Ex. No.: 1

Date: 01/10/24

Calculate Area and Perimeter

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

Algorithm:

STEP I : Start

STEP II : Input a, l

STEP III : Calculate Perimeter = 4 * a, go to Step V

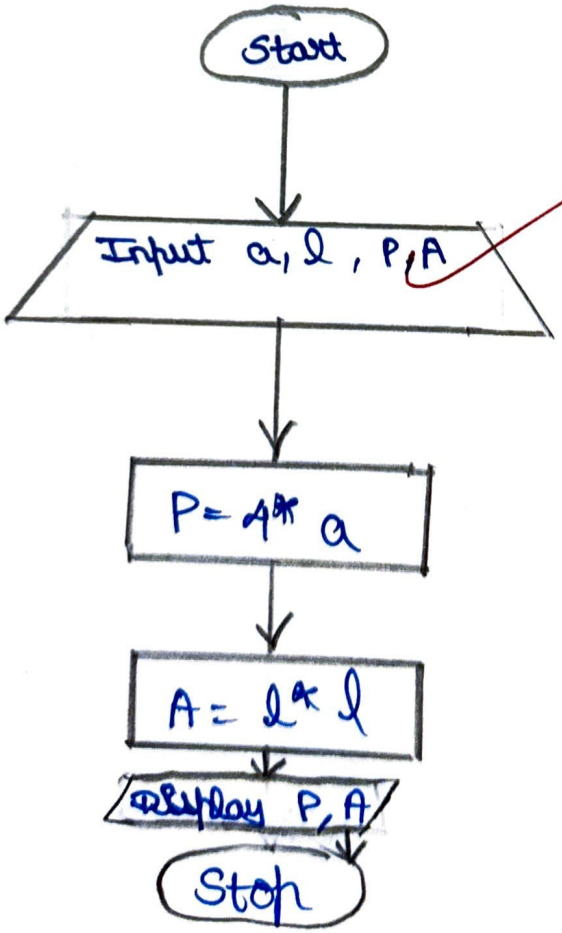
STEP IV : calculate Area = l * l, go to Step VI

STEP V : Display Perimeter

STEP VI : Display Area

STEP VII : Stop

Flowchart:



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Date: 04/10/24

Ex. No.: 2

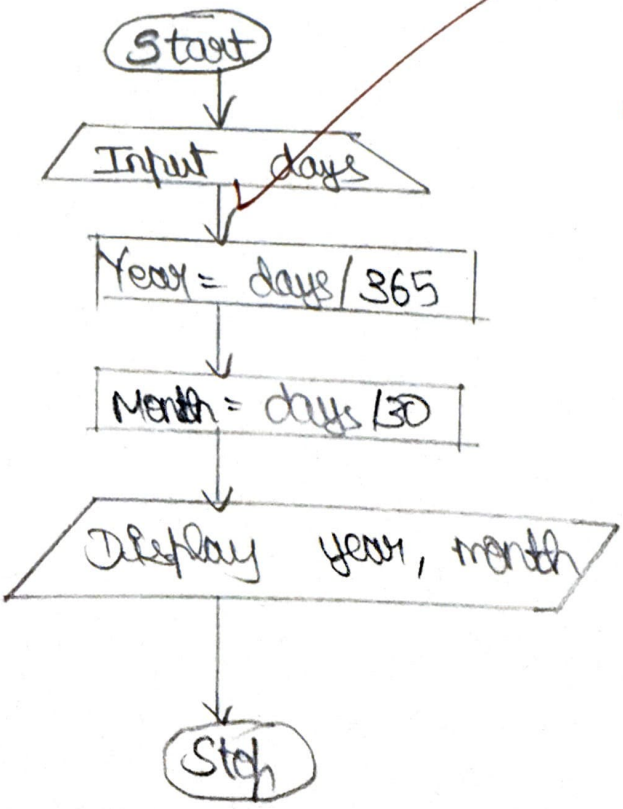
Days to Year Conversion

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

Algorithm:

STEP 1: Start
STEP 2: Input days
STEP 3: Calculate year = days/365, go to step 5
STEP 4: Calculate month = days/30, go to step 6
STEP 5: Display year
STEP 6: Display month
STEP 7: Stop

Flowchart:



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Ex. No.: 3

Date: 04/10/24

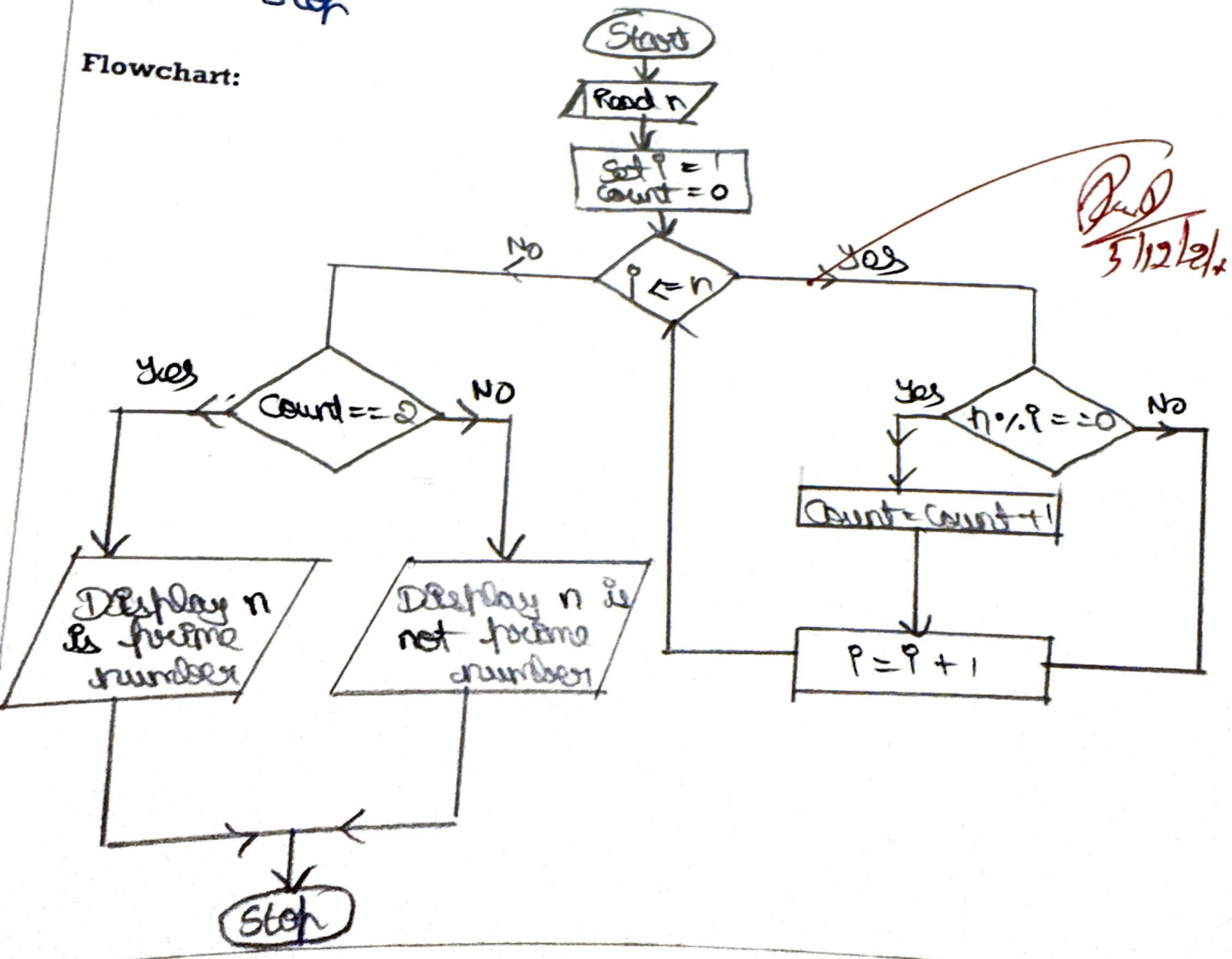
Prime Number

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

Algorithm:

