Friends or Foes



In the bustling city of Techville, citizens pride themselves on being honest. But beneath the bright neon signs and crowded alleys, dishonesty lurks.

The mayor of Techville has a simple rule to determine if someone is truly honest:

Every citizen claims to be honest.

But if 1% or more of a citizen's friends are dishonest, then the citizen is considered dishonest.

If less than 1% of their friends are dishonest, the citizen remains honest

You, the city's new investigator, are tasked with classifying the truthfulness of a given citizen.

Input Format

A string name, the name of the citizen being investigated.

'JOHN'

A string of length \leq 10 5 , representing the honesty of a citizen's friends. 'HHHHDHHHHH'

Constraints

 $1 \le \text{len}(S) \le 10^5$ name contains only English letters, with length ≤ 20

Output Format

'D'

Sample Input 0

Aiden H

Sample Output 0

Н