Ex. No.: 1

Date: 18/10/24

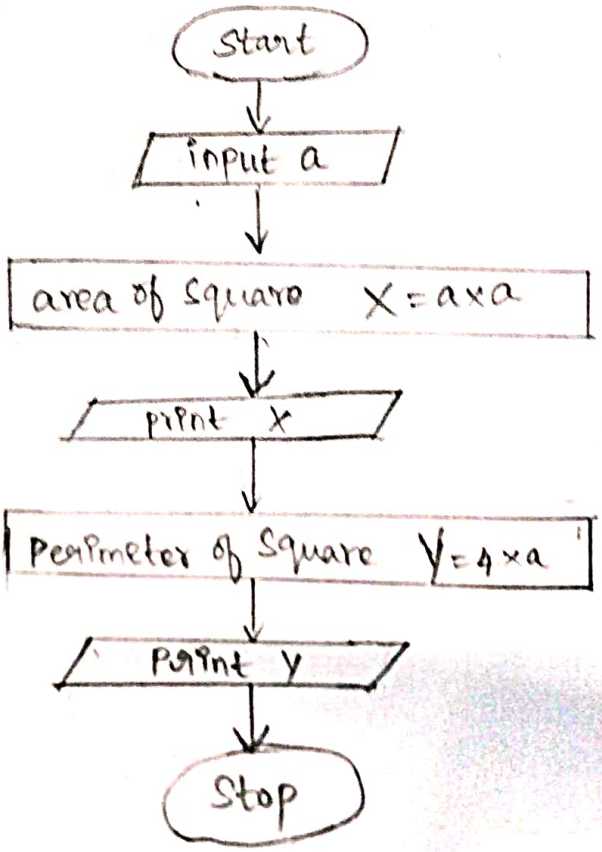
Calculate Area and Perimeter

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

Algorithm:

Step-1 : Start the program
Step-2 : Read a value for a
Step-3 : Evaluate area of Square X = a x a
Step-4 : Print X
Step-5 : Evaluate Perimeter of Square Y = 4 x a
Step-6 : Print Y
Step-7 : Stop

Flowchart:



RJM

Ex. No.: 2 **Date:** 18/10/24

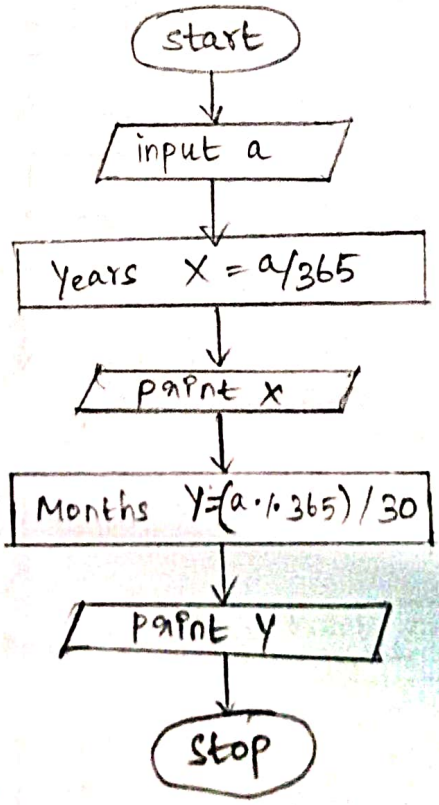
Days to Year Conversion

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

Algorithm:

Step-1: Start the program.
Step-2: Read value for a.
Step-3: Enter the value for a
Step-4: Evaluate Years X = a/365
Step-5: print X
step-6: Calculate months Y=(a%.365)/30
Step-7: Print Y
Step-8: Stop.

Flowchart:



Rpl

Ex. No.: 3

Date: 18/10/24

Prime Number

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

Algorithm:

Step-1 : Start the program.

Step-2 : Read value for n.

