An extra day is added to the calendar almost every four years as February 29, and the day is called a leap day. It corrects the calendar for the fact that our planet takes approximately 365.25 days to orbit the sun. A leap year contains a leap day.

In the Gregorian calendar, three conditions are used to identify leap years:

- The year can be evenly divided by 4, is a leap year, unless:
  - The year can be evenly divided by 100, it is NOT a leap year, unless:
    - The year is also evenly divisible by 400. Then it is a leap year.

This means that in the Gregorian calendar, the years 2000 and 2400 are leap years, while 1800, 1900, 2100, 2200, 2300 and 2500 are NOT leap years. Source

**Task**

Given a year, determine whether it is a leap year. If it is a leap year, return the Boolean `True`, otherwise return `False`.

Note that the code stub provided reads from STDIN and passes arguments to the `is_leap` function. It is only necessary to complete the `is_leap` function.

**Input Format**

Read $year$, the year to test.

**Constraints**

$1900 \leq year \leq 10^5$

**Output Format**

The function must return a Boolean value (True/False). Output is handled by the provided code stub.

**Sample Input 0**

```
1990
```

**Sample Output 0**

```
False
```

**Explanation 0**

1990 is not a multiple of 4 hence it's not a leap year.

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```
def is_leap(year):
    leap = False

    # Write your logic here
    if year%400==0:
        leap=True
    elif year%100==0:
        leap=False
    elif year%4==0:
        leap=True

    return leap

year = int(input())···
```

Line: 10 Col: 18

Upload Code as File | Run Code | Submit Code

Test against custom input

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Python

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Compiler Message

Success

Hidden Test Case

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