

2 Binary Number

时间限制：1000ms 空间限制：64MB

2.1 题目描述

Markyyz is learning binary numbers. There is an easy problem in his homework.

You are given a binary number $s_{1\sim n}$ (s_1 is the highest bit. s_n is the lowest bit.). You need to do an operation **exactly** k times: select an interval $[l, r]$ ($1 \leq l \leq r \leq n$) arbitrarily and flip s_l, s_{l+1}, \dots, s_r , in other word, for all $i \in [l, r]$, s_i becomes 1 if s_i is 0, s_i becomes 0 if s_i is 1. What is the biggest result binary number after the k operations.

Markyyz found useless algorithms useless on the problem, so he asked SPY to help. SPY looked down on the problem but finally got WA (wrong answer). Can you help them to find the correct solution?

2.2 输入格式

The first line of the input contains a single integer T ($1 \leq T \leq 6 \times 10^4$), indicating the number of test cases.

In each test case:

The first line contains two integers n, k . ($1 \leq n \leq 10^5, 0 \leq k \leq 10^{18}$)

The second line contains a binary number $s_{1\sim n}$. ($s_1 = 1, \forall i \in [2, n] : s_i \in \{0, 1\}$)

It's guarenteed that in all test cases, $\sum n \leq 2.5 \times 10^6$

2.3 输出格式

You need to print a string of length n in one line, representing the biggest binary number after the k operations.

2.4 输入输出样例

输入样例：

2

8 2

10100101

5 233333333333333333

11101

输出样例：

11111101

11111