$\label{lem:contest} Contest Duration: 2021-05-15 (Sat) 17:30 (http://www.timeanddate.com/worldclock % $$ \frac{19:10 (http://www.timeanddate.com/worldclock / 19:10 (htt$ 

↑ Top (/contests/abc201)

**≅** Tasks (/contests/abc201/tasks)

**3** Clarifications (/contests/abc201/clarifications)

✓ Submit (/contests/abc201/submit?taskScreenName=abc201\_c) ■ Results ▼

**↓** Standings (/contests/abc201/standings)

Custom Test (/contests/abc201/custom\_test)

#### $\nearrow$

# **C - Secret Number**



Time Limit: 2 sec / Memory Limit: 1024 MB

Score: 300 points

#### **Problem Statement**

Takahashi has forgotten his PIN. The PIN is a four-digit string consisting of 0, 1, ..., 9, and may begin with a 0.

For each digit  $_0$  through  $_9$ , Takahashi remembers the following fact, represented by a 10 -character string  $S_0S_1\dots S_9$ :

- ullet if  $S_i$  is  $\circ$ : he is certain that the PIN contained the digit i;
- if  $S_i$  is x: he is certain that the PIN did not contain the digit i;
- if  $S_i$  is :: he is not sure whether the PIN contained the digit i.

How many strings are there that could be Takahashi's PIN?

### **Constraints**

• S is a 10-character string consisting of  $\circ$ ,  $\times$ , and ?.

## Input

Input is given from Standard Input in the following format:

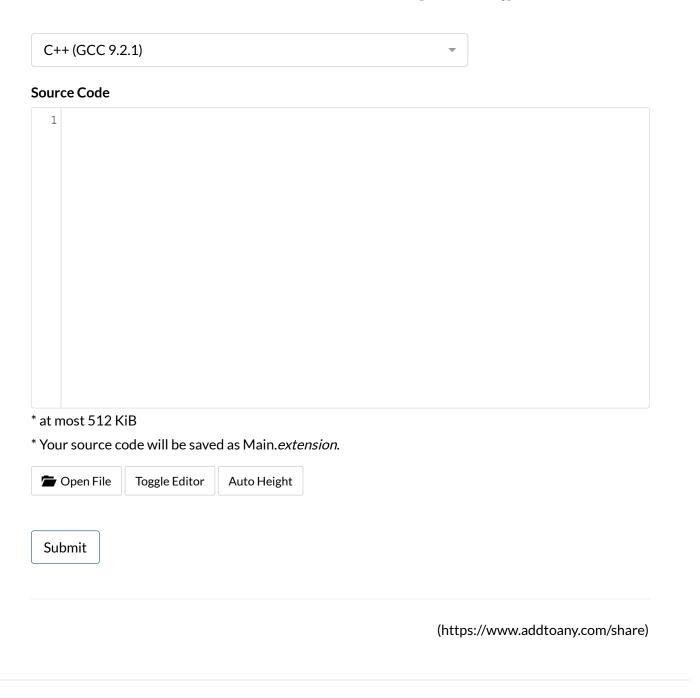
Remaining Time 00:55:03

00:55:03

Language

•	<b>51</b>
$oldsymbol{S}$	
Output	
int the answer.	
ample Input 1 Copy	
000???xxxx	Сору
ample Output 1 Copy	
	Сору
ome of the possible PINs are 0123 and 0021.	
ample Input 2 Copy	Сору
0?00?0x0x0	
ample Output 2 Copy	
	Сору
nere may be no possible PINs, in which case the answer	is 0.
ample Input 3 Copy	
xxxxx?xxxo	Сору
ample Output 3 Copy	
15	Сору
	D - · · · · · · · · · · · · · · · · · ·
	Remaining Tim

2 of 3 15/05/21, 18:15



Rule (/contests/abc201/rules) Glossary (/contests/abc201/glossary)

Terms of service (/tos) Privacy Policy (/privacy) Information Protection Policy (/personal) Company (/company) FAQ (/faq) Contact (/contact)

Copyright Since 2012 ©AtCoder Inc. (http://atcoder.co.jp) All rights reserved.

Remaining Time 00:55:03

3 of 3