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

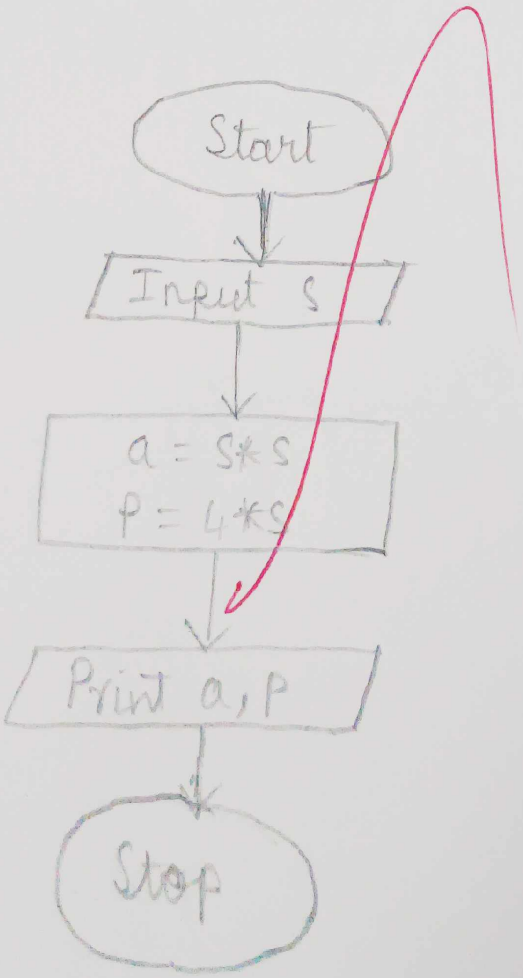
STEP-2: Input s

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

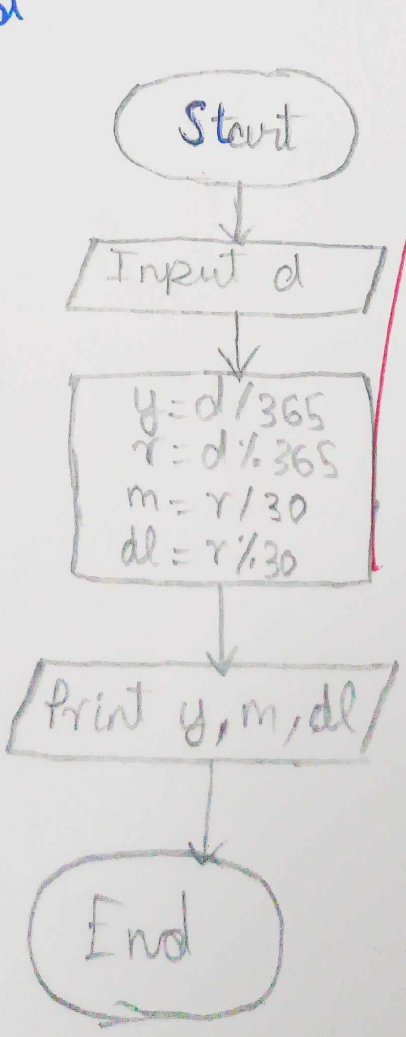
Days to Year Conversion

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:



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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 ('composite') else print ('Prime')

STEP-7: Repeat step 6 and until i <= sqrt(n)

STEP-8: Stop

Flowchart:

