16

Schedule of Events

- 9:00am: meet in EEB-105

- 9:30am: move over to CSE 003/006, practice contest

- 10:30am: full contest begins

- 12:30pm: food arrives (hopefully)

- 3:30pm: contest ends, back to EEB-105

- 4:00pm: end-of-day

Google Judges

- King Xia

- Ben Eggers

- Evan Whitfield

ICPC Contest Team

- Cody Kesting

- Zaha Wolfe

- Kevin Wallace

- Martin Kellogg

4065 - Rock, Paper, or Scissors?

Rock, Paper, Scissors is a two player game, where each player simultaneously chooses one of the three items after counting to three. The game typically lasts a pre-determined number of rounds. The player who wins the most rounds wins the game. Given the number of rounds the players will compete, it is your job to determine which player wins after those rounds have been played.

The rules for what item wins are as follows:

- Rock always beats Scissors (Rock crushes Scissors)
- Scissors always beat Paper (Scissors cut Paper)
- Paper always beats Rock (Paper covers Rock)

Input

The first value in the input file will be an integer t ($0 < t < 1000$) representing the number of test cases in the input file. Following this, on a case by case basis, will be an integer n ($0 < n < 100$) specifying the number of rounds of Rock, Paper, Scissors played. Next will be n lines, each with either a capital R, P, or S, followed by a space, followed by a capital R, P, or S, followed by a newline. The first letter is Player 1's choice; the second letter is Player 2's choice.

Output

For each test case, report the name of the player (`Player 1` or `Player 2`) that wins the game, followed by a newline. If the game ends up in a tie, print `TIE`.

Sample Input

```
3
2
R P
S R
3
P P
R S
S R
1
P R
```

Sample Output

```
Player 2
TIE
Player 1
```

4065 - Rock, Paper, or Scissors?

North America - Pacific Northwest - 2007/2008

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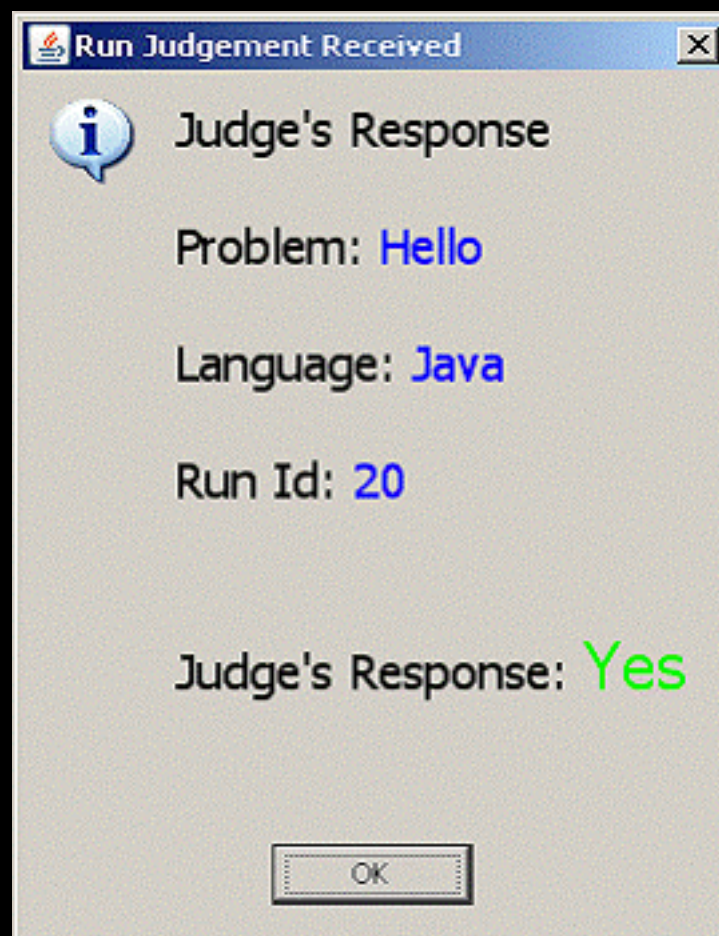
Sample Input

```
3
2
R  P
S  R
3
P  P
R  S
S  R
1
P  R
```

Sample Output

```
Player 2
TIE
Player 1
```

```java
import java.util.*;
import java.io.*;

public class Main {
    public static void main(String[] args) {
        Scanner in = new Scanner(System.in);
        int cases = in.nextInt();
        for(int i=0;i<cases;i++) {
            int n = in.nextInt();
            int d = in.nextInt();
            int count = 0;
            for(int j=0;j<n;j++) {
                int v = in.nextInt();
                int f = in.nextInt();
                int c = in.nextInt();
                if((v*f)/c >= d) {
                count++;
                }
            }
            System.out.println(count);
        }
    }
}
```

Run Judgement Received

Judge's Response

Problem: Hello

Language: Java

Run Id: 20

Judge's Response: Yes

OK

No - Compilation Error

No - Runtime Exception

No - Time Limit Exceeded

No - Wrong Answer

No - See Contest Staff

C

C++

Java

Python*

How to Win

- Solve more problems (1st tiebreaker)

- Solve problems faster (total time 2nd tiebreaker)

  - 20-min penalty for every problem you submit incorrectly, but later get correct

- Submit problems sooner (last correct submission 3rd tiebreaker, likely not used)

Very important note!!

For all problems, **including** those which contain multiple test cases, the input will start with one additional line containing a single integer indicating how many test cases there are.

For example, the practice problem input should be treated as though there is an extra "1" in the front:

Sample Input	Sample Output
1 5 9 1 11 3 20	The square of 9 is 81. The square of 1 is 1. The square of 11 is 121. The square of 3 is 9.

Or, repeating the sample input twice:

Sample Input	Sample Output
2 5 9 1 11	The square of 9 is 81. The square of 1 is 1. The square of 11 is 121. The square of 3 is 9. The square of 9 is 81.

Very important note on problems!!!!

- For <u>every problem</u> contest and practice, expect an additional line of input with the number of cases in the file

- <u>Including</u> if the problem already specifies multiple cases

- (The test cases were formed by concatenating multiple files together)

https://docs.python.org/2/

http://www.cplusplus.com/reference/

http://docs.oracle.com/javase/7/docs/api/

ICPC Regional Competition

- November 5th

- Top 5 teams

ICPC World Finals

- 2011: ~~Sharm-el-sheikh, Egypt~~ Orlando, Florida

- 2012: Warsaw, Poland

- 2013: St. Petersberg, Russia

- 2014: Ekaterinburg, Russia

- 2015: Marrakesh, Morocco

- 2016: Phuket, Thailand
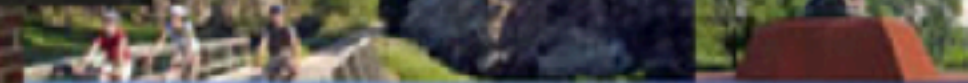
ACM-ICPC World Finals

May 20 - 25

2017

Rapid City
South Dakota

home of SDSM&T host ECP, Inc.

IBM event sponsor

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Let's go to the labs!