

C. Two-gram

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

Two-gram is an ordered pair (i.e. string of length two) of capital Latin letters. For example, "AZ", "AA", "ZA" — three distinct two-grams.

You are given a string s consisting of n capital Latin letters. Your task is to find **any** two-gram contained in the given string **as a substring** (i.e. two consecutive characters of the string) maximal number of times. For example, for string $s = \text{"BBAABBBA"}$ the answer is two-gram "BB", which contained in s three times. In other words, find any most frequent two-gram.

Note that occurrences of the two-gram can overlap with each other.

Input

The first line of the input contains integer number n ($2 \leq n \leq 100$) — the length of string s . The second line of the input contains the string s consisting of n capital Latin letters.

Output

Print the only line containing exactly two capital Latin letters — **any** two-gram contained in the given string s **as a substring** (i.e. two consecutive characters of the string) maximal number of times.

Examples

input	Copy
7 ABACABA	
output	Copy
AB	

input	Copy
5 ZZZAA	
output	Copy
ZZ	

Note

In the first example "BA" is also valid answer.

In the second example the only two-gram "ZZ" can be printed because it contained in the string "ZZZAA" two times.

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 #3 (STL 2).

Finished

Practice

→ About Time Scaling

This contest uses time limits scaling policy (depending on a programming language). The system automatically adjusts time limits by the following multipliers for some languages. Despite scaling (adjustment), the time limit cannot be more than 30 seconds. Read the details by the [link](#).

→ 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
311928889	Mar/23/2025 00:26	Accepted
311928818	Mar/23/2025 00:25	Wrong answer on test 4