Ex. No.: 1

Date: 17/10/24

Calculate Area and Perimeter

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

Algorithm:

Step 1: START

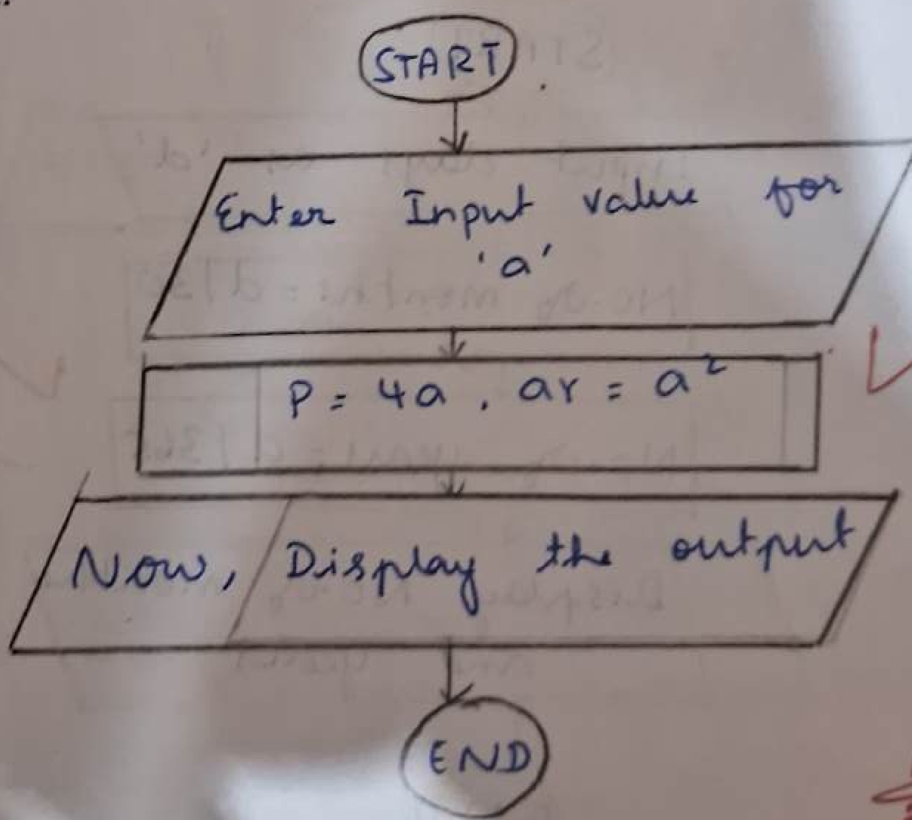
Step 2: Enter Input value for a variable 'a'.

Step 3: Using formulae, p = 4a and ar = a^2, we can calculate the perimeter and area of square respectively

Step 4: Click run and display the output.

Step 5: END

Flowchart:



24/11/24

Ex. No.: 2

Date: 17/10/24

Days to Year Conversion

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

Algorithm:

Step 1: START

Step 2: Input days as 'd'

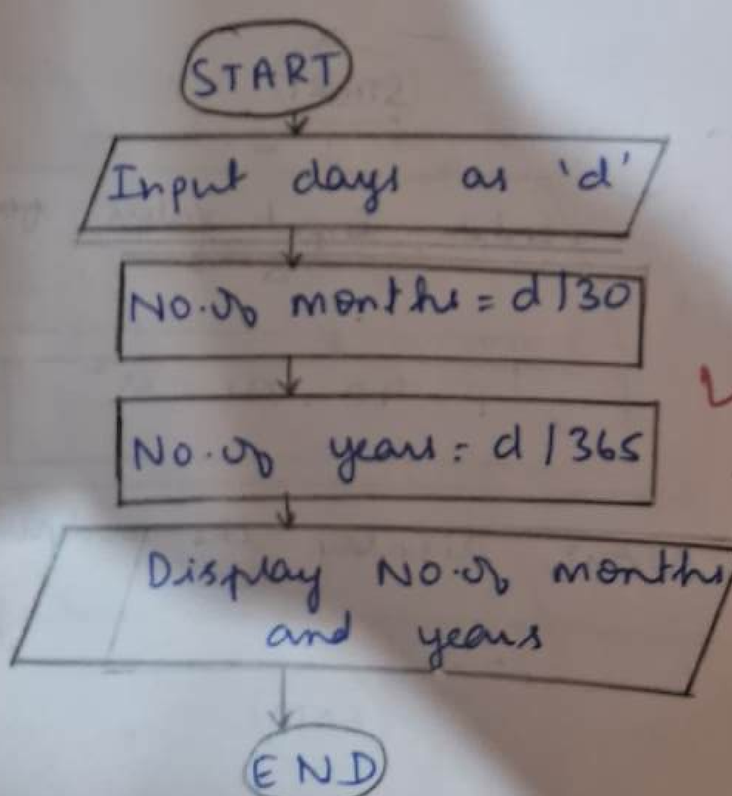
Step 3: Calculate the No. of months = d/30

