

时间限制: C/C++/Rust/Pascal 1秒,其他语言2秒

空间限制: C/C++/Rust/Pascal 512 M, 其他语言1024 M

64bit IO Format: %lld

题目描述 🔀

You have n robot friends, arranged in a row, labeled from left to right as $1, 2, \ldots, n$. Initially, some robots are turned off, while others are turned on.

Your phone can distantly control the power state of the robots, but unfortunately, it is not always very accurate. Specifically, there is a constant $1 \le a \le n-1$, and you can only perform the following two types of operations with your phone:

- Select a robots with consecutive labels which are all turned on and turn them all off.
- Select a+1 robots with consecutive labels which are all turned off and turn them all on.

You want to determine the maximum possible number of robots that are on after several (possibly, 0) operations.

输入描述:

Each test contains multiple test cases. The first line of input contains a single integer t $(1 \le t \le 4 \cdot 10^4)$ — the number of test cases. The description of the test cases follows.

The first line of each test case contains two integers n and a $(2 \leq n \leq 2 \cdot 10^5$, $1 \leq a \leq n-1)$.

The second line of each test case contains a string s of length n consisting only of 01, describing the initial power states of the robots. Specifically, the i-th robot is initially turned on if and only if $s_i=1$

It is guaranteed that the sum of n over all test cases does not exceed $4\cdot 10^5$.

输出描述:

For each test case, output a single line containing an integer: the maximum possible number of robots that are on.

示例1

输入

4

3 1

1

① C++ (clang++18)

ACM模

请通过 入输出 出描述!

运行结果

复制

自测辑