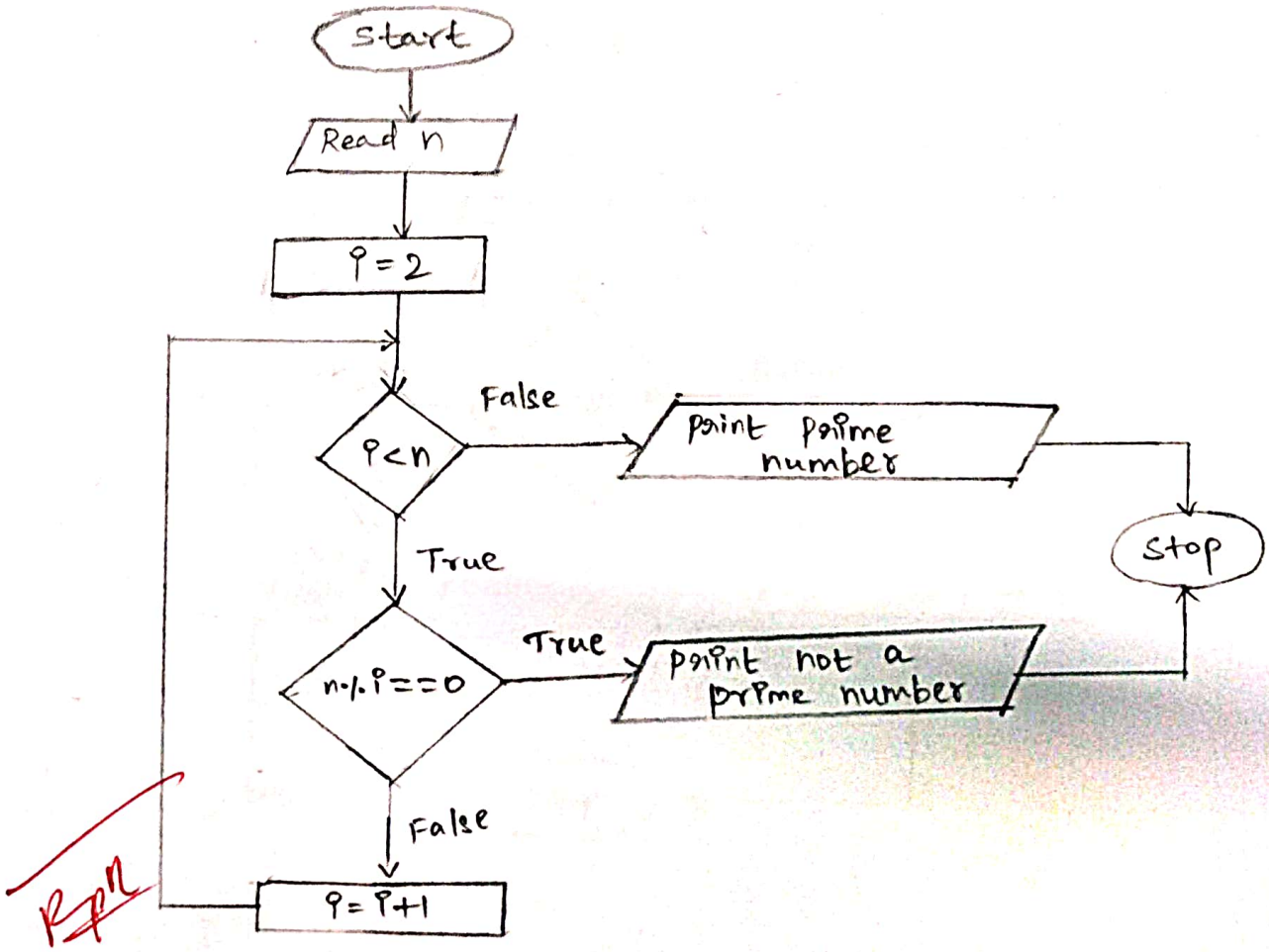
step-3: check if a number n is divisible by any number from 2 to n-1 using for loop.

Step-4: If not divisible then it is a prime number.

Step-5: else it is not a prime number.

Step-6: Stop.

Flowchart:



