EKMEK

Kayra and Asya are siblings. Before breakfast, their mother realized there is no bread at home in the one morning. She wanted Asya and Kayra go to the market to buy bread. The siblings are determined by playing their own game to decide who is going to buy bread.

They play N games between them. Each game consists of B parts. The game is played in sequence and is from section 1 up to the N. section. Each player has the right to play the maximum M episode during his / her own. A person will lose who played B. episode. A person will go to buy bread who won the last game. Let's find who would go to the bread.
The two siblings play the game optimally and pass each section they play.

input Format:
Number of N games in the first row.
In the next N line, the number of episodes is B, the maximum number of episodes that can play M, and who will start the game K or A.

output format:
The name of the sibling who went to the bread and the number of games lost by the lost brother. A sibling goes to the bread. Asya or Kayra.

Constrains
1 <= N,B <= 10^6
1 <= M <= B

Sample Input1:
2
3 2 K
5 1 A

Sample Output1:
Asya 0

Explanation1:
1.Game
Episodes -> 1 2 3
Who played->K K A
Asya lost the first game

2.Game
Episodes -> 1 2 3 4 5
Who played->A K A K A
Asya lost the second game

Asya:0 Kayra:2. Asya went to buy bread.