Ex. No.: 1

Date: 26/9/24

Calculate Area and Perimeter

Write an Algorithm and draw a Flowchart to Calculate the area and perimeter of a square.

Algorithm:

STEP-1 : Start

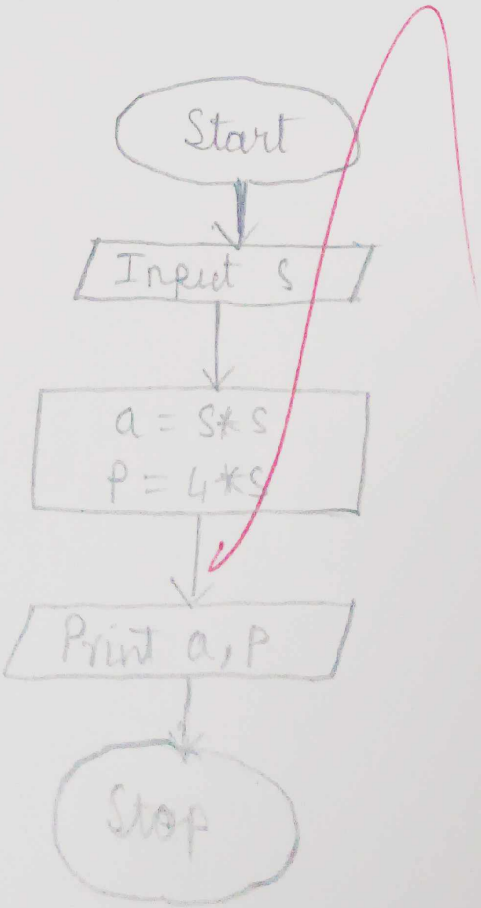
STEP-2: Input s

STEP-3: Calculate area(a) as s*s and perimeter as 4*s and store in a and p

STEP-4: Print a and p

STEP-5: Stop

Flowchart:



26/9/24

Ex. No.: 2

Date: 26/9/24

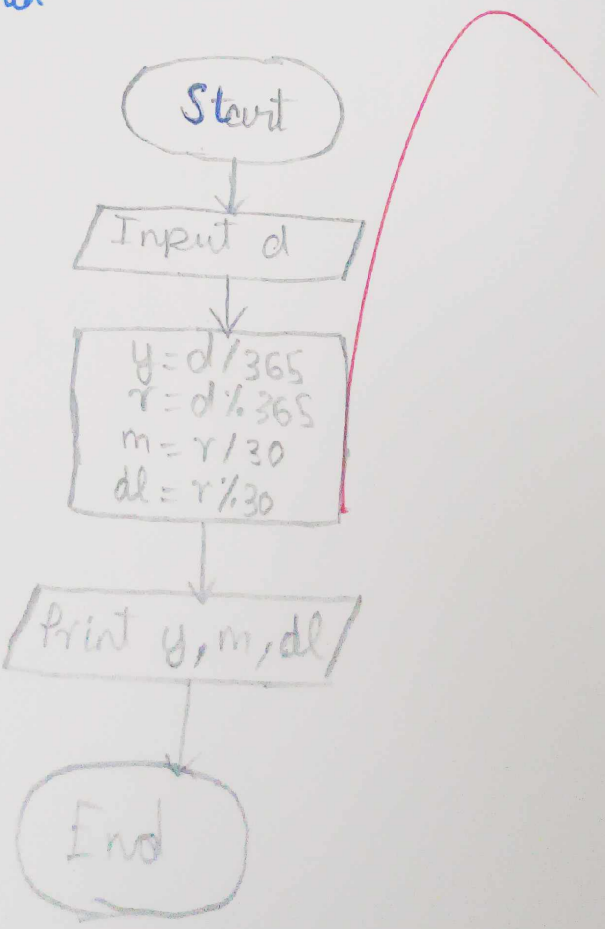
Days to Year Conversion

Write an Algorithm and draw a Flowchart to convert the given days into years & months.

Algorithm:

STEP-1 : Start
STEP-2 : Get total numbers of days
STEP-3 : Initialise days in years to 365 and days in months to 30.
STEP-4 : Calculating remainder days by dividing days to 365 and remaining days by 30 to find months and days left will be left
STEP-5 : Print y, m, dl
STEP-6 : End

Flowchart:



26/9/24

Ex. No.: 3

Date: 26/9/24

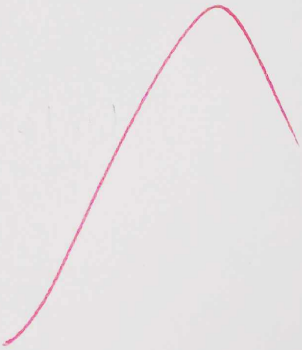
Prime Number

Write an Algorithm and draw a Flowchart to check whether the given number is Prime or not.