Ex. No.: 4 **Date:** 18/10/24

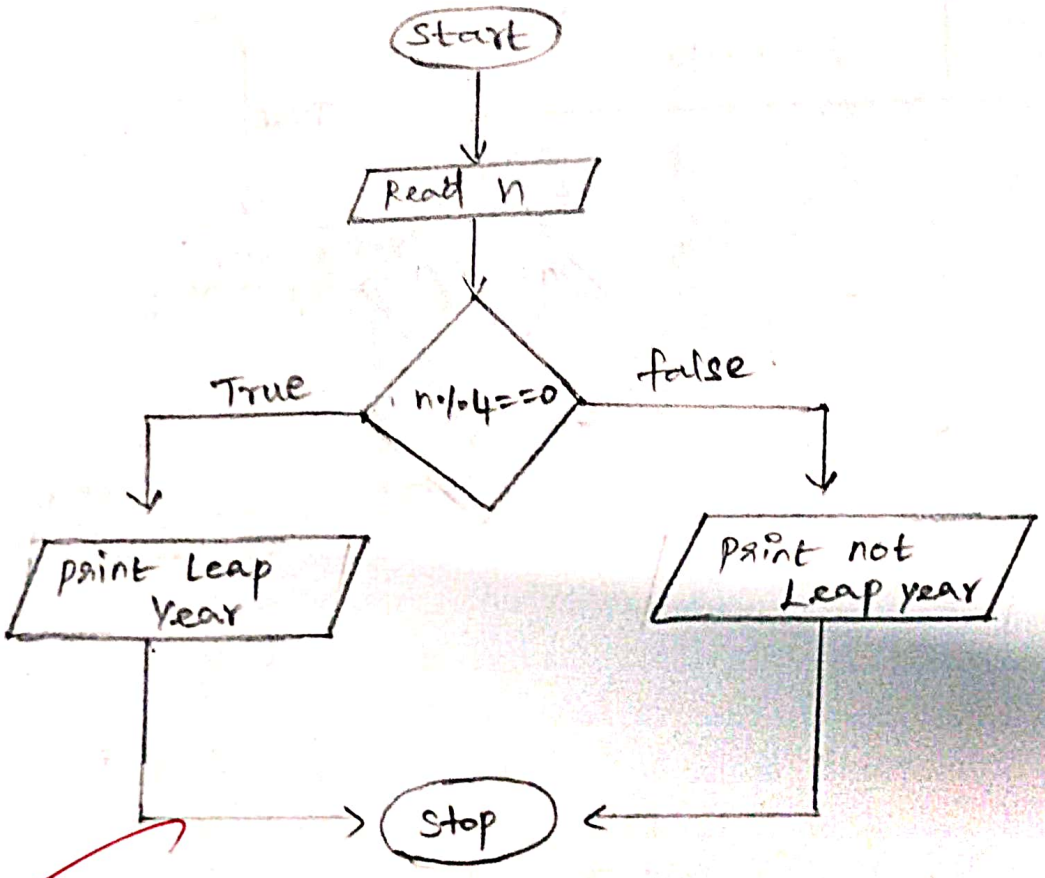
Leap Year

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

Algorithm:

step-1: start the program.
step-2: Enter a value of n
step-3: check if n%4==0
step-4: print leap year.
step-5: else print Not Leap Year.
step-6: stop

Flowchart:



RM

Ex. No.: 5 **Date:** 18/10/24

Palindrome Number

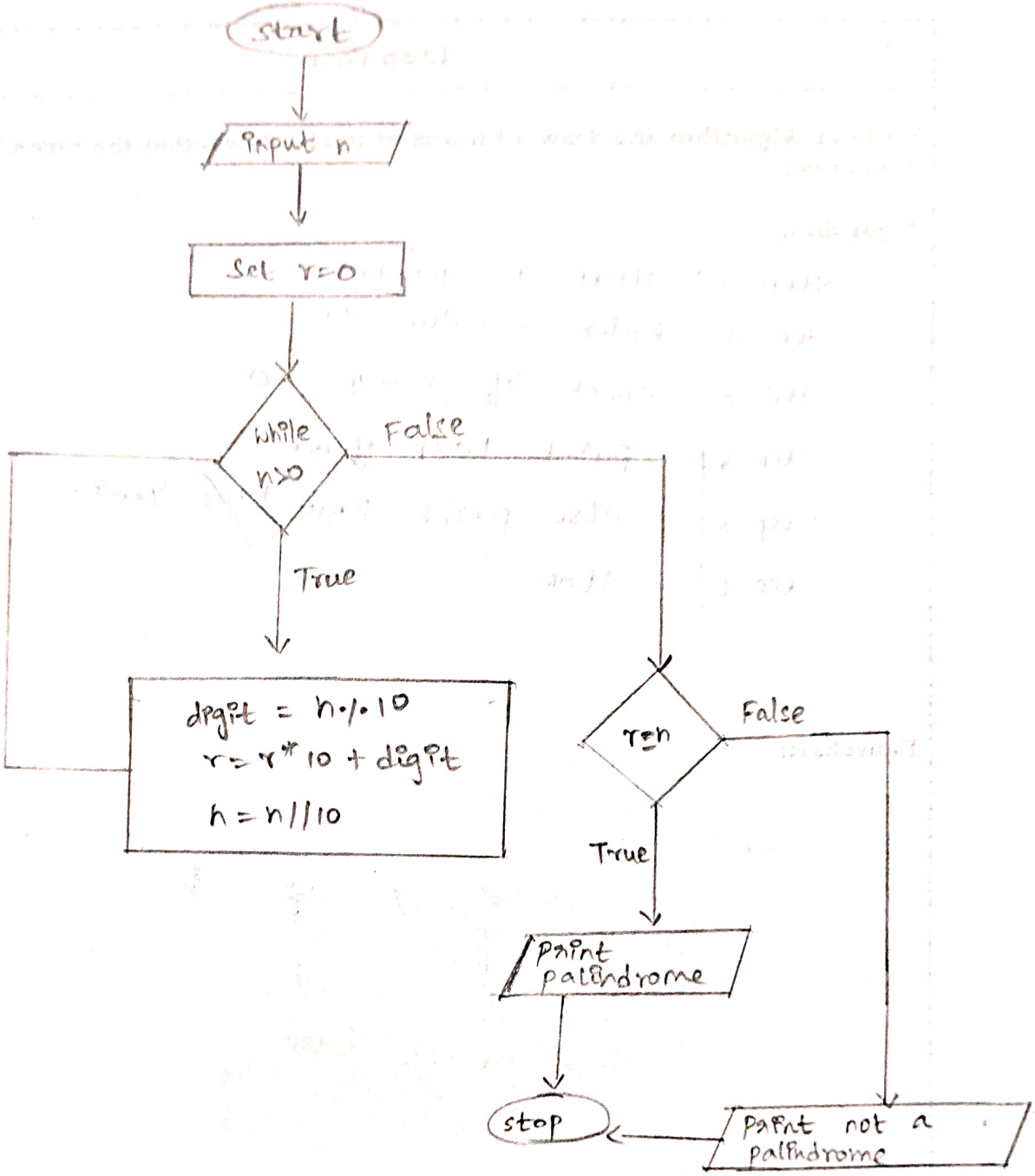
Write an Algorithm and draw a Flowchart to check whether the given number is palindrome number or not.

