Ex. No.: 1 **Date:**

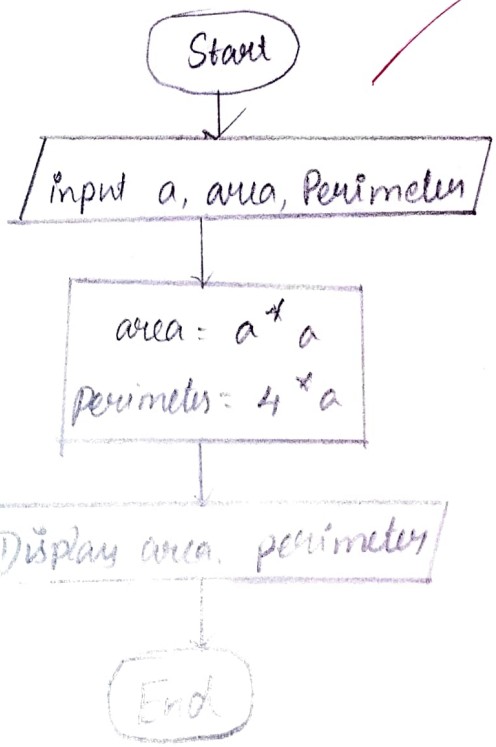
Calculate Area and Perimeter

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.: **Date:**

Days to Year Conversion

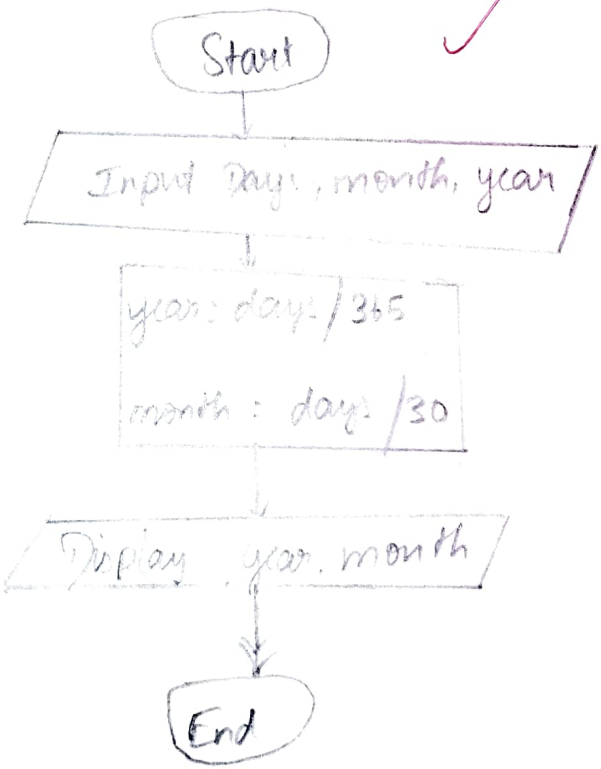
Write an Algorithm and draw a Flowchart to convert the given days into years & months.

Algorithm:

Step 1: Start
Step 2: input days, month, year
Step 3: Calculate year = days/365
Step 4: Calculate month = days/30
Step 5: Display month and Year
Step 6: END

Flowchart:

6/12/24



Ex. No.: **Date:**

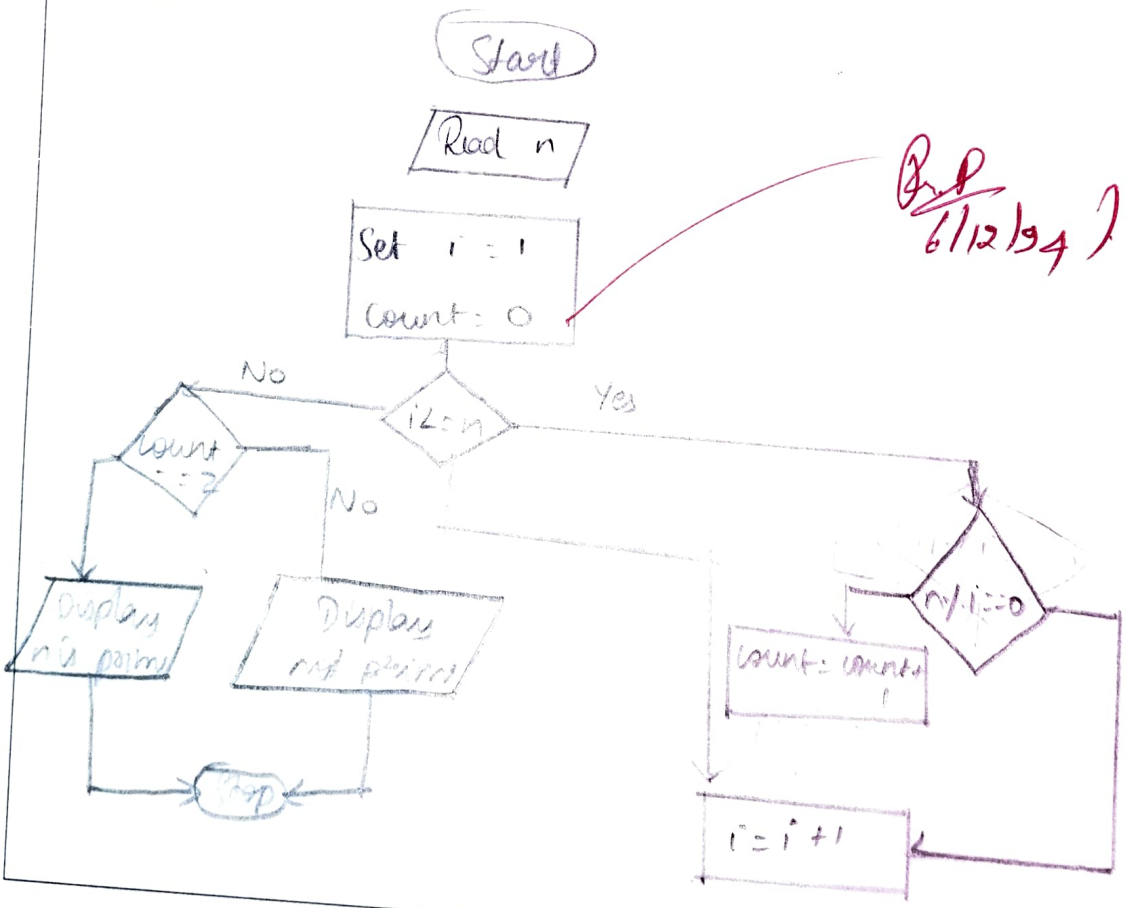
Prime Number

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

Algorithm:

Step 1 :- Start
Step 2:- Read Value 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 go to Step 6.
Step 6:- Set count = count+1
Step 7:- i=i+1 go to Step 4
Step 8:- check count, if count = 2, display Prime if not display it is not prime
Step 9:- Stop

Flowchart:



Ex. No.: **Date:**

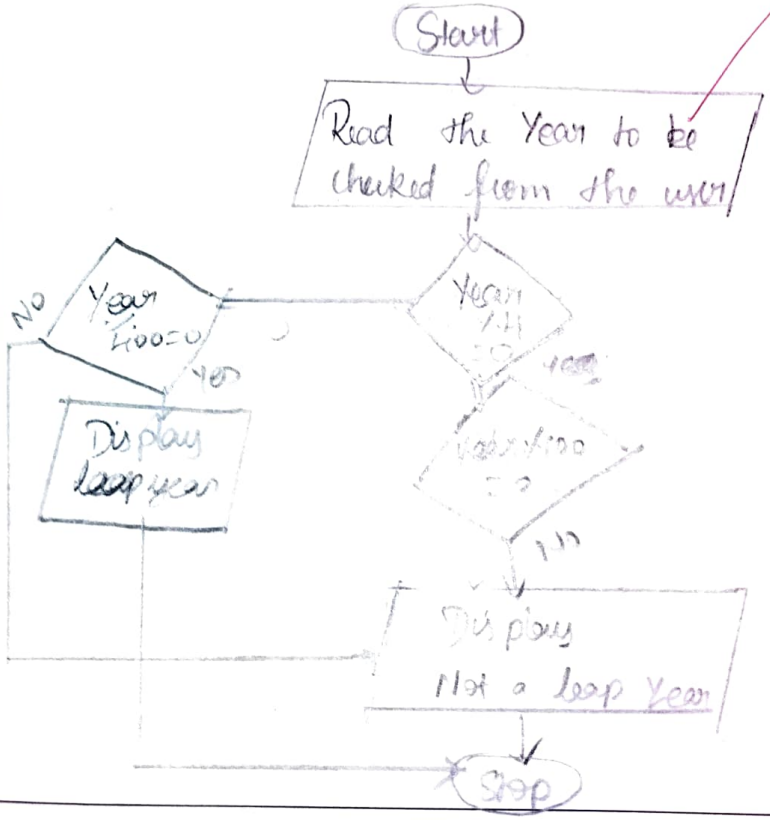
Leap Year

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 to be checked from the user
Step 3:- Assign the value to a variable, say 'Year'
Step 4:- If (Year %.4=0 and Year %.100 !=0) or Year %.400=0
Step 5:- Display Leap Year
Step 6:- Else display Not leap Year
Step 7:- Stop/end

Flowchart:



Ex. No.:

Date:

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 utilize the variable reverse and assign input to the temp variable temp Num = num

