

Leap year

Leap year is a year which has 366 days. A year is leap year if it divisible by four, except for years that are exactly divisible by 100, but these centurial years are leap years if they are exactly divisible by 400. Given a year n , check if n is leap year or not.

Input

The only integer n ($0 \leq n \leq 10^9$).

Output

Output "YES" if n is leap year, otherwise output "NO"

Example

Input:

2016

Output:

YES