Algorithm:

step-1 : Start the program.
step-2 : Enter a value of n.
step-3: Initialize r=0 and check while n>0:
step-4: If True, evaluate digit = n%10 and r = r*10 + digit and n=n//10.
step-5: check if n=r then print palindrome.
step-6: else print not a palindrome number.
step-7: Stop

Flowchart:

FLOW CHART :


start
Input n
Set r=0
while n>0
False
True
digit = n%10
r = r*10 + digit
n = n//10
r==n
False
True
Print palindrome
stop
Print not a palindrome

Ex. No.: 6 **Date:** 18/10/24

Sum of Digits

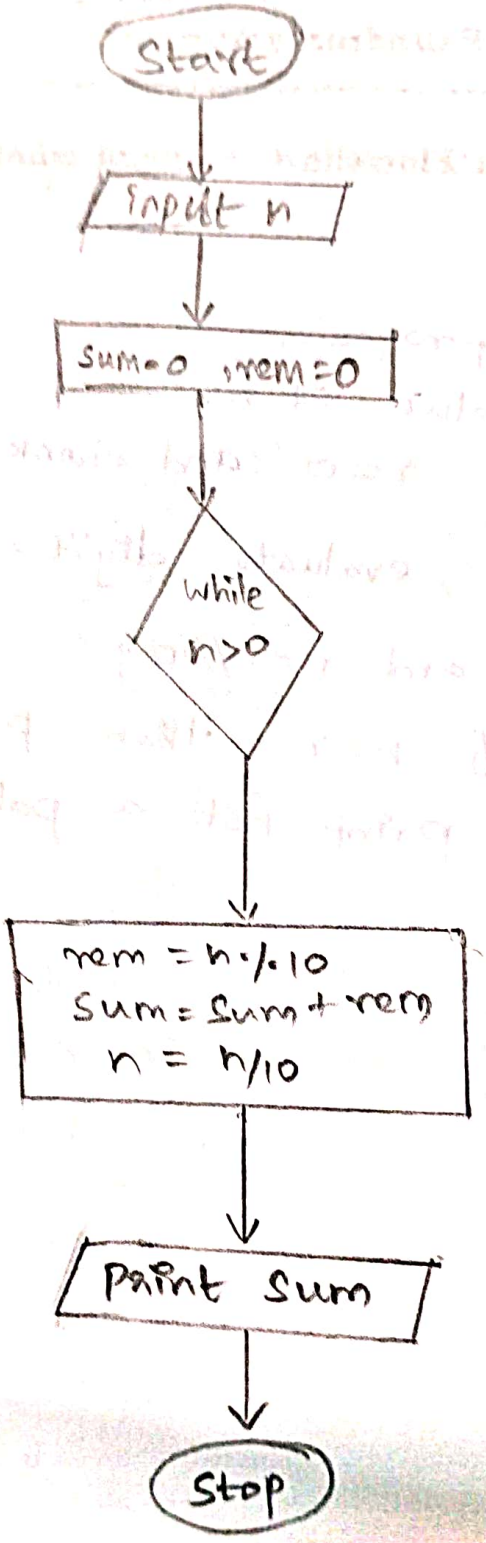
Write an Algorithm and draw a Flowchart to calculate the sum of digits in the given number.

Algorithm:

step-1 : Start the program.
step-2 : Read a value for n.
step-3 : Initialize Sum=0, rem=0
step-4 : Evaluate while (n>0)
step-5 : If true, evaluate rem = n%.10 and
Sum = Sum + rem and n = n/10
step-6 : Print Sum.
step-7 : Stop.

Flowchart:

FLOW CHART:


Start
Input n
sum=0 ,rem=0
while
n>0
rem = n%.10
Sum = Sum + rem
n = n/10
Print Sum
Stop