

Groovy Ram



Ram has recently learnt a new dance move s . He knows he can work hard and convert it into a stronger dance move t . Both the moves s and t contain the same number of letters.

In a single day, Ram can increase any letter of move s by one, that is, in a single day, he can convert letter **A** to **B**, **C** to **D**, **M** to **N** and so on. He can also convert letter **Z** to letter **A**.

Ram just realized he also has a hidden ability. It can help him increase any letter of move s by 13, that is, in a single day, he can convert letter **A** to letter **N**, **B** into **O**, **M** into **Z**, **O** into **B** and so on.

Now Ram wants to know the minimum number of days in which he can convert the move s into move t ?

Input Format

- First line contains an integer n , the length of strings s and t
- Second line contains string s of length n
- Third line contains string t of length n

Constraints

- $1 \leq |s| = |t| \leq 10^5$
- s and t consists of uppercase English letters only

Output Format

Output single line containing the minimum number of days required

Sample Input 0

```
4
ABCT
PBDI
```

Sample Output 0

```
7
```

Explanation 0

Ram can convert move s into move t in 7 days as follows:

1. **A** -> **N** (1st letter)
2. **N** -> **O** (1st letter)
3. **O** -> **P** (1st letter)
4. **C** -> **D** (3rd letter)
5. **T** -> **G** (4th letter)
6. **G** -> **H** (4th letter)
7. **H** -> **I** (4th letter)