Determine the Winner



A deck of cards contains 52 cards, where each card has a suit and a number written on it. There are 4 suits, namely A, B, C and D, and numbers on cards are from range 1 to 13.

Before the game starts, one of the suits is decided to be called the winning suit. Then, the play begins and two players play exactly n rounds as follows:

- first, each player draws a single card from the deck
- if one of the players drew a card of the winning suit and the other did not, then the player who drew a card of the winning suit wins the round
- otherwise, the numbers written on drawn cards decide: if one player drew a card with a greater number on it than
 the other player, the player with the greater number wins, otherwise, if both players drew cards with the same
 numbers, the round ends in a draw
- after the round is ended, the players return the cards they drew into the deck

Given the cards the players drew in each round, determine the winner of each round of the game.

Input Format

In the first line, there is a single character **winning_suit** denoting the winning suit.

In the second line, there is a single integer n denoting the number of rounds to be played.

Each of the next n lines denotes the cards that were drawn in a single round of the game and contains four space-separated values: $\mathbf{suit1}$, $\mathbf{number1}$, $\mathbf{suit2}$, and $\mathbf{number2}$ denoting the suit of player's 1 card, the number on player's 1 card, the suit of player's 2 card, and the number of player's 2 card respectively.

Constraints

- winning_suit $\in \{A, B, C, D\}$
- $1 < n < 10^3$
- suit1, suit2 $\in \{A, B, C, D\}$
- $1 \le \text{color1}, \text{color2} \le 13$

Output Format

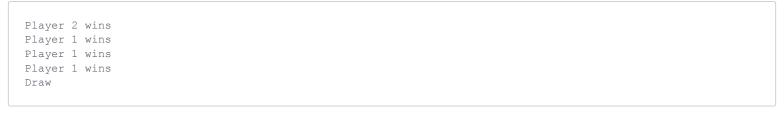
The output must contain exactly n lines. The i^{th} of those lines must denote the result of the i^{th} round of the game and contain either Player 1 wins if Player 1 wins or Player 2 wins if Player 2 wins, or Draw if the round ends in a draw.

Sample Input 0

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B
5
A 2 B 1
A 7 D 2
B 5 D 13
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B 3 B 1
A 12 C 12
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Sample Output 0



Explanation 0

The winning suit is \boldsymbol{B} and there are 5 rounds of the game.

In the first round, Player 2 drew a winning suit card and Player 1 did not, therefore, Player 2 wins.

In the second round, none of the players drew a winning suit card, so the numbers on the cards decide. Since Player 1 drew a card with a greater number than Player 2, Player 1 wins.

In the third round, Player 1 drew a winning suit card and Player 2 did not, therefore, Player 1 wins.

In the fourth round, both players drew a winning suit cards, so the numbers on the cards decide. Since Player 1 drew a card with a greater number than Player 2, Player 1 wins.

In the fifth round, none of the players drew a winning suit card, so the numbers on the cards decide. Since both players drew cards with the same numbers, the round results in a Draw.