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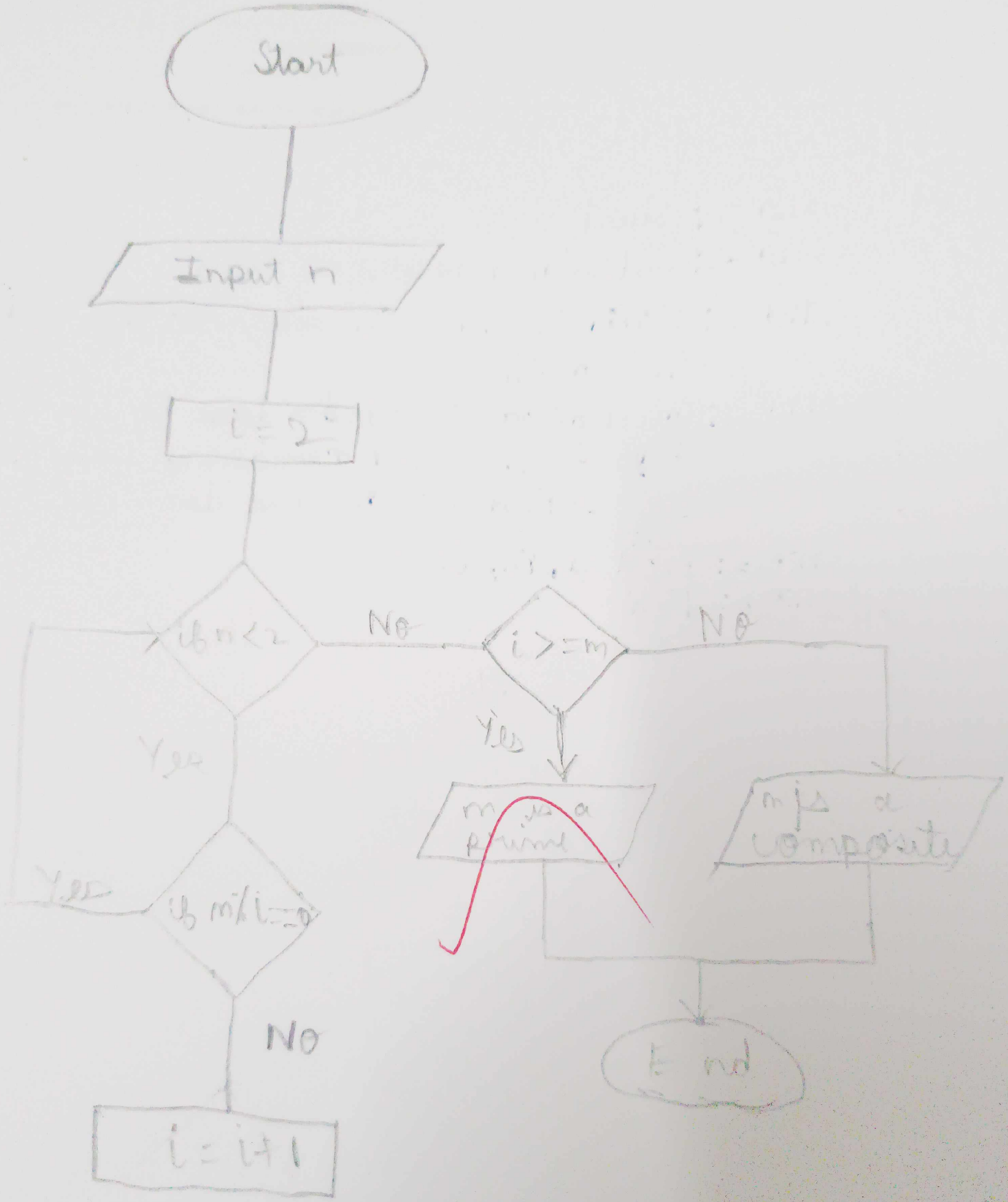

Ex. No.: 4

Date: 26/9/24

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 ('No')

STEP-4: else:
print ('No')

Flowchart:

STEP-5: Stop

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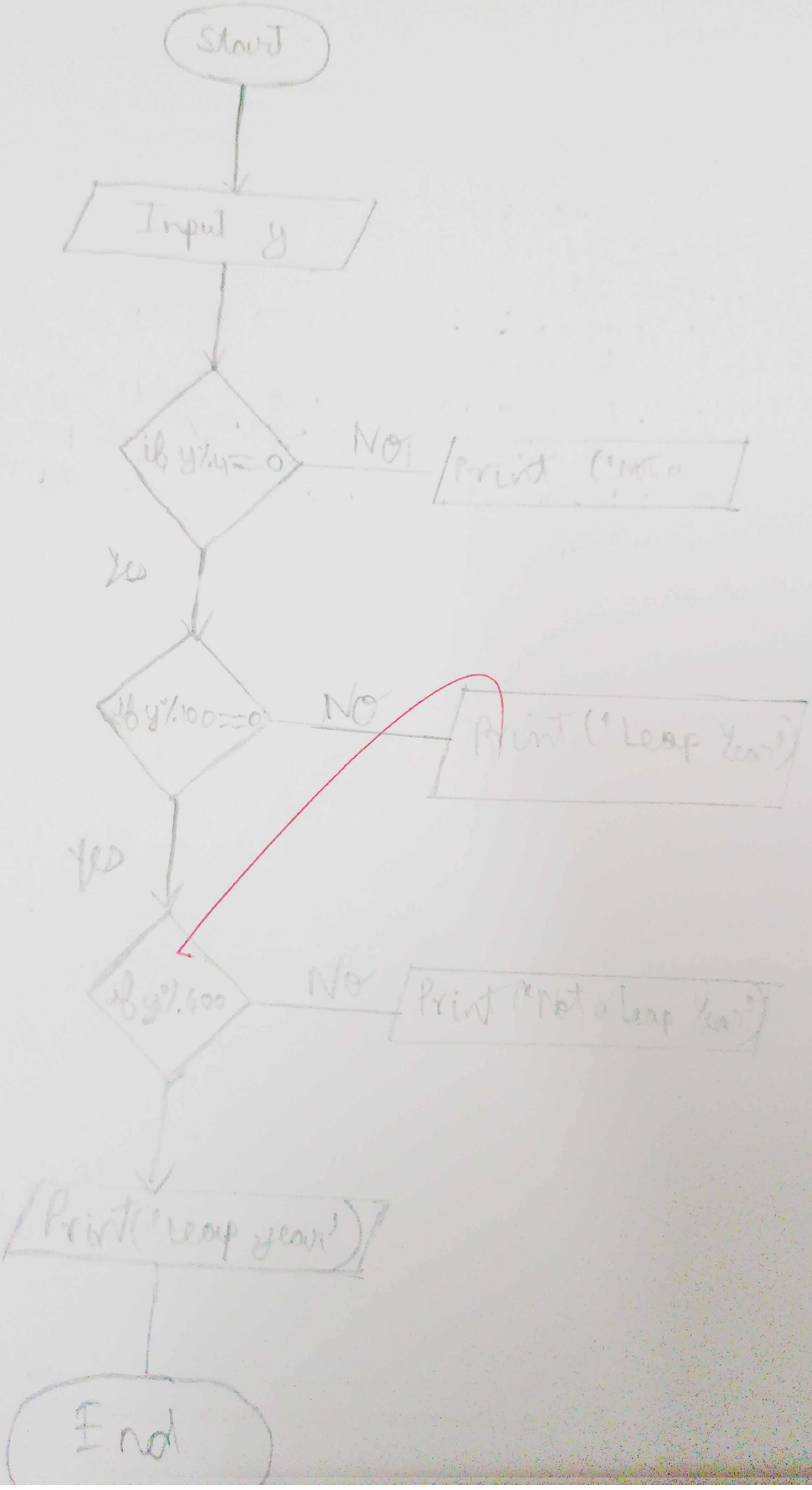