Step 1: Start
Step 2: Read value n
Step 3: Set i = 1, count = 0
Step 4: If i <= n, If go to step 5, otherwise go to step 8
Step 5: Check n % i == 0, go to step 6, otherwise go to step 7
Step 6: Set count = count + 1
Step 7: i = i + 1, go to step 4
Step 8: Check count, If count = 2, Display Prime number, otherwise not a prime number
Step 9: Stop

Flowchart:



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Ex. No.: 4

Date: 04/10/24

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 year

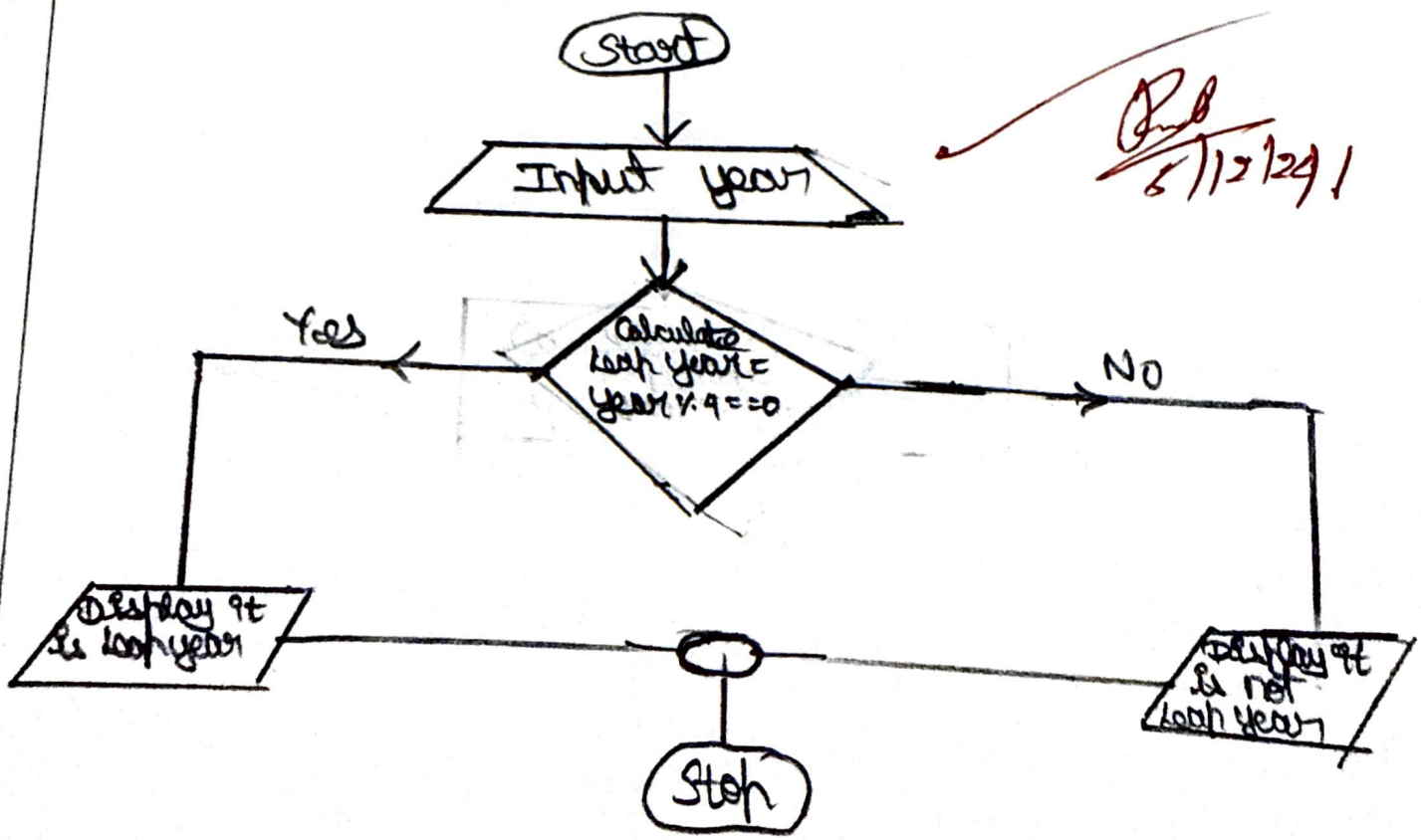
Step 3: calculate Leap year = year % 4 == 0 • go to Step 4, otherwise go to Step 5