Step 4: Calculate No. of years = d/365

Step 5: Display No. of months and years

Step 6: END

Flowchart:



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Ex. No.: 3

Date: 17/10/24

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: Assign two inputs "number" "i".

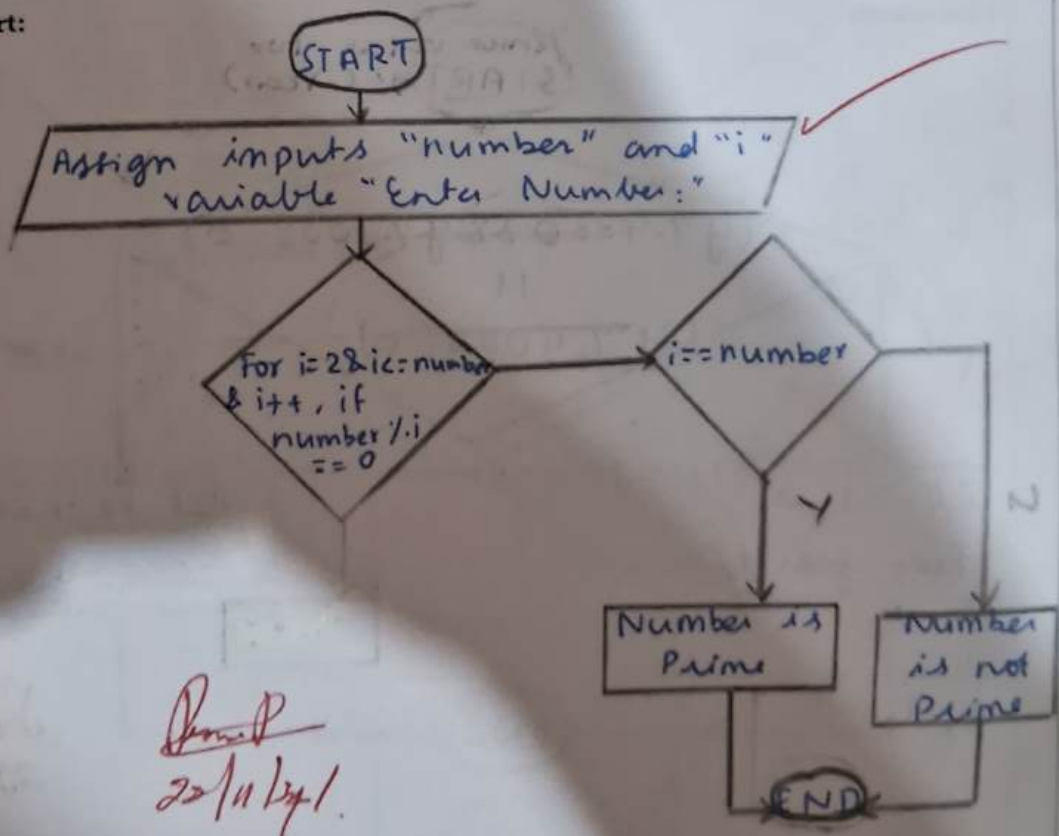
Step 3: For i = 2 ; i <= number ; i++ , if number %. == 0 then break the loop.

Step 4: If i == number , then print "Number is prime".

