



Codemania 3.0: Nunquam Soli Sumus

Mar 25, 2020, 04:00 PM IST - Mar 25, 2020, 10:00 PM IST

INSTRUCTIONS PROBLEMS SUBMISSIONS LEADERBOARD ANALYTICS JUDGE

← Problems / Elaine's IQ

# Elaine's IQ

Max. Marks: 100

This problem is no longer available for practice. Apology for any inconvenience!

George, Elaine, and Jerry are sitting in the hallway. George is frustrated because he scored only 80 in the IQ test which he was forced to give by his girlfriend, Monica. Elaine agrees to give the test for him as she claims her IQ be 145. The test day arrives and the first question is as follows:

Given an arbitrary sequence of 0s and 1s, a valid sequence is defined as follows:

- 1) An empty sequence is valid.
- 2) If sequence p is valid, then 0p1 is also valid.
- 3) If p and q are valid, then pq is valid.

Now given a sequence, allowed operations are replacing 0s with 1s and vice versa. Find the minimum number of operations required to make sequence valid.

Now as Elaine is busy with logical questions and she desperately needs to prove her IQ is 145(even though it is not), she asks you for help. Can you help Elaine?

### **INPUT**

- No of test cases, t
- For each line t, given a sequence.

### OUTPUT

• T lines giving no of minimum operations required for each line, if not possible to make sequence valid, then print -1.

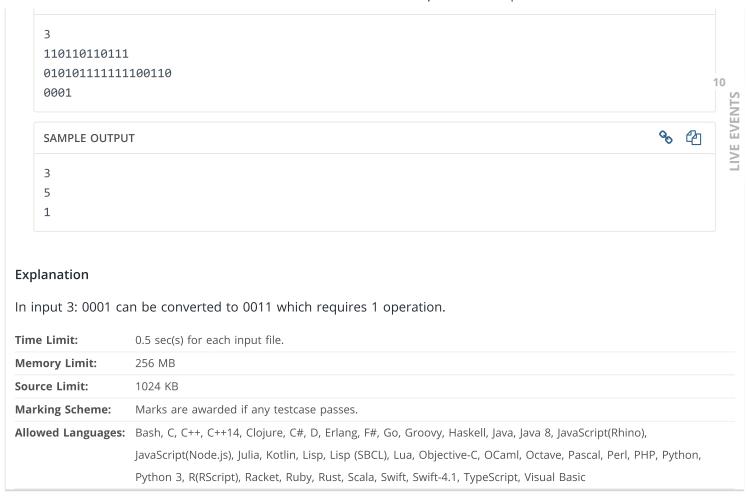
### Constraint

- 1<=t<=1000
- 1<=|str|<=1000

90



SAMPLE INPUT



## **CODE EDITOR**

```
C (gcc 5.4.0)
                                                      Save
     /*
1
2
     // Sample code to perform I/O:
3
     #include <stdio.h>
4
5
     int main(){
         int num;
6
7
         scanf("%d", &num);
                                                         // Reading input from STDIN
                                                 // Writing output to STDOUT
         printf("Input number is %d.\n", num);
8
9
     }
10
11
     // Warning: Printing unwanted or ill-formatted data to output will cause the test
     cases to fail
12
     */
13
14
     // Write your code here
15
```



☑ Provide custom input

COMPILE & TEST

SUBMIT

Your Rating:

View all comments

	Resources	Solutions	CompanyService & Support About Us	
	Tech Recruitment Blog	Assess Developers		
	Product Guides	Conduct Remote	Press	Technical Support
+1-650-461-4192	Developer hiring guide	Interviews	Careers	Contact Us
contact@hackerearth.comEngineering Blog		Assess University Talent		
	Developers Blog	Organize Hackathons		
f y in	Developers Wiki			
	Competitive Programming			
	Start a Programming Club			
	Practice Machine Learning			

Site Language: English ▼ | © 2020 HackerEarth All rights reserved | Terms of Service | Privacy Policy