Ex. No.: 1 **Date:** 27/9/24

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 a, area, Perimeter

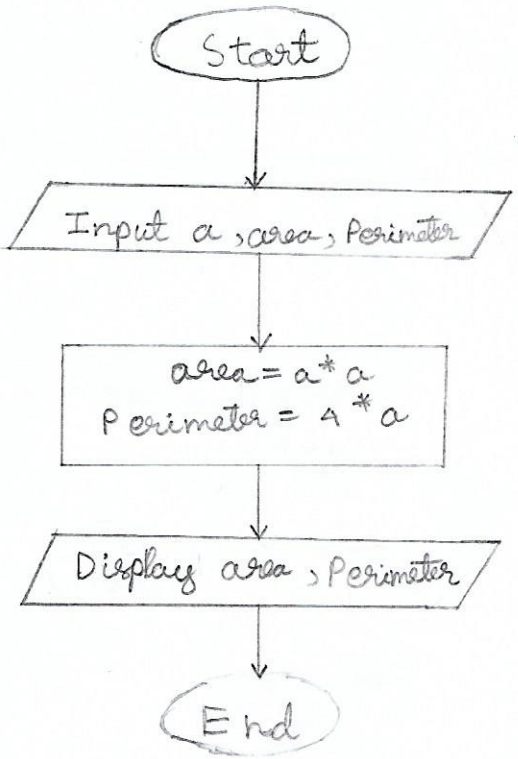
Step 3: Area of the Square = a*a

Step 4 : Perimeter of the Square = 4*a

Step 5 : Display the Area and perimeter of the square

Step 6 : end

Flowchart:



Ex. No.: 1 **Date:** 27/9/24

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: input days, months, years

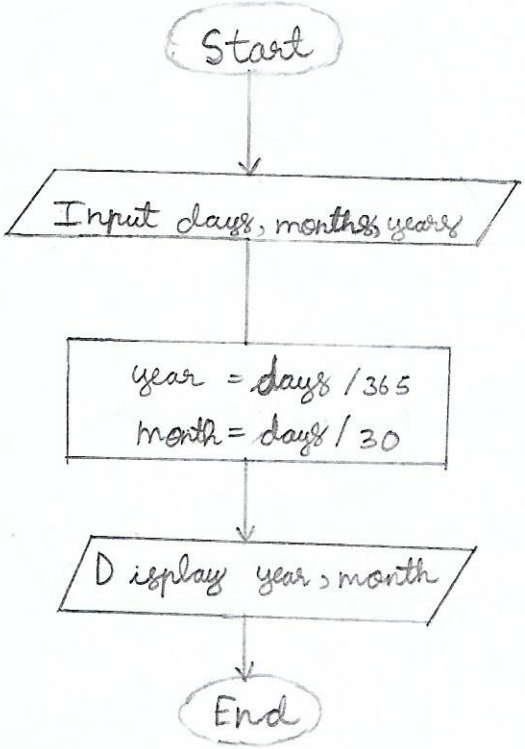
Step 3: calculate year = days/365

Step 4: Calculate month = days/30

Step 5: Display month and years.

Step 6: End

Flowchart:



Ex. No.: 8II **Date:** 31/10/24

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 : input n

Step 3 : Set i = 1, count = 0

Step 4 : If i <= n, if true go to step 5, else go to step 8

Step 5 : check the condition n % i == 0; if true then go to step 6, else go to step 7

