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# Dodgeball

Input file:            **standard input**  
Output file:         **standard output**  
Time limit:          10 seconds  
Memory limit:       256 megabytes

Umar has finished programming his hit video game, Dodgeball, and he needs your help to check if the levels are not too hard.

Dodgeball takes place on a court that is  $N$  blocks wide with a player character, called Aphiwe, who is  $K$  blocks wide. Every second, two things happen. First, a ball is fired at a predetermined position on the court. Second, in order to try to avoid the ball, Aphiwe either moves one block left or one block right, or stays where she is. The goal is for Aphiwe to avoid getting hit by the balls for as long as possible. Aphiwe knows the entire sequence in which the balls will be fired, and thus can make choices in the early moves that will avoid her getting hit by later balls. Positions are numbered from 1 on the left of the court to  $N$  on the right, and at the start of the game Aphiwe takes up the  $K$  leftmost blocks of the court (those numbered from 1 to  $K$ ). A level consists of  $L$  seconds.

You will be given  $N$ ,  $K$  and  $L$ , and the positions at which the balls will be fired at each second. Write a program that will ask for the inputs and will then determine the longest time, in seconds, before Aphiwe is hit by a ball.

## Input

The first line of input will contain three space-separated integers,  $N$ ,  $K$  and  $L$ . The second line of input will contain  $L$  space-separated integers. The  $i$ -th of these indicates at which position a ball will be fired in the  $i$ -th second.

## Output

Output a single integer, the maximum number of seconds that Aphiwe can survive before being hit by a ball. If Aphiwe can survive the whole level, output "Complete" instead.

## Examples

standard input	standard output
4 2 2 4 2	Complete
5 3 6 4 5 2 1 3 2	5

## Note

In the second given example, at the beginning, Aphiwe is on the left of the court, occupying blocks 1 to 3. The first ball gets fired at block 4 and the second ball at block 5. . In order to dodge these balls, Aphiwe need not move at all, BUT then she will have no way of avoiding the third ball fired at position 2 and she would only last two seconds without being hit.

As she know the entire sequence of balls beforehand, a better strategy would be to move one block right when the first ball is fired and right again when the second ball is fired; so Aphiwe then occupies blocks 3 to 5. The third ball is fired at block 2, so Aphiwe must stay where she is to avoid being hit. The fourth ball is fired at block 1 and Aphiwe can stay where she is again, The fifth ball is fired at block 3 and there is no way Aphiwe can dodge it. So with this strategy Aphiwe lasts 5 seconds before she is hit.