Step 4 :- Start the while loop until num != 0 becomes false

- num = num % 10
- reverse = reverse * 10 + num
- num = num / 10

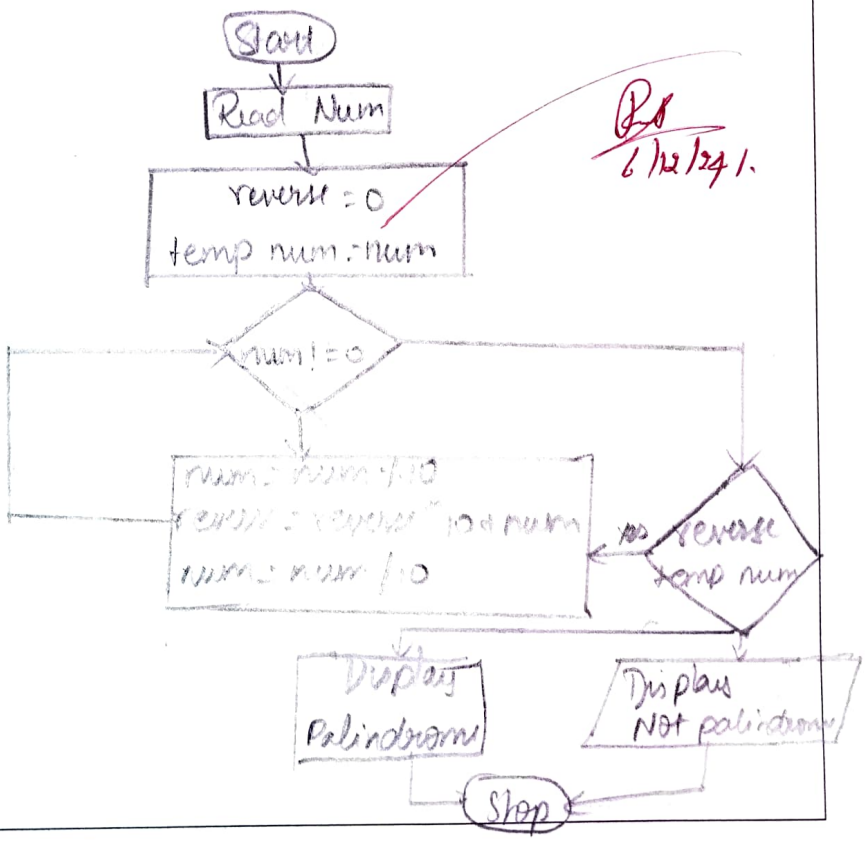
Step 5 :- check if reverse == temp num

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:



6/12/24.

Ex. No.: **Date:**

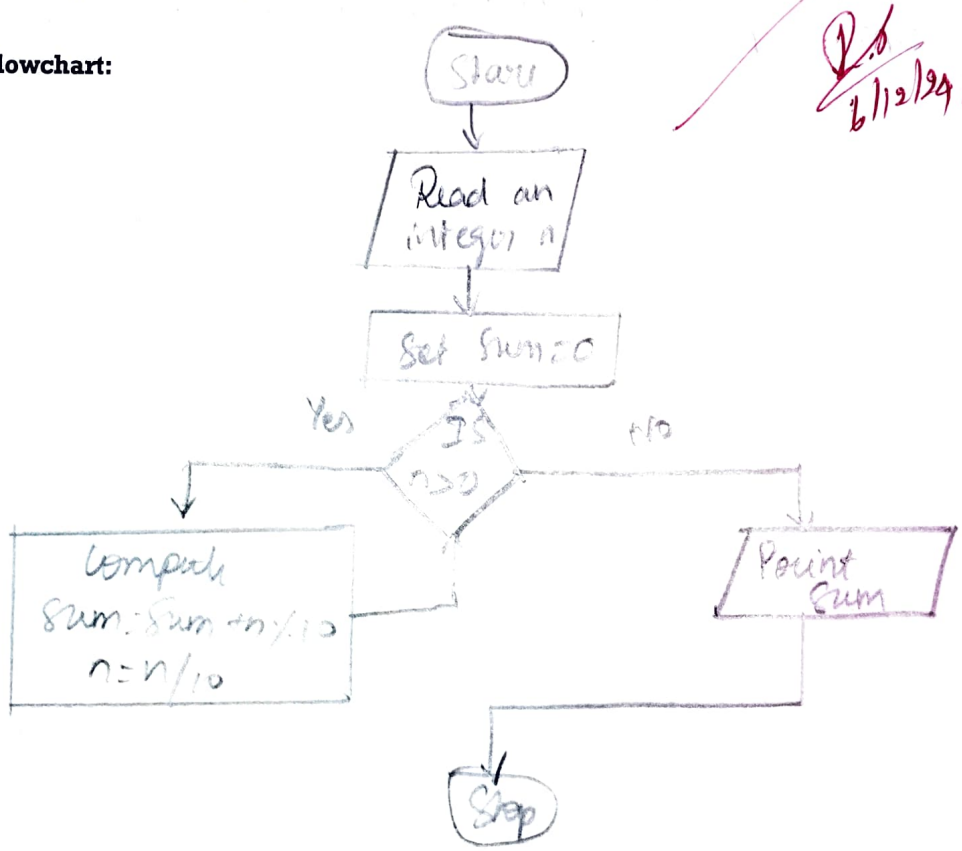
Sum of Digits

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
Step 4:- Repeat Step 2 and 3 until the result is not 0
Step 5:- Divide the number by to obtain the right most digit using the remaining "Percent" operators, then add it
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:



P.S 6/12/24