Step 5: Else , print "Number is not prime"

Step 6: END

Flowchart:



22/11/24

Ex. No.: 4 **Date:** 17/10/24

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 : Assign variable name 'Enter Year' and Enter input value 'y'

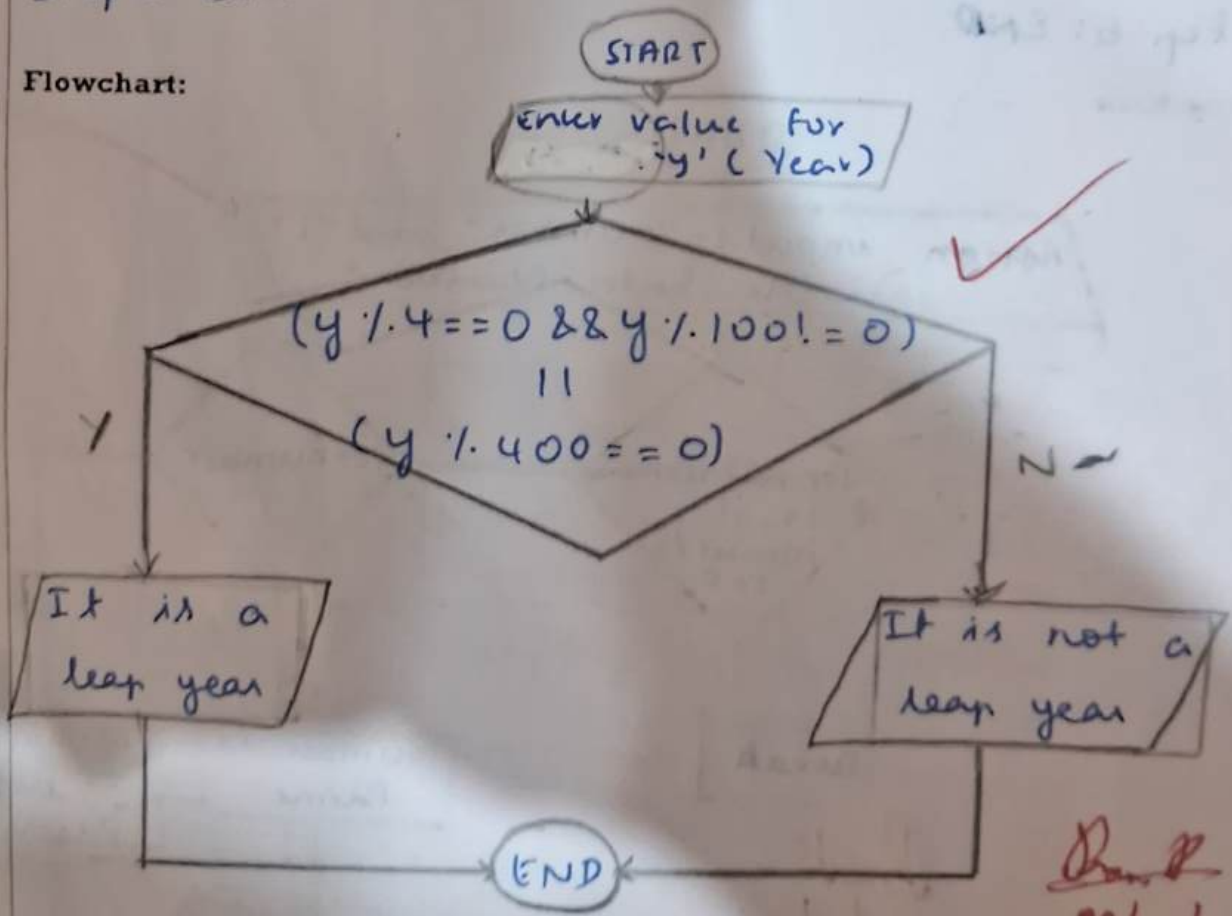
Step 3 : If (y %. 4 == 0 and y %. 100 ≠ 0) or (y %. 400 == 0).

Step 4 : Print "It is a leap year"

Step 5 : Else, Print "It is not a leap year".

Step 6 : END

Flowchart:



