

5.1.1 check leap year

A) Algorithm: Check Leap Year

Step 1: Start

Step 2: Input the year and store it in variable year

Step 3: Check if (year % 400 == 0)

If condition is true, then go to Step 6

Step 4: Else check if (year % 4 == 0 AND year % 100 != 0)

If condition is true, then go to Step 6

Step 5: Else print "Not a leap year" and go to Step 7

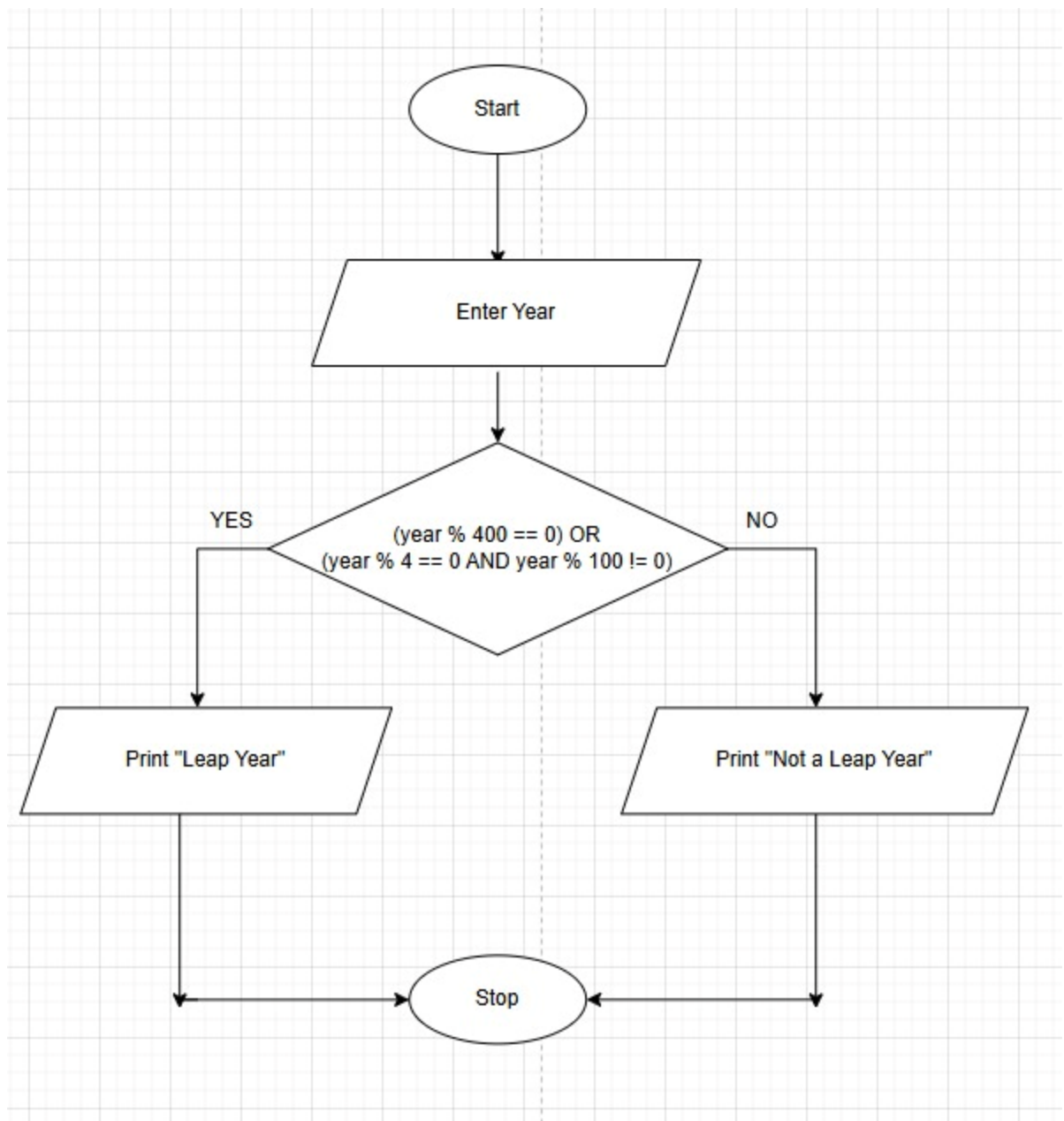
Step 6: Print "Leap year"

Step 7: Stop

B) Code

```
year=int(input().strip())
if(year % 400 == 0) or (year % 4 == 0 and year % 100 != 0):
    print("Leap year")
else:
    print("Not a leap year")
```

C) Flowchart



D) output

The screenshot displays the CodeTANTRA IDE interface. The top header includes the CodeTANTRA logo, a home icon, the user email 'shreyash.girade.batch2025@sitnagpur.siu.edu.in', and links for 'Support' and 'Logout'. The main workspace is divided into two panels. The left panel, titled '5.1.1. Leap Year Checker', contains the problem description and test cases. The right panel, titled 'leapYear.py', shows the Python code for the solution.

Problem Description: Write a Python program that prompts the user to enter a year. The program should determine if the year is a leap year or not and print the appropriate message.

Input Format:

- A single line contains an integer representing the year.

Output Format:

- Print "Leap year" if it is a leap year. Otherwise, print "Not a leap year".

Sample Test Cases

Python Code (leapYear.py):

```
1 year=int(input().strip())
2 if(year % 400 == 0) or (year % 4 == 0 and year % 100
   != 0):
3     print("Leap year")
4 else:
5     print("Not a leap year")
```

The bottom of the IDE features a dark blue bar with navigation buttons: '< Prev', 'Reset', 'Submit', and 'Next >'. Above these buttons are tabs for 'Terminal' and 'Test cases'.