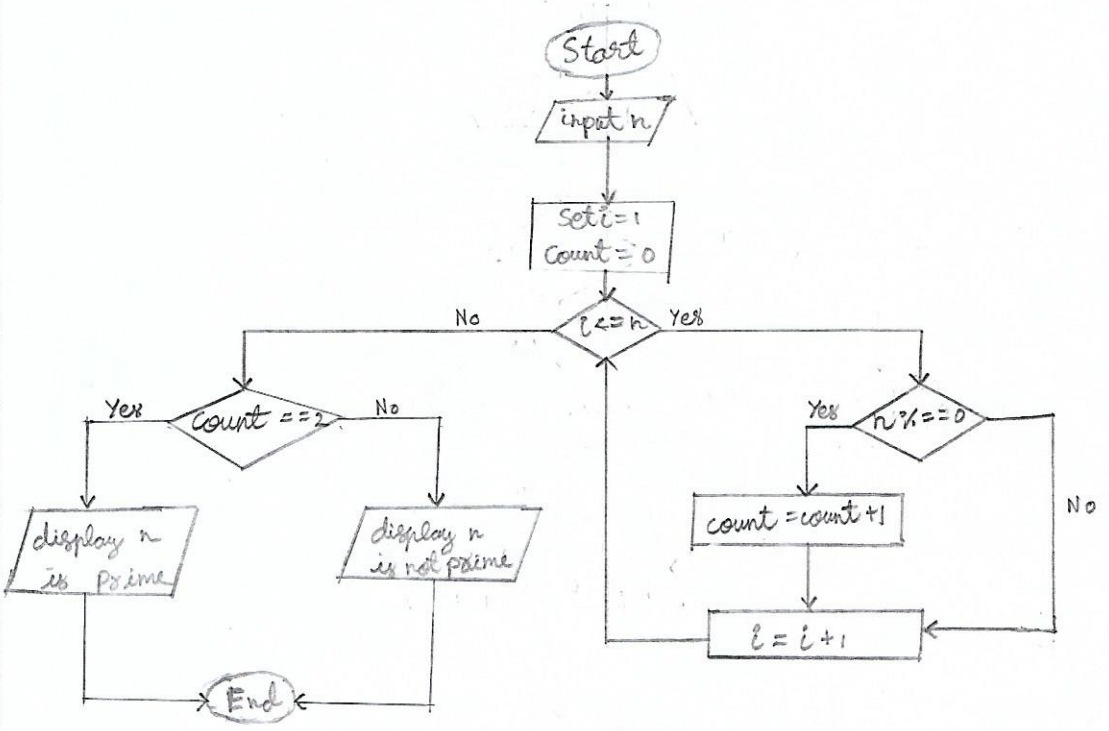
Step 6 : Set count = count + 1

Step 7 : i = i + 1 go to step 4

Step 8 : Check count, if count = 2, display prime number else display it as not prime

Step 9 : End

Flowchart:



Ex. No.: 1 **Date:** 31/10/24

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 : int year

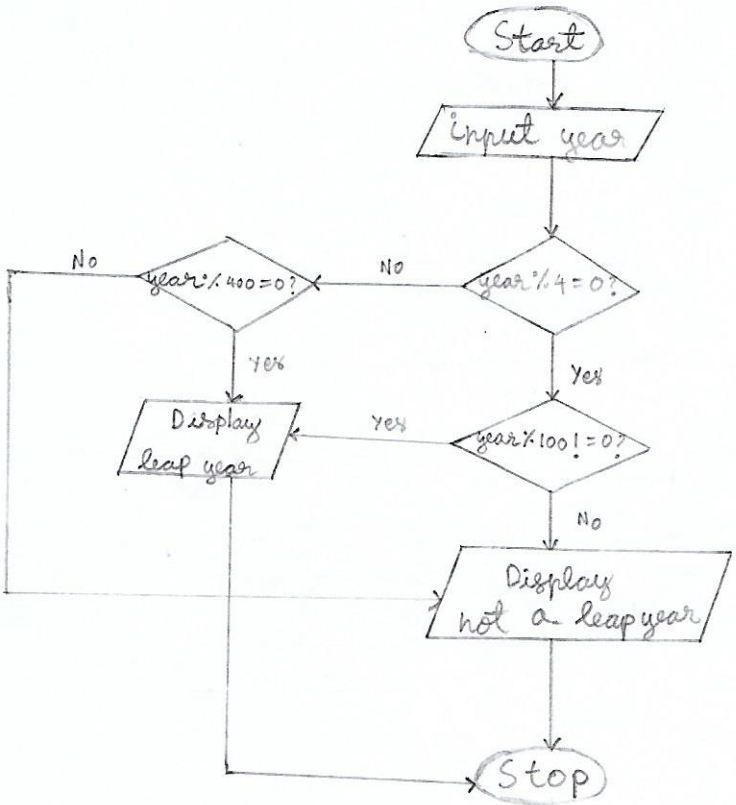
Step 3: To calculate leapyear or not by formula Ly = Y%.4==0 if Ly=0 leap year and Y%.100!=0 or year%.400=0 go to step 5