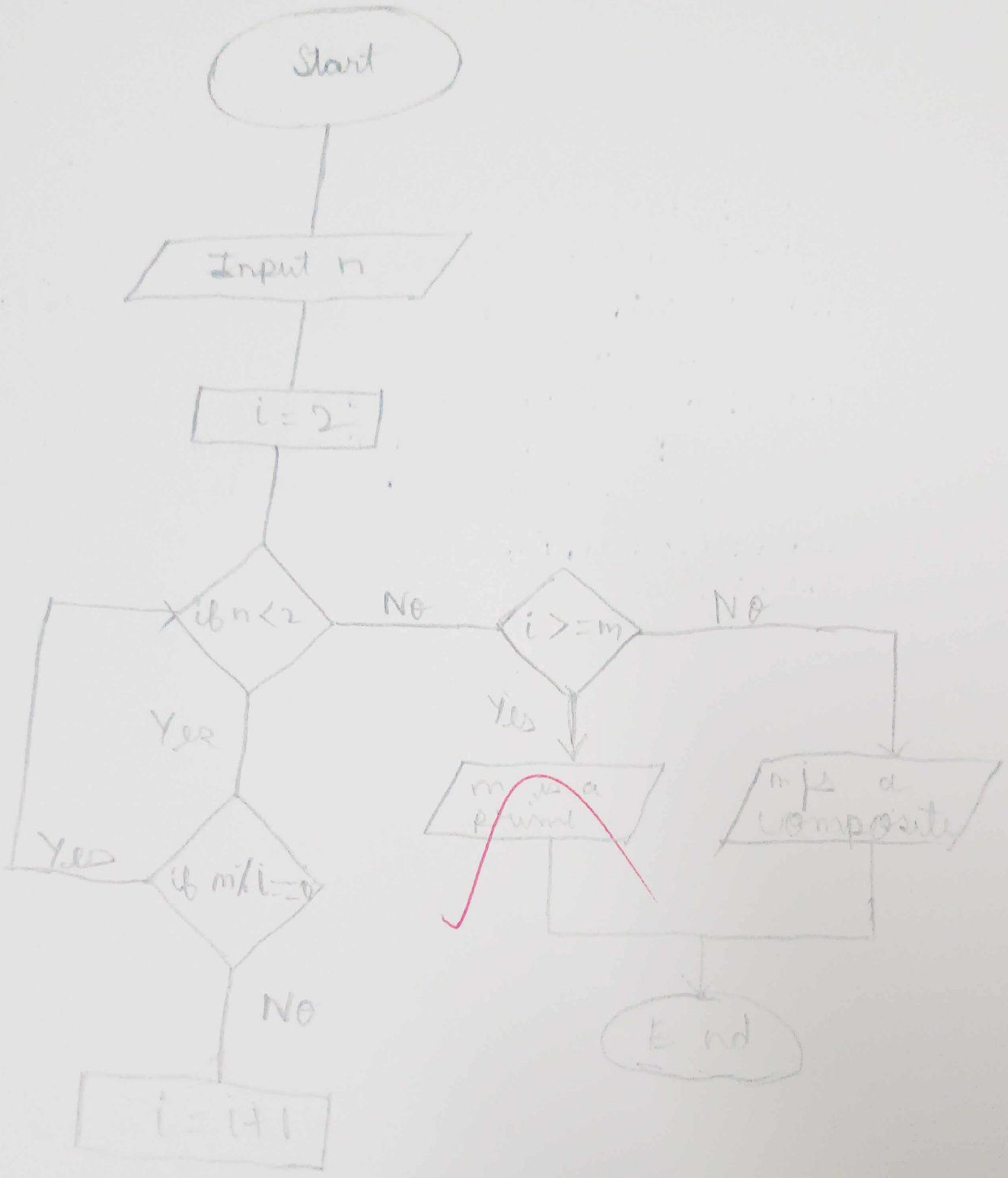
Algorithm:

STEP-1: Start
STEP-2: Input n
STEP-3: Set i = 2
STEP-4: Check if n<2 then go to step 5 else go to step 6
STEP-5: Print composite and go to step 8
STEP-6: IF n%2 = 0 print ("~~prime~~ composite") else print ('Prime')
STEP-7: Repeat step 6 and until i <= sqrt(n)
STEP-8: Stop

Flowchart:



26/9/24



Ex. No. 6

Date: 26/10/24

Leap Year

Write an Algorithm and draw a Flowchart to check whether the given year is Leap year or not.

