

## PROBLEM 1

# Election II

**Input File:** `elecin.txt`**Output File:** `elecout.txt`**Time and Memory Limits:** 1 second, 1 GB

Election time is here again, and you are in charge of determining the outcome. There were  $N$  voters this year, each voting for one of three candidates: A, B or C. Which candidate received the most votes and therefore won the election? Or is there a tie this year?

## Input

- The first line of input contains the integer  $N$ .
- The second line of input contains a string of  $N$  characters representing the votes.

## Output

If some or all of the candidates are tied for the most votes, your program must output T (for tie). Otherwise, it must output the winner.

### Sample Input 1

```
4
BBAC
```

### Sample Input 2

```
7
BAAABAB
```

### Sample Input 3

```
2
CB
```

### Sample Output 1

```
B
```

### Sample Output 2

```
A
```

### Sample Output 3

```
T
```

## Explanation

In the first sample input, B received the most votes:

- A received 1 vote.
- B received 2 votes.
- C received 1 vote.

In the second sample input, A received the most votes:

- A received 4 votes.
- B received 3 votes.
- C received 0 votes.

In the third sample input, B and C are tied for the most votes:

- A received 0 votes.
- B received 1 vote.
- C received 1 vote.

## Subtasks & Constraints

For all subtasks:

- $2 \leq N \leq 100\,000$ .
- Each character of the string is A, B or C.

Additionally:

- For Subtask 1 (50 marks),  $N = 2$ .
- For Subtask 2 (30 marks), each character of the string is A or B.
- For Subtask 3 (20 marks), no special constraints apply.