

Switch

Jojo is easily bored. Because he feels very bored today, he starts to think of a problem. There's a lamp that is connected to a switch. If the switch is pressed, the lamp will turn on if it is initially off and vice versa. If the lamp is initially off, which state will it be in if Jojo presses the switch N times?

Format Input

A single line with integer N.

Format Output

A single line with integer 1 or 0. If the lamp is on, output 1. If it is off, output 0.

Constraints

• $1 \le N \le 10^9$

Sample Input 1

1

Sample Output 1

1

Sample Input 2

4

Sample Output 2

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Sample Input 3

13

Sample Output 3



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Jojo adalah orang yang cepat bosan. Karena Ia merasa sangat bosan, Ia pun mulai berpikir. Ada sebuah lampu yang terhubung dengan sebuah saklar. Jika saklar ditekan, lampu yang awalnya mati akan menyala dan sebaliknya. Jika lampu pada awalnya mati, apakah lampu tersebut menyala atau mati jika saklar ditekan oleh Jojo sebanyak N kali?

Format Input

Satu baris berisi bilangan bulat N.

Format Output

Satu baris berisi bilangan 1 atau 0. Jika lampu menyala, maka keluarkan angka 1. Jika lampu mati, maka keluarkan angka 0.

Constraints

• $1 \le N \le 10^9$

Sample Input 1

Sample Output 1

1

Sample Input 2

4

Sample Output 2

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Sample Input 3

13

Sample Output 3



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