

Round 1A 2011

**A. FreeCell Statistics**[B. The Killer Word](#)[C. Pseudominion](#)[Contest Analysis](#)[Questions asked](#) **1**

## Submissions

## FreeCell Statistics

6pt	Not attempted <b>3079/4262 users</b> correct (72%)
14pt	Not attempted <b>2181/2997 users</b> correct (73%)

## The Killer Word

10pt	Not attempted <b>684/1855 users</b> correct (37%)
20pt	Not attempted <b>181/542 users</b> correct (33%)

## Pseudominion

15pt	Not attempted <b>105/565 users</b> correct (19%)
35pt	Not attempted <b>3/65 users</b> correct (5%)

## Top Scores

krijgertje	100
Myth	100
Progbeat	100
SkidanovAlexander	65
Eryx	65
Khuc.Anh.Tuan	65
MichaelLevin	65
iwi	65
Ahyangyi	65
cos	65

**Problem A. FreeCell Statistics**

This contest is open for practice. You can try every problem as many times as you like, though we won't keep track of which problems you solve. Read the [Quick-Start Guide](#) to get started.

Small input  
6 points

Solve A-small

Large input  
14 points

Solve A-large

## Problem

I played **D** ( $D > 0$ ) games of FreeCell today. Each game of FreeCell ends in one of two ways -- I either win, or I lose. I've been playing for many years, and have so far played **G** games in total (obviously,  $G \geq D$ ).

At the end of the day, I look at the game statistics to see how well I have played. It turns out that I have won exactly  $P_D$  percent of the **D** games today, and exactly  $P_G$  percent of **G** total games I had ever played. Miraculously, there is no rounding necessary -- both percentages are exact! Unfortunately, I don't remember the exact number of games that I have played today (**D**), or the exact number of games that I have played in total (**G**). I do know that I could not have played more than **N** games today ( $D \leq N$ ).

Are the percentages displayed possible, or is the game statistics calculator broken?

## Input

The first line of the input gives the number of test cases, **T**. **T** lines follow. Each line contains 3 integers -- **N**,  $P_D$  and  $P_G$ .

## Output

For each test case, output one line containing "Case #x: y", where x is the case number (starting from 1) and y is either "Possible" or "Broken".

## Limits

$0 \leq P_D \leq 100$ ;  
 $0 \leq P_G \leq 100$ .

## Small dataset

$1 \leq T \leq 100$ ;  
 $1 \leq N \leq 10$ .

## Large dataset

$1 \leq T \leq 2000$ ;  
 $1 \leq N \leq 10^{15}$ .

## Sample

Input	Output
3	Case #1: Possible
1 100 50	Case #2: Broken
10 10 100	Case #3: Possible
9 80 56	

In Case #3, I could have played 5 games today ( $D = 5$ ) and 25 games in total ( $G = 25$ ), and won 4 games today (80% of 5) and 14 games in total (56% of 25).

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