

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

L. House of Cards

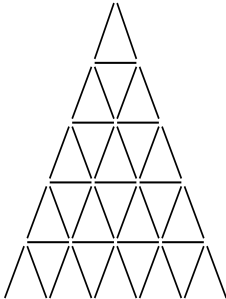
time limit per test: 1 second
memory limit per test: 256 megabytes

Hussien has a string of cards made up of:

- 1. '/' (right-leaning cards)
- 2. '\' (left leaning cards)
- 3. '_' (ceiling cards)

He wants to make a house of cards such that:

- 1. The house consists of some non-zero number of floors.
- 2. Each floor consists of a non-zero number of rooms and the ceiling. A room is two cards that are leaned towards each other. The rooms are made in a row, every two adjoining rooms share a ceiling made by another card.
- 3. Each floor besides for the lowest one should contain strictly less rooms than the floor below it.



Given left and right queries of the array, state the maximum height of a house of cards that could be made using the characters between the left and right index inclusively.

Input

First line of input is a string s of cards ($1 \leq |s| \leq 10^5$)

The second line of input is q ($1 \leq q \leq 10^5$)- the number of queries.

The next q lines each contain l_i, r_i ($1 \leq l_i \leq r_i \leq |s|$)- the left and right range for the i^{th} query.

Output

For each query, output the maximum height for a house of cards made with cards in that range.

Example

input	Copy
/\ /\ /\	
5	
1 2	
1 5	
1 8	
3 8	
2 3	
output	Copy
1	
1	
2	
1	
0	

ICPC Assiut University Training - Juniors Phase 1 Sheets-2022

Public

Participant

→ Group Contests

- Juniors Phase 1 Practice #5 (Bitmask, Bitset, Bits)
- Juniors Phase 1 Practice #4 (Binary search , Two pointers)
- Juniors Phase 1 Practice #3 (STL 2)
- Juniors Phase 1 Practice #2 (STL 1)
- Juniors Phase 1 Practice #1 (Prefix sum , Frequency Array)

Juniors Phase 1 Practice #1 (Prefix sum , Frequency Array)

Finished

Practice

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Submit?

Language: GNU G++20 13.2 (64 bit, win

Choose file: Choose File No file chosen

Submit

→ Last submissions

Submission	Time	Verdict
246293199	Feb/14/2024 01:25	Accepted
246293019	Feb/14/2024 01:21	Accepted
246292996	Feb/14/2024 01:21	Wrong answer on test 1
246292796	Feb/14/2024 01:17	Accepted
246292359	Feb/14/2024 01:09	Wrong answer on test 2