Step 4: Else not a leap year

Step 5: Display leap year

Step 6: Stop

Flowchart:



Ex. No.: 7 **Date:** 3/10/24

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: Read the input number from the user

Step 3: Declare and initialize the variable reverse and assign input to the temp variable tempNum = Num

Step 4: Start the while loop until num != 0 becomes false.
- num = num % 10
- reverse = reverse * 10 + num
- num = num / 10

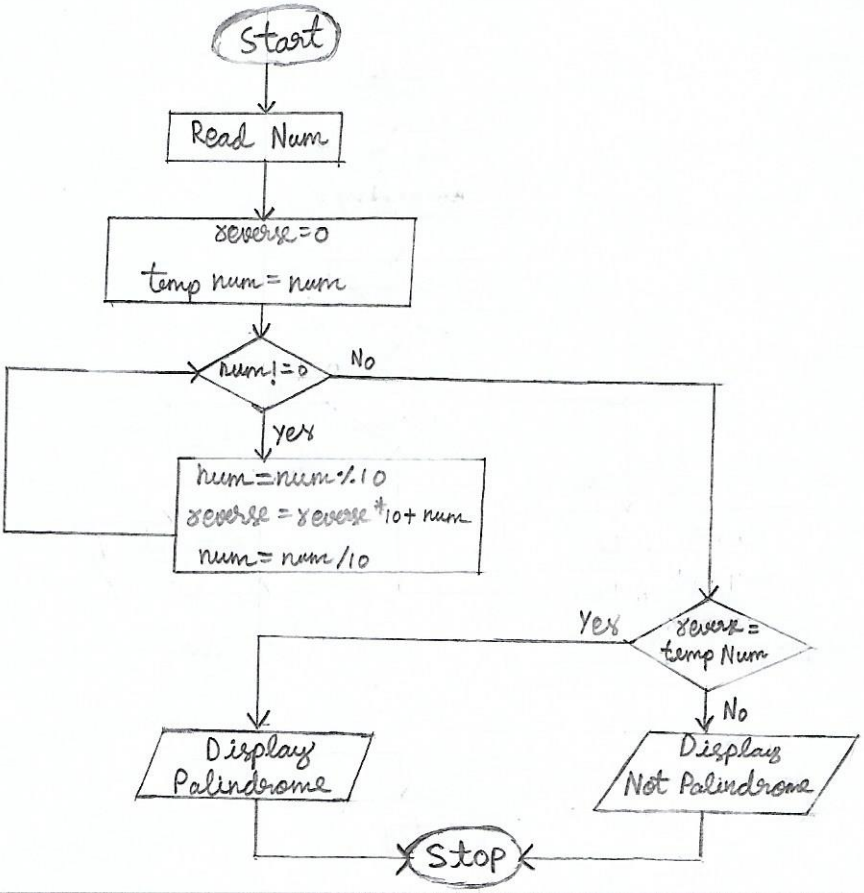
Step 5: check if reverse == tempNum

Step 6: If it's true then display the number is a palindrome

Step 7: If not display the number is Not a Palindrome

Step 8: stop

Flowchart:



Ex. No.: VI **Date:** 3/10/24

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: Get the Number
Step 3: Construct a variable to hold the total and initialize it to 0
Step 4: Repeat steps 2 and 3 until the result is not 0
Step 5: Divide the Number by 10 to obtain the rightmost digit using the remaining "Percent" operator, then add it to the total.
Step 6: use the "/" operator to divide the integer by 10 to eliminate the last digit on the right
Step 7: Display the total
Step 8: Stop

Flowchart: