

# FreeCell Statistics

## 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

$$0 \leq P_D \leq 100;$$

$$0 \leq P_G \leq 100.$$

Memory limit: 1GB.

### Small dataset (Test set 1 - Visible)

$$1 \leq T \leq 100;$$

$$1 \leq N \leq 10.$$

Time limit: 30 seconds.

### Large dataset (Test set 2 - Hidden)

$$1 \leq T \leq 2000;$$

$$1 \leq N \leq 10^{15}.$$

Time limit: 60 seconds.

## Sample

Sample Input

Sample Output

```
3
1 100 50
10 10 100
9 80 56
```

Case #1: Possible  
Case #2: Broken  
Case #3: Possible

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).