Exam

You and your friend have just taken a True/False exam. Your friend has been to see the instructor, so they know how many answers they got right (but not which ones). You compare notes: you know your answers and your friend's answers. What is the maximum number of answers you could have gotten right?

Input

Each input will consist of a single test case. Note that your program may be run multiple times on different inputs.

Each test case will begin with a line containing a single integer ***n*** ($0 \le n \le 1{,}000$), which is the number of answers your friend got right on the exam.

Each of the next two lines will contain a string ***s*** ($\max[n,1] \le |s| \le 1{,}000$, $s \in \{T,F\}^*$). The two strings will be of the same length. The first line represents your answers; the second line represents your friend's answers. The order of answers is the same in both strings: the first letter is the answer to question 1, the second to question 2, and so on.

Output

Output a single integer, which is the maximum number of answers you could have gotten right.

Sample Input	Sample Output
3 FTFFF TFTTT	2
6 TTFTFFTFTF TTTTFFTTTT	9