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## B. Not Quite a Palindromic String

time limit per test: 2 seconds memory limit per test: 256 megabytes

Vlad found a binary string\* s of even length n. He considers a pair of indices (i, n-i+1), where  $1 \leq i < n-i+1$ , to be good if  $s_i = s_{n-i+1}$  holds true.

For example, in the string '010001' there is only 1 good pair, since  $s_1 \neq s_6$ ,  $s_2 \neq s_5$ , and  $s_3 = s_4$ . In the string '0101' there are no good pairs.

Vlad loves palindromes, but not too much, so he wants to rearrange some characters of the string so that there are exactly k good pairs of indices.

Determine whether it is possible to rearrange the characters in the given string so that there are exactly k good pairs of indices (i, n-i+1).

## Input

The first line contains an integer t ( $1 \le t \le 10^4$ ) — the number of test cases.

The first line of each test case contains two integers n and k ( $2 \le n \le 2 \cdot 10^5$ ,  $0 \le k \le \frac{n}{2}$ , n is even) — the length of the string and the required number of good pairs.

The second line of each test case contains a binary string s of length n.

It is guaranteed that the sum of n across all test cases does not exceed  $2\cdot 10^5$ .

## Output

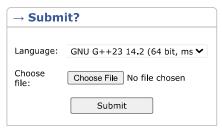
For each test case, output "YES" if there is a way to rearrange the characters of the string so that there are exactly k good pairs, otherwise output "NO".

You may output each letter in any case (lowercase or uppercase). For example, the strings "yEs", "yes", "Yes", and "YES" will be accepted as a positive answer.

## Example

input	Сору
6	
6 2	
000000	
2 1	
01	
4 1	
1011	
10 2	
1101011001	
10 1	
1101011001	
2 1	
11	
output	Сору
NO	
NO	
YES	
NO	
YES	
YES	





→ Last submissions		
Submission	Time	Verdict
321459397	May/26/2025 18:20	Accepted

<sup>\*</sup>A string s is called binary if it consists only of the characters '0' and '1'

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