Algorithm:

STEP-1: Start

STEP-2: Input y

STEP-3: If y is divisible by 4:

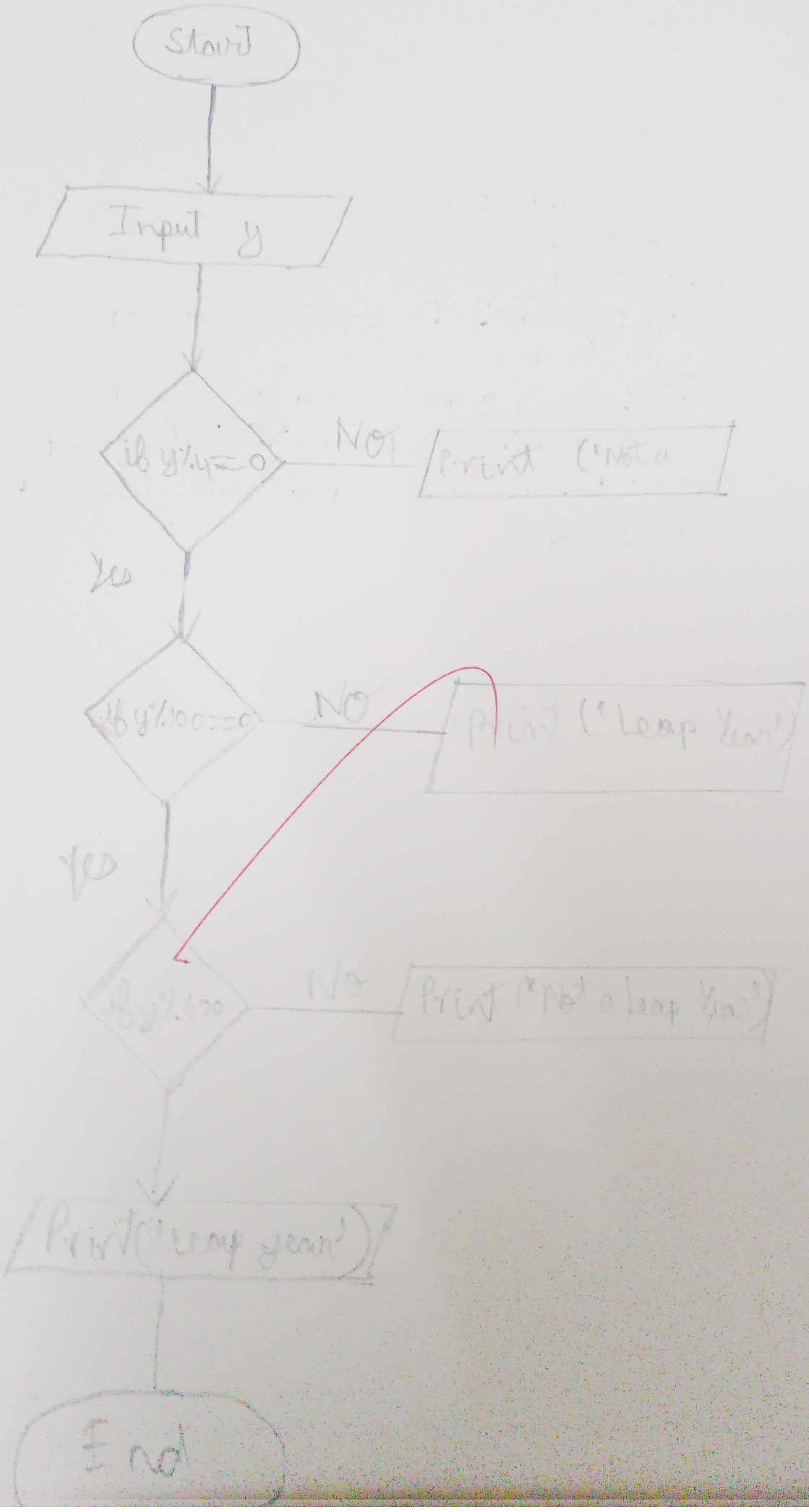
- If y is divisible by 100:
  - If y is divisible by 400:
    print ("Leap year")
  - else:
    print ("Not leap year")

STEP-4: else:
print ("Not leap year")

Flowchart:

STEP-5: Stop

21/10/24



Ex. No.: 5

Date: 28/9/24

Palindrome Number

Write an Algorithm and draw a Flowchart to check whether the given number is palindrome number or not.

