

# BSTRING

In his next interview digo is given a binary string of N characters. A binary string is string consisting of only 0's and 1's. Digo can swap any adjacent pair of characters in one operation. Digo has to bring atleast M 1's together starting at any position of the string. Help him count the minimum number of operations required to do so.

It is gauranteed that there are atleast M 1's present in the given string.

Input Format:

First line contains single integer T. Number of test cases.

Next 2 \* T lines represent T test cases. Each test case is described by two lines; first line contains a single integer M and the second line contains the input binary string.

Output Format:

Output T lines, one for each test case containing the answer for that case.

Constraints :

$1 \leq T \leq 10$

$1 \leq N \leq 50000$

$1 \leq M \leq N$

Sum of N over all the cases if less than or equal to 50000.

Sample Input:

```
2
3
101001
2
101001
```

Sample Output:

```
3
1
```