Sherlock and Probability

Watson gave a string S to Sherlock. It is N characters long and consists of only `1`s and `0`s. Now he asks: Given an integer K, I'll pick two indices i and j at random between 1 and N, both inclusive. What's the probability that both $S[i]$ and $S[j]$ are `1` and $|i-j| \leq K$?

Input Format

First line contains T, the number of testcases. Each testcase consists of N(the length of S) and K in one line and string in second line.

Output Format

Print the required probability as an irreducible fraction. If required answer is `0`, output `0/1`.

Constraints

$1 \leq T \leq 10^5$
$1 \leq N \leq 10^5$
$1 \leq K \leq N$
$1 \leq \text{Sum of N over all testcases in one file} \leq 10^5$

Sample input

```
2
4 3
1011
4 1
1011
```

Sample output

```
9/16
5/16
```

Explanation

test1: Out of 16 choices, 9 pairs of (i, j) satisfy our condition.

```
(1,1), (1,3), (1,4), (3,1), (3,3), (3,4), (4,1), (4,3), (4,4)
```

test2: Out of 16 choices, 5 pairs of (i, j) satisfy our condition.

```
(1,1), (3,3), (4,4), (4,3), (3,4)
```