22/11/24

Ex. No.: 5

Date: 17/10/24

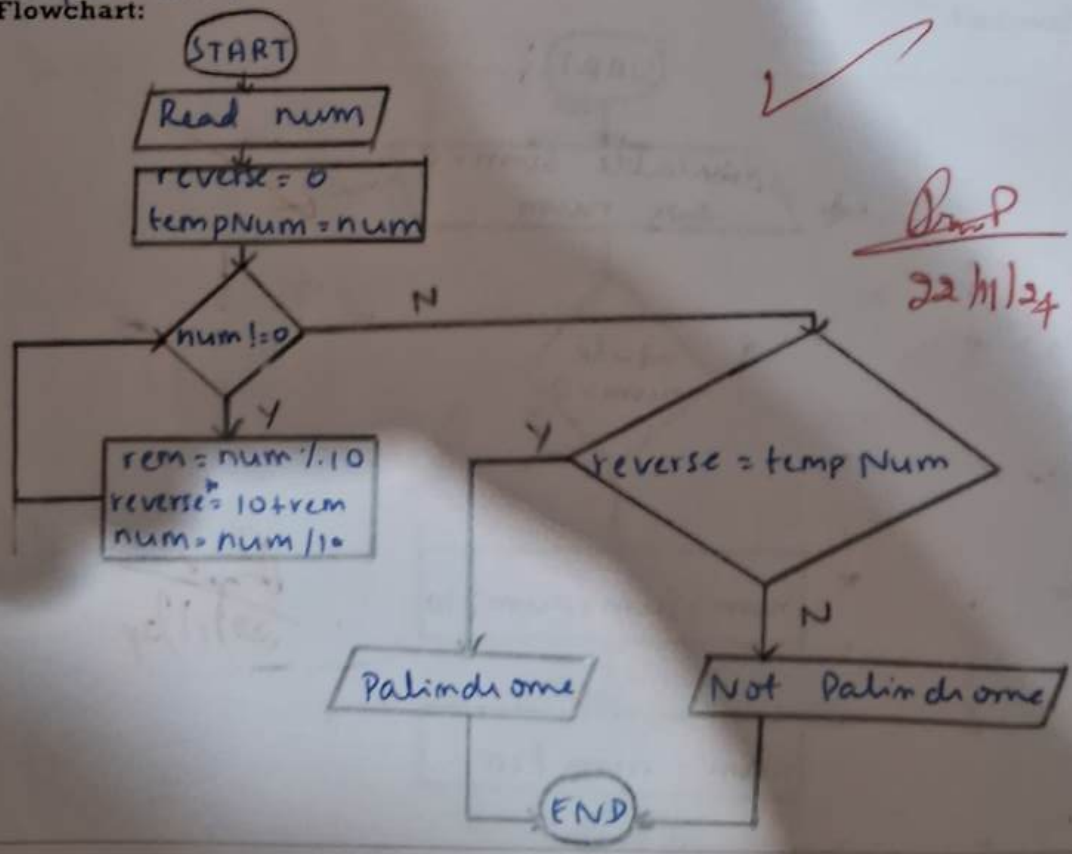
Palindrome Number

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

Algorithm:

Step 1: START
Step 2: Get input from user.
Step 3: Declare and initialize the variable reverse and assign input to a temp. variable tempNum=num
Step 4: Start while loop until num != 0 becomes false. rem = num % 10; reverse = 10 * rem; num = num / 10
Step 5: Check if reverse == tempNum
Step 6: If true, then the no. is a palindrome
Step 7: Else, it is not a palindrome.
Step 8: END

Flowchart:



22/11/24

Ex. No.: 6 Date: 17/10/24

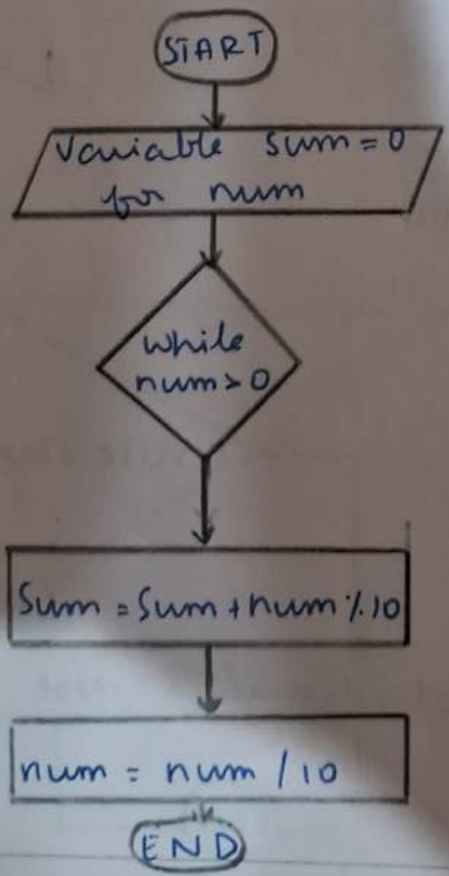
Sum of Digits

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

Algorithm:

Step 1: START
Step 2: Initialize a variable sum=0 to count the sum of all digits for num.
Step 3: Start a while loop with the condition that num > 0.
Step 4: Add to sum the value at ones place in num as sum = sum + num%10. Here, num%10 represents the value of digit at the ones placed in num.
Step 5: Divide num by 10 as the current digit at ones place has been counted.
Step 6: END

Flowchart:



22/11/24