Ex. No.: 1 **Date:** 22/10/24

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 the value of a.

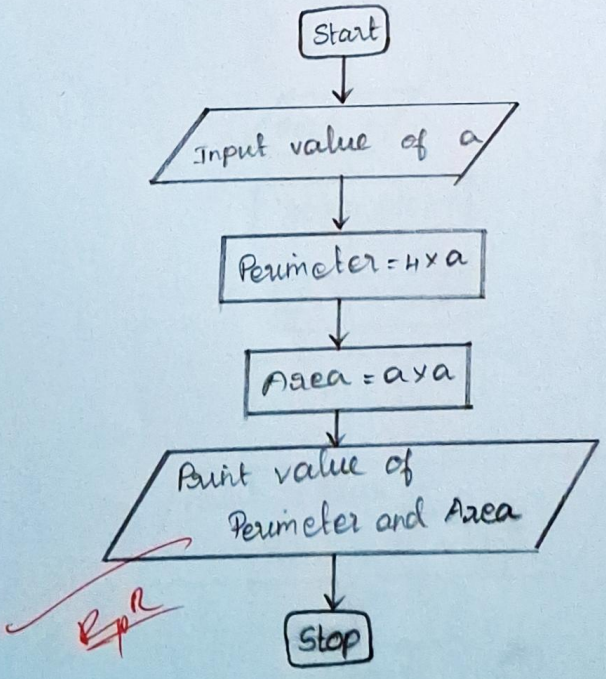
Step 3: Perimeter = 4 x a.

Step 4: Area = a x a.

Step 5: Print Perimeter and Area.

Step 6: Stop the program

Flowchart:



Ex. No.: 2 II **Date:** 22/10/24

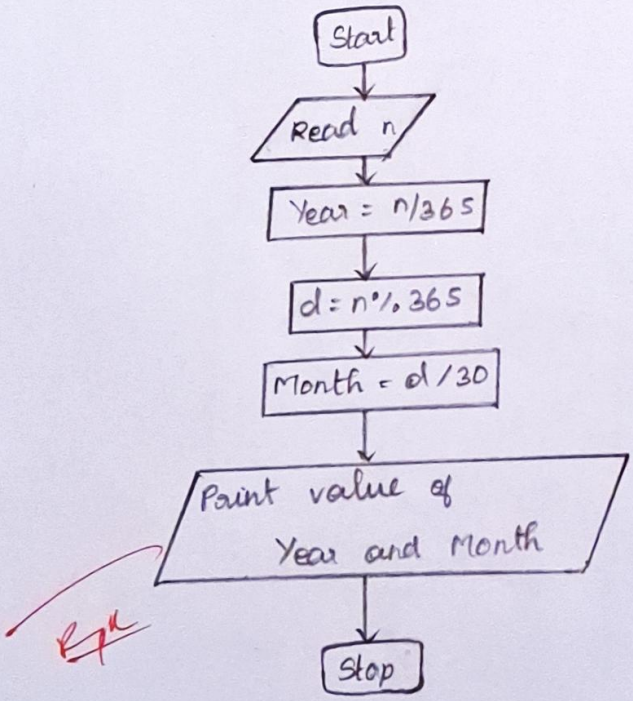
Days to Year Conversion

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

Algorithm:

Step 1: Start the program.
Step 2: Read the value of n & d.
Step 3: Print the value of Year using formula n/365.
Step 4: Obtain the value of d using formula d=d%365.
Step 5: Print the value of Month using formula d/30.
Step 6: Stop the program.

Flowchart:



Ex. No.: 8 III **Date:** 22/10/24

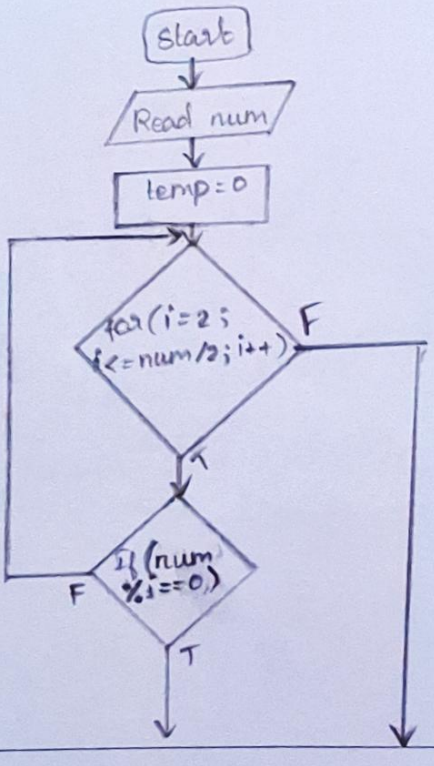
Prime Number

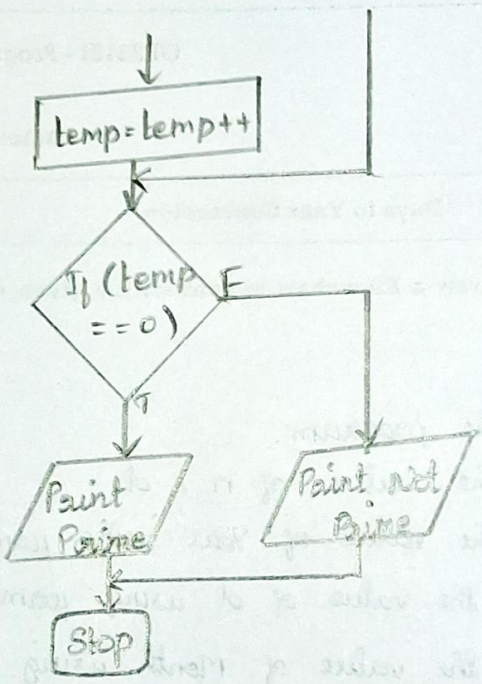
Write an Algorithm and draw a Flowchart to check whether the given number is Prime or not.

