Wocs and Cows 2

Problem Statement:

In an alternate dimension, the nhojs have invaded Farmer Bessie's johns. Farmer Bessie has N johns standing in a line. However, some johns have been replaced by the malicious nhojs. Thankfully, Farmer Bessie has a secret weapon to defend against the nhojs: The Johninator. In one shot, the Johninator can convert any number consecutive nhojs back into johns, and due to alternate dimensional technology, all johns hit will also be completely safe! However, the Johninator also costs 1 apple for every john it hits. Additionally, Bessie only has a total of M shots left! Farmer Bessie wants to know the minimum amount of apples the Johninator would need to convert all nhojs back into johns, given only M shots.

Input Format:

Line 1: N M

Line 2: N digits, each being either 0 or 1, with 1 representing a john and 0 representing a nhoj

Example Input:

19 4

0011100010110011100

Flag Format:

mctf{woCs_aNd_c0W5_2_[ANSWER]}

[ANSWER]: an integer representing the number of apples necessary

Example Flag:

mctf{woCs_aNd_c0W5_2_1}

Answer Explanation:

Shot 1: 0011100010110011100 -> 1111100010110011100, 0 apples

Shot 2: 1111100010110011100 -> 1111100010111111100, 0 apples

Shot 3: 1111100010111111100 -> 1111100010111111111, 0 apples

Shot 4: 1111100010111111111 -> 1111111111111111111, 1 apple