Example 1:

Input:

1

1 2 3, ,

, , 1 2 3

Output:

blue move and clockwise direction: Total steps: 7, goal is reached

Example 2:

Input:

1

1 2, 3,

3, , 1 2

Output:

red move and counterclockwise direction: Total steps: 5, goal is reached

Example 3:

Input:

1 2 3, ,

2, , 1 3

Output:

Impossible

Example4 :

Input:

1

1 6 9 10, 2 7 8 11, 3 4 5 12 13

1 4, 5 8 9 10 11, 2 3 6 7 12 13

Output :

red counterclockwise 697