

# Fibonacci check

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[English version](#)

For given number  $x$  check if it is Fibonacci number.

## Input

There is unknown number of tests. Each test consist of one integer  $x$  ( $0 < x < 10^{12}$ ).

## Output

For each test print *YES* if  $x$  is Fibonacci number or *NO* otherwise.

## Example

**Input:**

1  
2  
3  
4  
5

**Output:**

YES  
YES  
YES  
NO  
YES