

Minimum String Co-Efficient

Given a string S consisting of only 0's and 1's, you are required to compute the co-efficient of the string.

Firstly,

- Count the number of all 0's between two consecutive 1's. Let's say that number is a .
- Count the number of all 1's between two consecutive 0's. Let's say that number is b .

The string co-efficient will be $a + b$.

Given "110100100".

- $a = 0 + 1 + 2 = 3$.
- $b = 1 + 0 + 1 + 0 = 2$.

Hence, the string co-efficient is 5.

The aim is to minimize the string co-efficient with at most p operations. In each operation, you can choose any two indices $i, j (1 \leq i \leq j \leq |S|)$ of the string and flip all the characters of $S[k]$ such that $(i \leq k \leq j)$.

Can you determine the least value of the string co-efficient using at most p operations?

Input Format

The first line contains two space-separated integers n, p : The length of the string and number of operations that can be performed, respectively. The next line contains a string S of length n .

Constraints

- $1 \leq n \leq 10^6$
- $0 \leq p \leq n$

Output Format

Print the least value of the string co-efficient using at most p operations.

Sample Input 0

```
4 1
1101
```

Sample Output 0

```
0
```

Explanation 0

One optimal way is to flip in the range $[2, 2]$.

We have **1111**.

- $a = 0 + 0 + 0 = 0$
- $b = 0$

Hence, the string coefficient is **0**.

Sample Input 1

```
7 1
1011010
```

Sample Output 1

```
2
```

Explanation 1

One optimal way is to flip in the range $[1, 1]$.

We have **1111010**\$.

- $a = 0 + 0 + 0 + 1 = 1$
- $b = 1$

Hence, the string coefficient is $1 + 1 = 2$.