

EXPERIMENT - 5

5.1.1 Leap Year Checker

ALGORITHM

Step 1: Start the program.

Step 2: Input the year from the user.

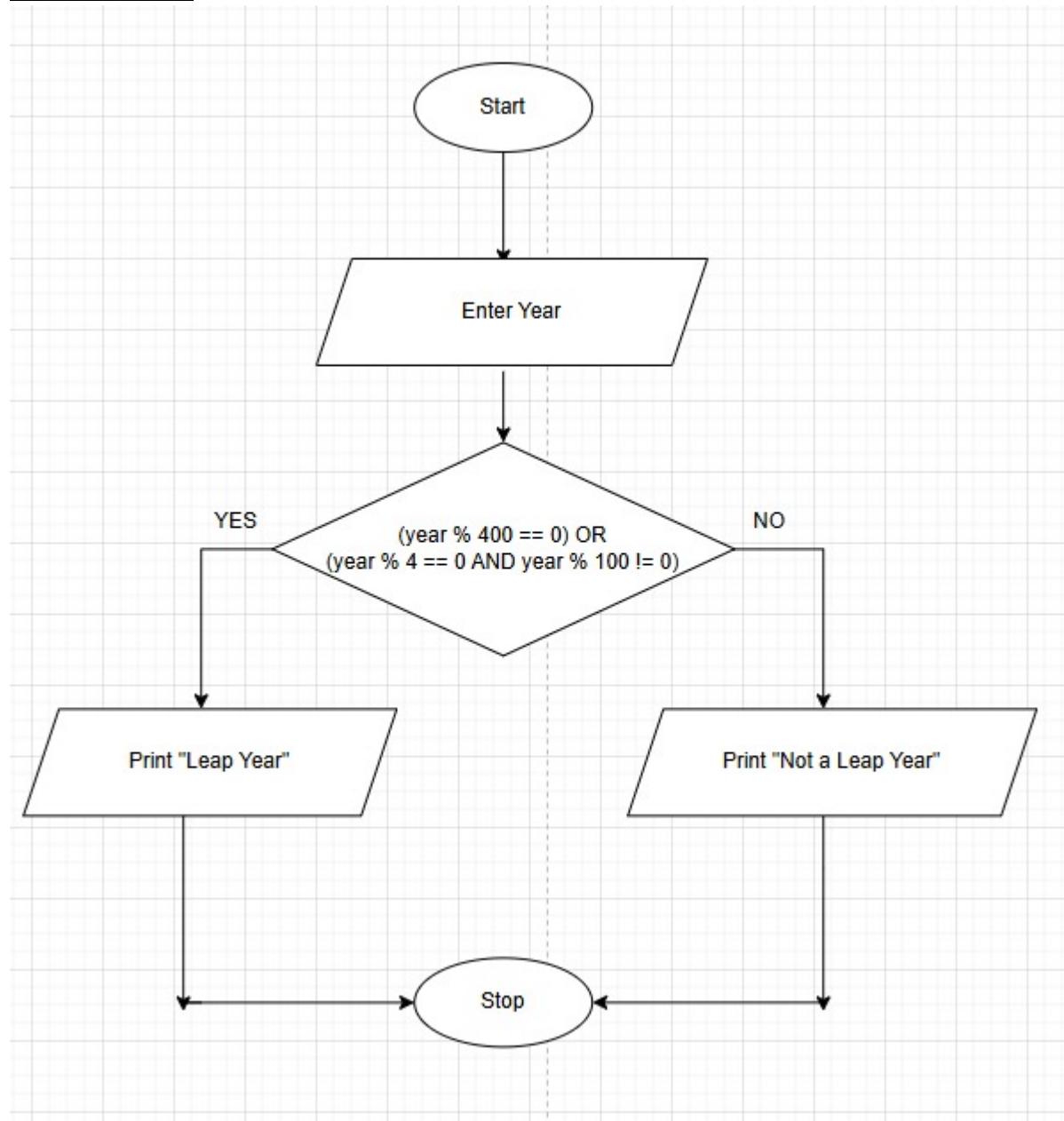
Step 3: Check if $(\text{year} \% 400 == 0)$ OR $(\text{year} \% 4 == 0 \text{ AND } \text{year} \% 100 != 0)$.

Step 4: If the condition is true, print "Leap year".

Step 5: Otherwise, print "Not a leap year".

Step 6: End the program.

FLOWCHART



EXPERIMENT - 5

PYTHON CODE

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

EXECUTION

The screenshot shows the CodeTantra IDE interface. The title bar says "CODETANTRA Home". The user is logged in as "harsh.ghaoghave.batch2025@sitagpur.siu.edu.in". The code editor window is titled "leapYear.py" and contains the provided Python code. The code is highlighted in green and blue. Below the code editor, there are performance metrics: Average time 0.007 s, Maximum time 0.008 s, and 6.75 ms. It also shows that 2 out of 2 shown test case(s) passed and 2 out of 2 hidden test case(s) passed. The test cases section shows two successful test cases: Test case 1 (Expected output: 2824, Actual output: 2824, Status: Leap year) and Test case 2 (Expected output: 2020, Actual output: 2020, Status: Leap year). At the bottom, there are buttons for "Prev", "Reset", "Submit", and "Next >".