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## Problem A. The Match

Input file: `input.txt`  
Output file: `output.txt`  
Time limit: 2 seconds  
Memory limit: 256 megabytes

Bob discovered in the local network a large video archive of “Attack from the Future” matches. Each match is played by two teams. A match consists of several games. Each game is won by one or another team (no draws). The match continues until one of the teams wins exactly  $N$  games.

Bob does the following: he downloads all games of the match (and, thus, he knows how many games were played in the match). Then, he watches the games in the order they were played, starting with the first one.

Bob does not know the final score of the match or who is the winner. Of course, he could read the description of the match, but it would be very boring to watch the games afterwards. However, if he can predict the winner of the next game, he will not watch it.

Your task is to determine how many games Bob will watch, given the description of match’s games.

### Input

The first line contains two integers  $N$  and  $M$  ( $1 \leq M \leq 20$ ,  $1 \leq N \leq M$ ) — the necessary amount of wins and the total number of games in the match.

The second line contains the description of the match’s games — a string of  $M$  symbols: zeros and ones. 0 denotes the loss of the first team, and 1 denotes the win of first team.

### Output

Output a single integer on the first line — the number of games that Bob will watch.

### Examples

<code>input.txt</code>	<code>output.txt</code>
3 4 0010	2
3 5 01010	4
5 5 00000	1

### Note

Let’s call the first team “green” and the second team “blue”.

In the first example Bob watches two games: the 1st and the 2nd, team blue wins both. The score is 2-0 at the moment. The next game is not the last game of the match, thus team green wins the game. The score is 2-1 and only one game remains. So, in the 4th game team blue wins again. As a result, Bob will watch only two games: the 1st and the 2nd.

In the second example the score is 2-1 after three games, thus, in the next game team green wins, but the result of the fifth game is unpredictable. That means that Bob will watch four games: 1st, 2nd, 3rd, 5th.

In the third example one of the teams loses without scoring a point, and Bob will watch only the first game to understand which team wins.