Ex. No.: 5

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.

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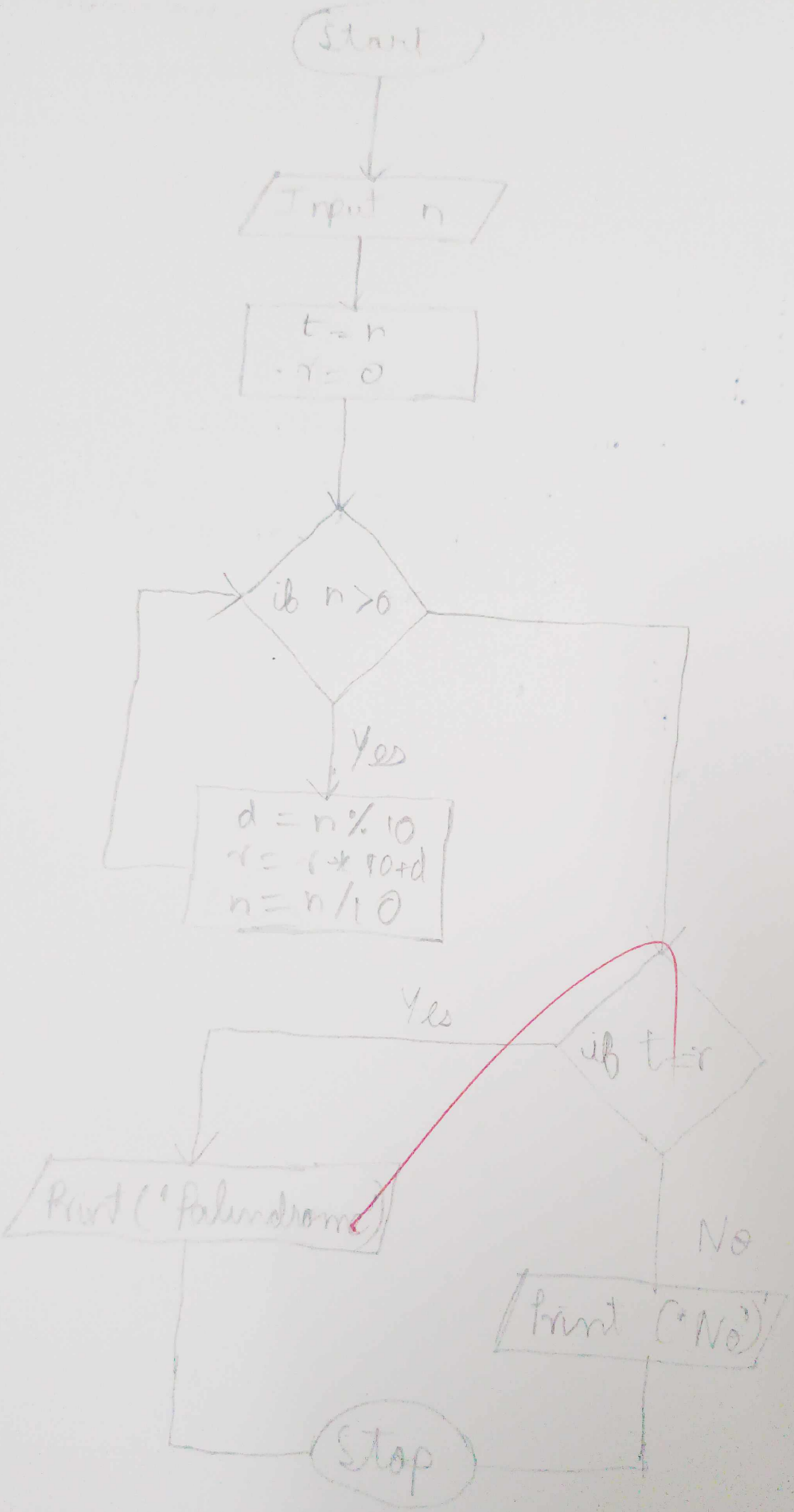

Ex. No.: 6

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
STEP-5: Print s
STEP-6: End.

Flowchart:

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