



STUDENT REPORT

DETAILS

Name

A.Padmini

Roll Number

3BR21CS002

EXPERIMENT

Title

LONGEST SUBSTRING OF EVEN LENGTH

Description

You are given a strings of length n. The string s consists of digits varying from 0-9. Find and print the length of the longest even length substring of string s, such that the length of the substring is 2k digits and the sum of left k digits is equal to the sum of right k digits.

Note:

Print 0 if no such substring is possible with the given condition.

Input Format:

The input consists of two lines:

The first line contains an integer denoting n.

The second line contains a string denoting s.

Input will be read from the STDIN by the candidate

Output Format:

Print the length of the longest even length substring.

The output will be matched to the candidate's output printed on the STDOUT

Constraints:

$1 \leq n \leq 10$

$0 \leq s_i \leq 9$.

Sample Input:

6

123123

Sample Output:

6

Explanation:

The entire string is a valid substring where the sum of the first half (1+2+3) equals the sum of the second half (1+2+3).

Source Code:

```
n=int(input())
s=input()
mx=0
for i in range(n):
    for j in range(i+1,n,2):
        l=j-i+1
        mid=(i+j)//2
        ls=sum(int(s[k])for k in range(i,mid+1))
        rs=sum(int(s[k])for k in range(mid+1,j+1))
        if ls==rs:
            mx=max(mx,l)
print(mx)
```

RESULT

5 / 5 Test Cases Passed | 100 %