Algorithm:

STEP-1 : Start

STEP-2 : Input n

STEP-3 : Set t = n and r = 0

STEP-4 : while n greater than 0 :

- d = n % 10
- r = r * 10 + d
- n = ~~n/2~~ n/10

Flowchart: STEP-5 : if t is equal to r :

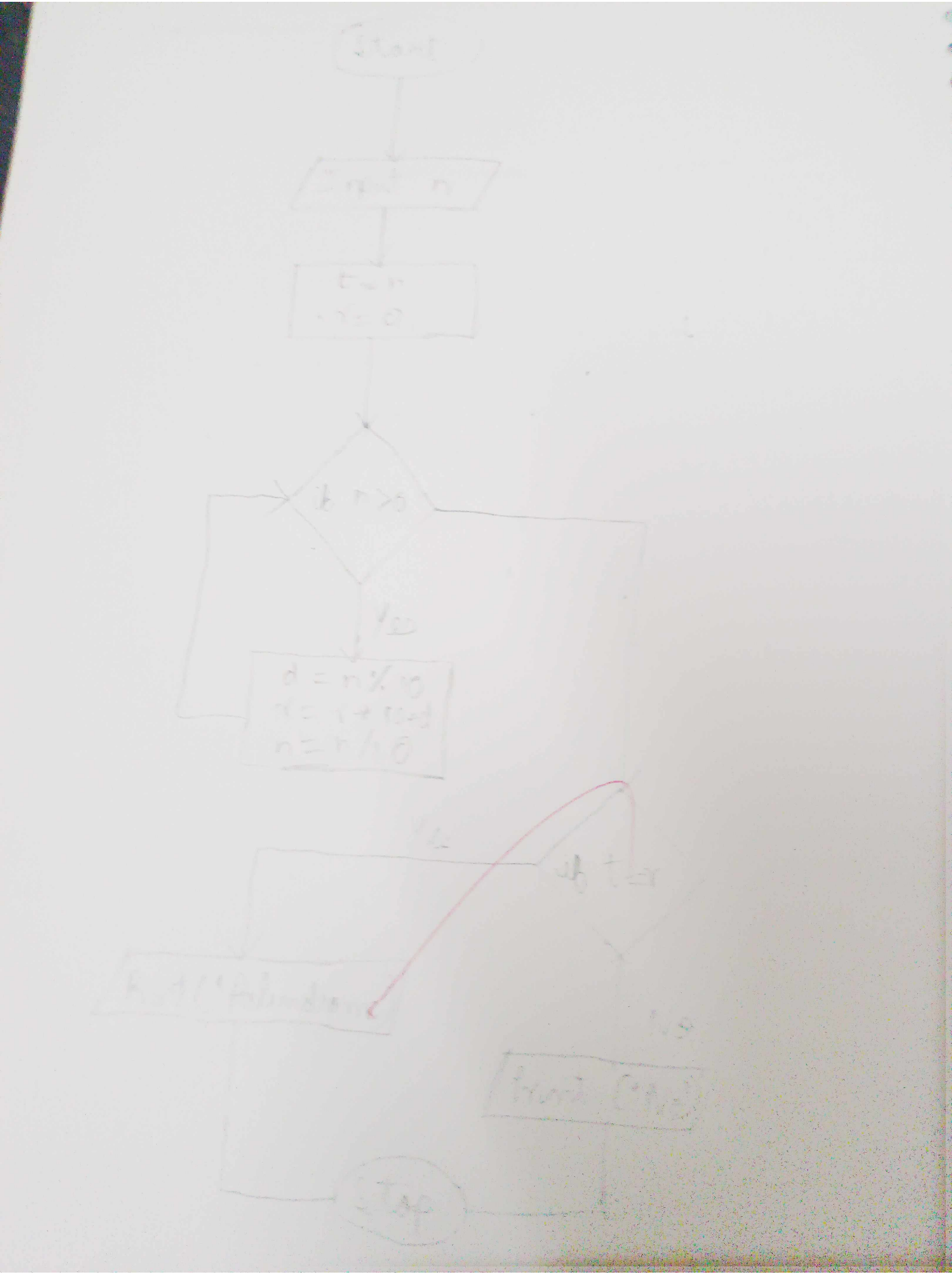
print ('Palindrome')

STEP-6 : else :

print ('No')

STEP-7 : End.

28/9/24



Ex. No.: 6

Date: 28/9/24

Sum of Digits

Write an Algorithm and draw a Flowchart to calculate the sum of digits in the given number.

Algorithm:

STEP-1 : Start

STEP-2 : Input n.

STEP-3 : Initialise s = 0

STEP-4 : while n is greater than 0 :

d = n % 10

s = s+d

n = n/10

Flowchart: STEP-5: Print s

STEP-6 : End.

28/9/24