



5

LIVE EVENTS

# Code Chronicles

Sep 10, 2018, 06:00 PM IST - Sep 13, 2018, 12:00 AM IST

[INSTRUCTIONS](#) [PROBLEMS](#) [SUBMISSIONS](#) [JUDGE](#)[← Problems](#) / Hermoine's Magic

## Hermoine's Magic

Max. Marks: 30

The challenge is over and this problem has been moved to practice area. You can either submit your solution here or [Go to Practice Area](#). Also further submissions won't affect the leaderboard.

[PROBLEM](#)[EDITORIAL](#)[MY SUBMISSIONS](#)

Hermione has a knows a magical spell to teleport words.

She can teleport words in two ways, each teleport takes a minute to work a and b. Help her to convert her move a to b

In a one minute, she can teleport any letter by spell a by one, that is, in a minute, she can convert letter A to B, B to C, C to D and so on. She can also teleport Z to A.

She comes to know that she can take help from Ron Weasley and can teleport any letter using spell b by 13 that is she can teleport any single letter by 13 like A to N, B into letter O, M into letter Z, O to B and so on.

Harry Potter challenges her to teleport by taking minimum time.

Help Hermione to accept the challenge and teleport faster.....!!!

Constraints:

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

Input format:

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

Output format:

- Output single line containing the minimum time required

SAMPLE INPUT



```
4
ABCT
PBDI
```

SAMPLE OUTPUT



```
7
```



## Explanation

Hermione can convert teleport with help of Ron from a to b in 7 minutes 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)

**Time Limit:** 5.0 sec(s) for each input file.

**Memory Limit:** 256 MB

**Source Limit:** 1024 KB

**Marking Scheme:** Marks are awarded if any testcase passes.

**Allowed Languages:** Bash, C, C++, C++14, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, R(RScript), Racket, Ruby, Rust, Scala, Swift, Swift-4.1, Visual Basic

## CODE EDITOR

Enter your code or [Upload your code](#) as file.

[Save](#)

Bash (GNU bash, version 4.3 ▾)



```
1 # Sample bash code
2
```

1:1

☒ Provide custom input

COMPILE & TEST

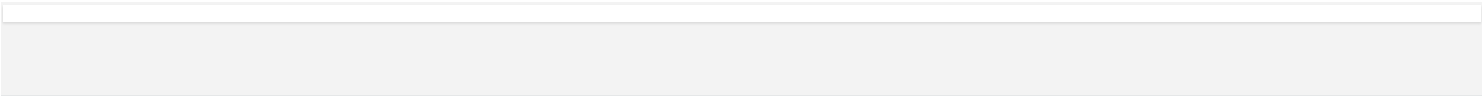
SUBMIT

Your Rating:

Like 0

Share

Tweet



[About Us](#)

[Innovation Management](#)

[Technical Recruitment](#)

[University Program](#)

[Developers Wiki](#)

[Blog](#)

[Press](#)

[Careers](#)

[Reach Us](#)

5  
LIVE EVENTS



Site Language: [English](#) ▼ | [Terms and Conditions](#) | [Privacy](#) | © 2018 HackerEarth