Step 4: Display it is leap year

Step 5: Display it is not Leap year

Step 6: Stop

Flowchart:



5/11/24

Date: 04/10/24

Ex. No.: 5

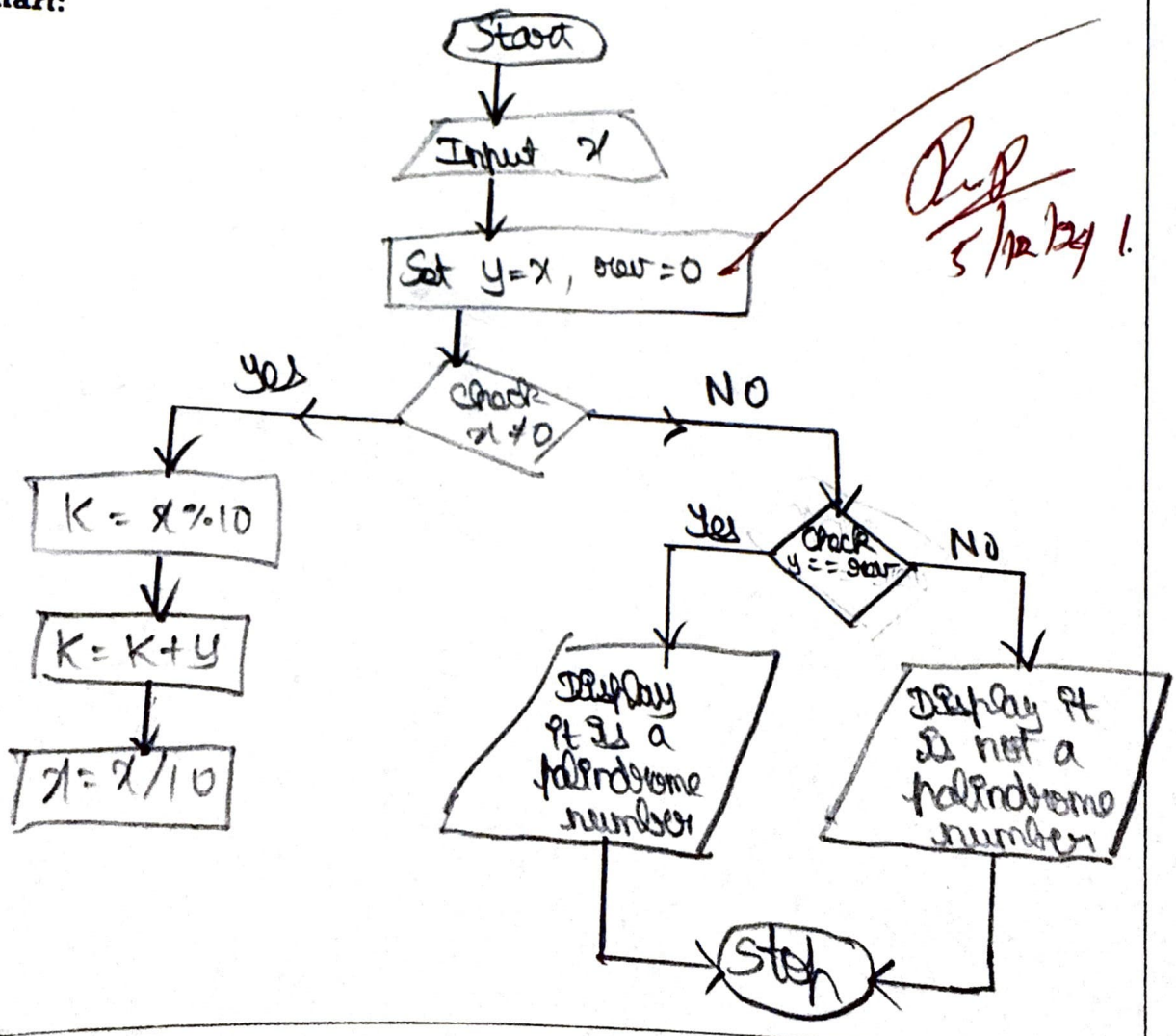
Palindrome Number

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 x
Step 3: Set y=x, rev=0
Step 4: Check if x!=0, otherwise go to Step 8
Step 5: Compute k= x%10
Step 6: rev = rev*10 +k
Step 7: x=x/10, go to Step 4
Step 8: Check if y== rev, otherwise go to step 10
Step 9 :Display It is a palindrome number
