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Count Substrings

Problem Code: **CSUB**

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Given a string **S** consisting of only **1s** and **0s**, find the number of substrings which start and end both in **1**.

In this problem, a substring is defined as a sequence of continuous characters **S_i**, **S_{i+1}**, ..., **S_j** where **1 ≤ i ≤ j ≤ N**.

Input

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

Output

For each testcase, print the required answer in one line.

Constraints

- **1 ≤ T ≤ 10⁵**
- **1 ≤ N ≤ 10⁵**
- Sum of **N** over all testcases ≤ **10⁵**

Example

Input :

```
2
4
1111
5
10001
```

Output :

```
10
3
```

Explanation

#test1: All substrings satisfy.

#test2: Three substrings S[1,1], S[5,5] and S[1,5] satisfy.

All submissions for this problem are available.

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Editorial:	https://discuss.codechef.com/problems/CSUB
Tags:	ad-hoc , cakewalk , darkshadows , july14
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Time Limit:	1 secs
Source Limit:	50000 Bytes
Languages:	CPP14, C, JAVA, PYTH 3.6, PYTH, CS2, ADA, PYP3, TEXT, PAS fpc, RUBY, PHP, NODEJS, GO, TCL, HASK, PERL, SCALA, BASH, JS, PAS gpc, BF, LISP sbcl, CLOJ, LUA, D, CAML, ASM, FORT, FS, LISP clisp, SCM guile, PERL6, CLPS, WSPC, ERL, ICK, NICE, PRLG, ICON, PIKE, SCM qobi, ST, NEM

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