Algorithm:

Step 1: Start the program.
Step 2: Read the value of num.
Step 3: Initialize a variable as temp with 0.
Step 4: Use for loop to run from 2 to num/2.
Step 5: If num is divisible by loop iterator, then increament temp.
Step 6: If temp is equal to 0, print Prime.
Step 7: Else prime Not Prime.
Step 8: Stop the program.

Flowchart:




temp=temp++
If (temp == 0)
F
T
Paint Prime
Paint not Prime
Stop

Ex. No.: VII **Date:** 22/10/24

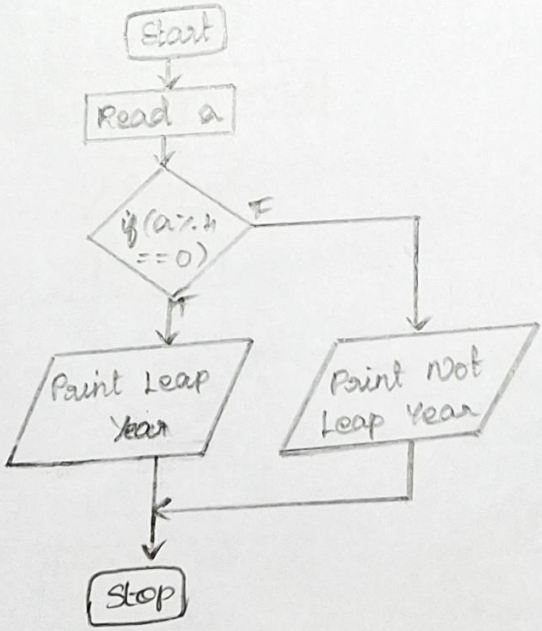
Leap Year

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

Algorithm:

Step 1 : Start
Step 2 : Read the value of a
Step 3 : if a % 4 == 0
Step 4 : Print Leap Year
Step 5 : Else print Not Leap Year
Step 6 : Stop

Flowchart:



Rpt

Ex. No.: 6 V **Date:** 22/10/24

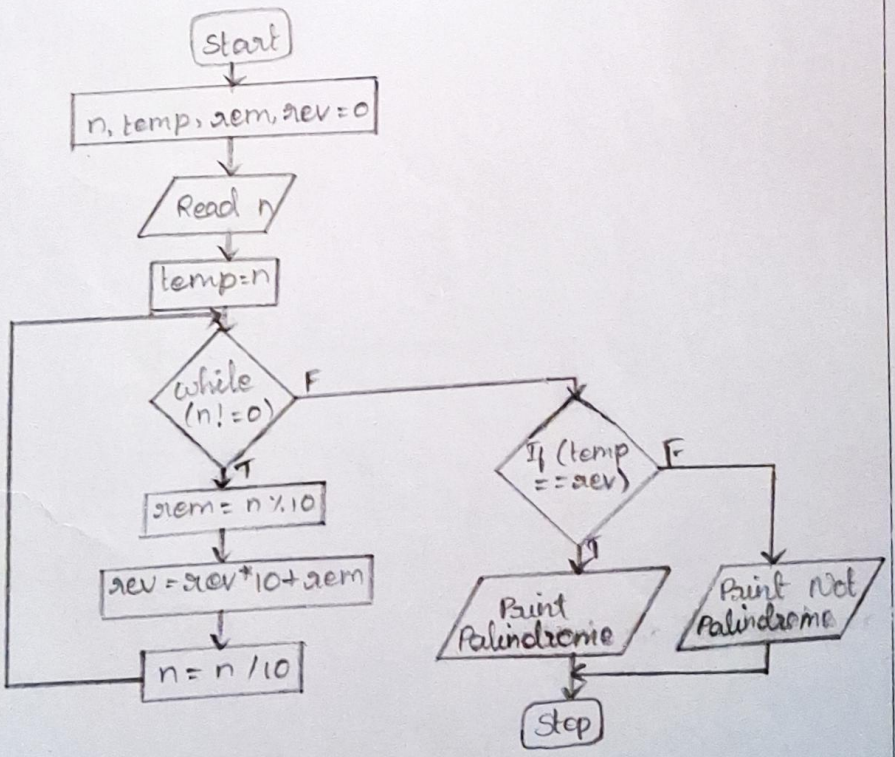
Palindrome Number

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

Algorithm:

Step 1: Start
Step 2: Declare n, temp, rem, rev=0
Step 3: Read the value of n
Step 4: Assign temp=n
Step 5: Use while loop, while(n!=0)
Step 6: rem = n%10 (Assign)
Step 7: rev = rev*10+rem (Assign)
Step 8: n=n/10 (Assign)
Step 9: If (temp==rev), print Palindrome
Step 10: Else print Not Palindrome

Flowchart:



Ex. No.: 6 VI **Date:** 22/10/24

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: Declare n, sum = 0

Step 3: Read n

Step 4: Using Loop while (n > 0)

Step 5: Assign sum = sum + (n % 10)

Step 6: Assign n = n / 10

Step 7: Print sum

Step 8: Stop

Flowchart: