Ex. No.: 1 **Date:** 18/10/2024

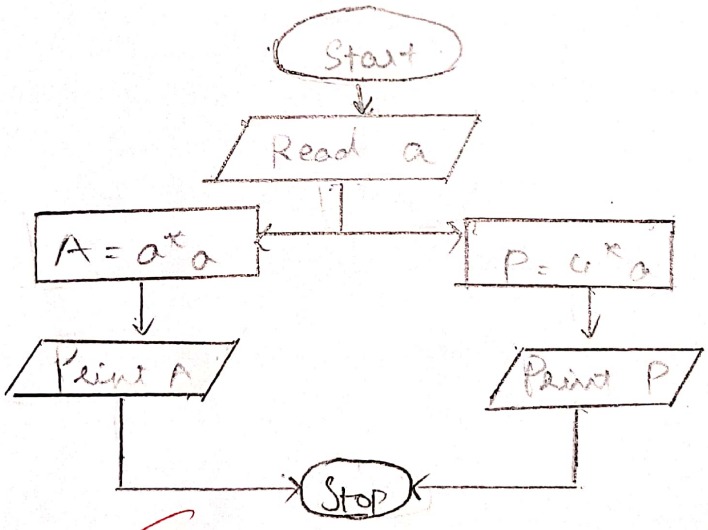
Calculate Area and Perimeter

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

Algorithm:

Step 1: Start
Step 2: Read the value of a
Step 3: A = a*a
Step 4: Print A as the area of the square
Step 5: P = 4*a
Step 6: Print P as the perimeter of square
Step 7: Stop

Flowchart:



Ex. No.: 2 **Date:** 18/10/2024

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 input for number of days 'n'

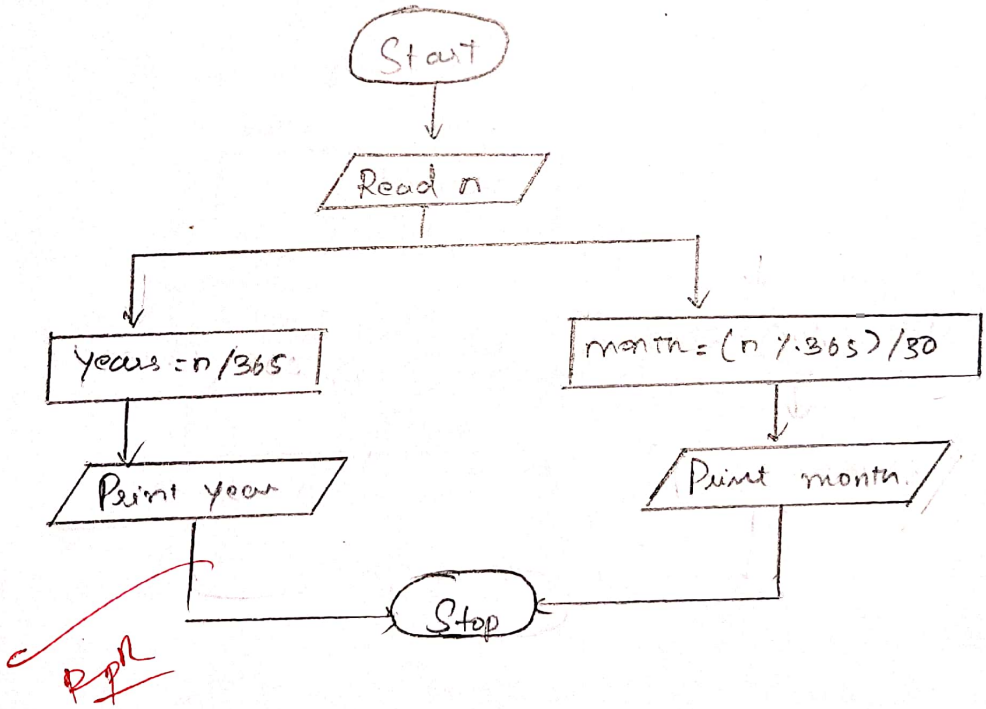
Step 3 : year = n/365

month = (n%365)/30

Step 4 : Print year, month

Step 5 : Stop

Flowchart:



Ex. No.: 3 **Date:** 18/10/2024

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: Get input of a Number 'N' to check prime or not

Step 3: Initialize the loop variable 'i'

Step 4: Start loop variable from 1 and end with N

Step 5: Check N%.i = 0

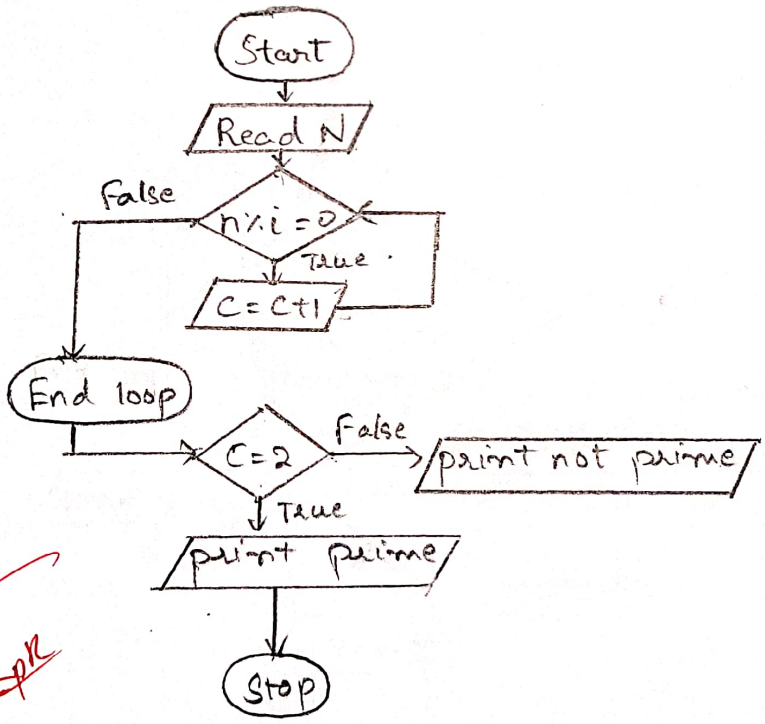
C = C+1, end loop

Step 6: if C=2, Display prime Number

else, Display not a prime number

Step 7: Stop.

Flowchart:



Ex. No.: 4 **Date:** 18/10/2024

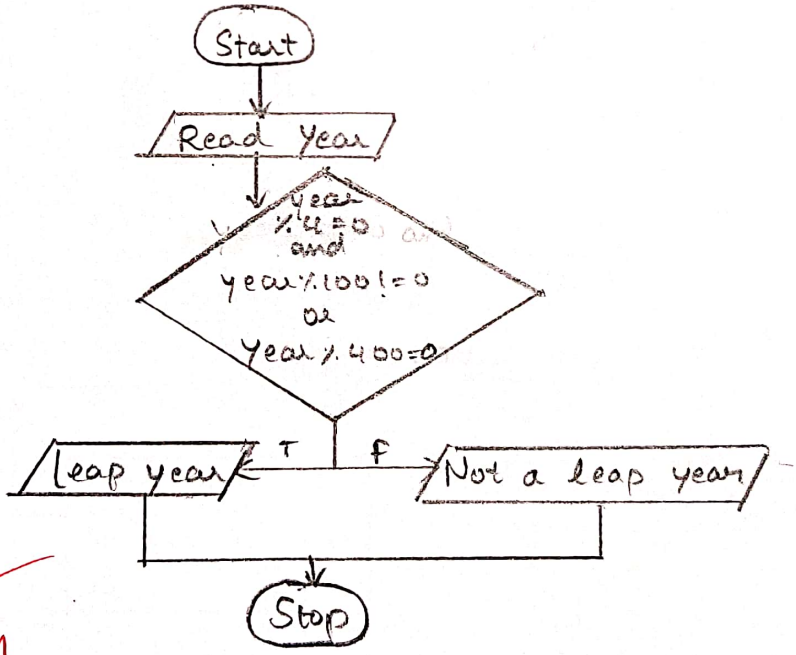
Leap Year

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 the year
Step 3: If (year %.4=0 and year %. 100 != 0) or year %.400 = 0
Step 4: Print leap year
Step 5: Else, print not leap year
Step 6: Stop.