Step 10: Display It is not a palindrome number
Step 11: Stop

Flowchart:



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Ex. No.: 6

Date: 04/10/24

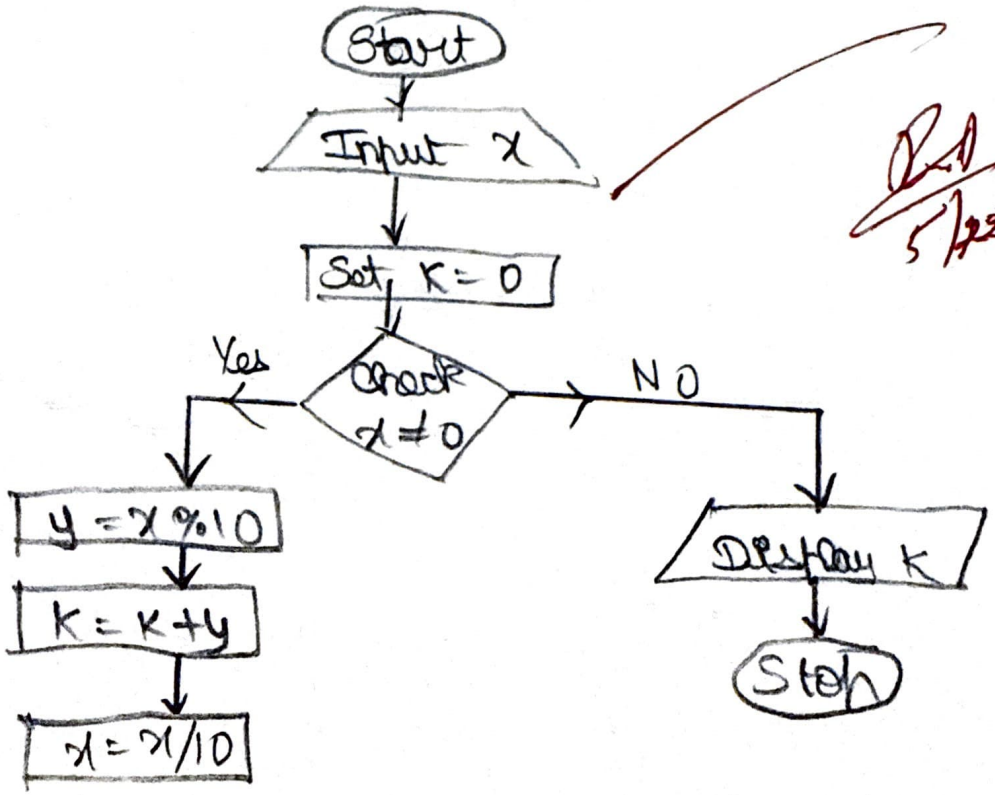
Sum of Digits

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

Algorithm:

Step 1: Start
Step 2: Input x
Step 3: Set k=0
Step 4: Check if x!=0, go to Step 8
Step 5: Compute y=x%10
Step 6: k=k+y
Step 7: Compute x=x/10, go to Step 4
Step 8: Display k
Step 9: Stop

Flowchart:



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