Flowchart:



Ex. No.: 5 **Date:** 18/10/2024

Palindrome Number

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

Algorithm:

Step 1 : Read Num

Step 2 : Declare Variable reverse and assign input to a temp. variable tempNum = num

Step 3 : Start the loop until num != 0 becomes false while num > 0

-> rem = num % 10

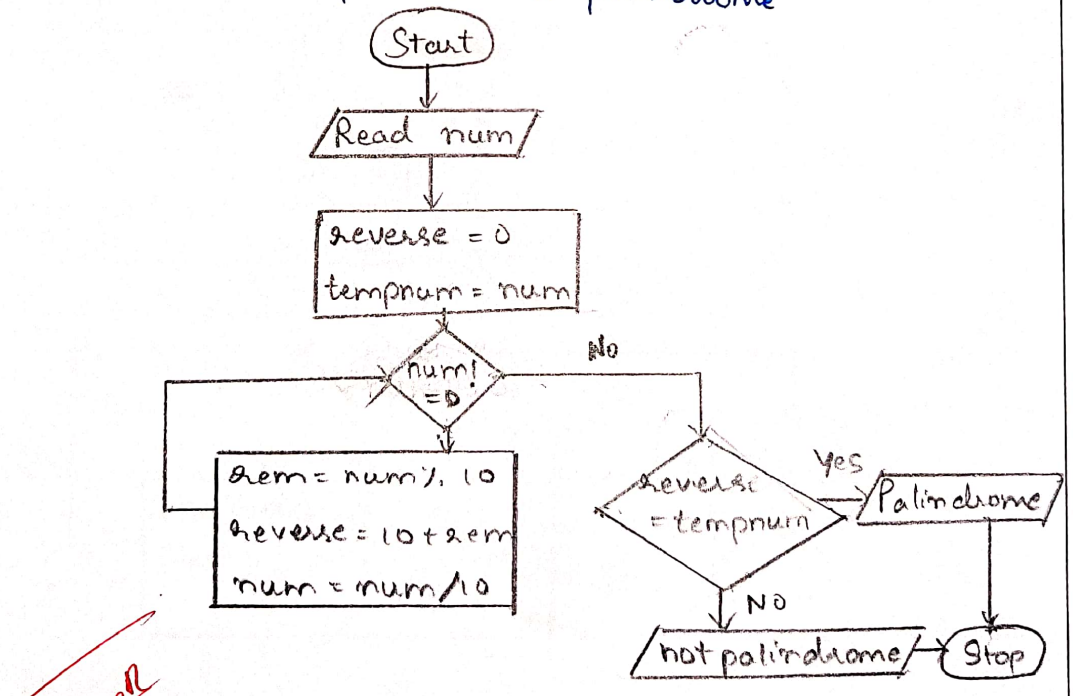
-> reverse = 10 + rem

-> num = num / 10

Step 4 : Check if reverse = temp num

Step 5 : If Step 5 is true print It is palindrome else print not a palindrome

Flowchart:



Ex. No.: 6 **Date:** 18/10/2024

Sum of Digits

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

Algorithm:

Step 1: Read n

Step 2: Declare sum = 0

Step 3: Declare reminder = n % 10 & declare
sum = sum + (reminder)
n = n/10

Step 4: If (n>0) then go to step 4 else go to step 5

Step 5: Print sum

Flowchart: