Ex. No.: I **Date:** 27/09/2024

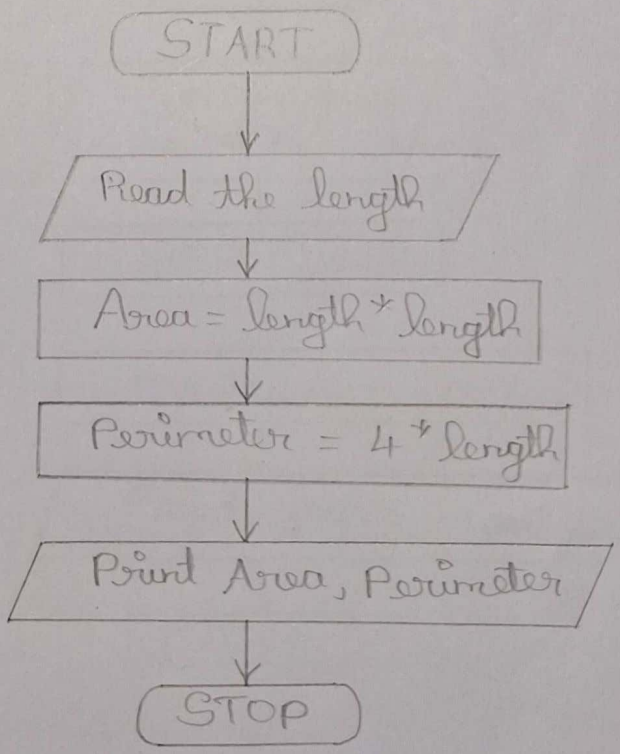
Calculate Area and Perimeter

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

Algorithm:

Step 1 : Start the program
Step 2 : Read the value of length
Step 3 : Calculate Area = length * length
Step 4 : Calculate perimeter = 4 * length
Step 5 : Print, "Area, Perimeter"
Step 6 : Stop the Program

Flowchart:



08/10/24

Ex. No.: XII **Date:** 22/10/2024

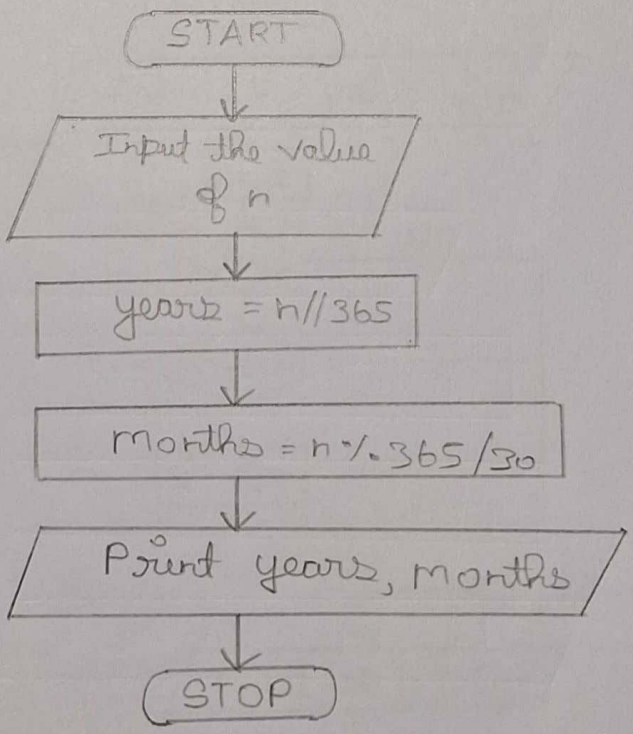
Days to Year Conversion

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

Algorithm:

Step 1 : Start the program
Step 2 : Get the value of n for no. of days
Step 3 : Print years as n//365
Step 4 : Print month as (n%.365)/30
Step 5 : Stop the program

Flowchart:



Ex. No.: 8 III

Date: 22/10/2024

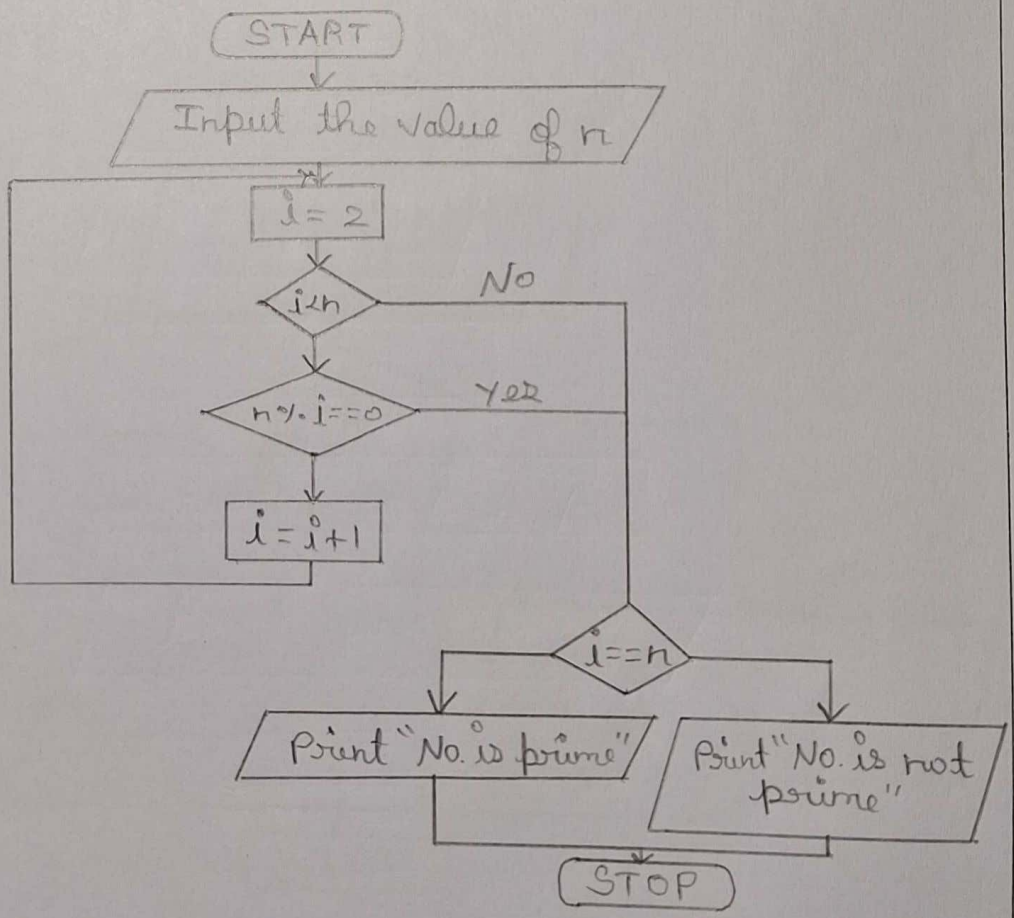
Prime Number

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

Algorithm:

Step 1 : Start the program
Step 2 : Get the value n for the number to check
Step 3 : check if n>1
Step 4 : Iterate the loop (i) from 2 to number
Step 5 : check if n%.i == 0 ; if true, the number is not prime
Step 6 : If n%.i!=0, the number is prime
Step 7 : Stop the program

Flowchart:



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Ex. No.: IV

Date: 22/10/2024

Leap Year

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

Algorithm:

Step 1 : Start the program

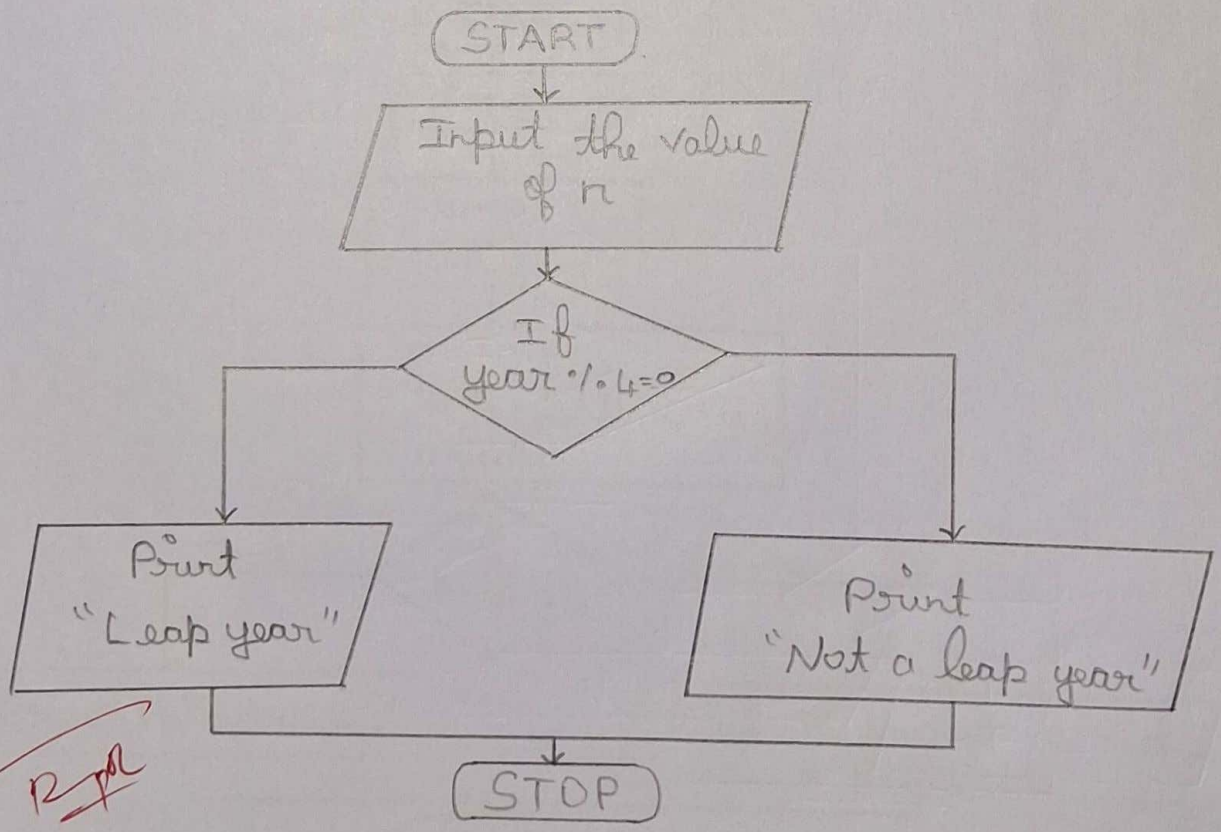
Step 2 : Get the value (n) for the year to check

Step 3 : Check if n%.4 == 0 and n%.100 != 0
(or) n%.400 == 0

Step 4 : If Step 3 is true → Then the given year is a leap year, else it is not a leap year

step 5 : Stop the ~~year~~ program

Flowchart:



Ex. No.: 5 V

Date: 22/10/2024

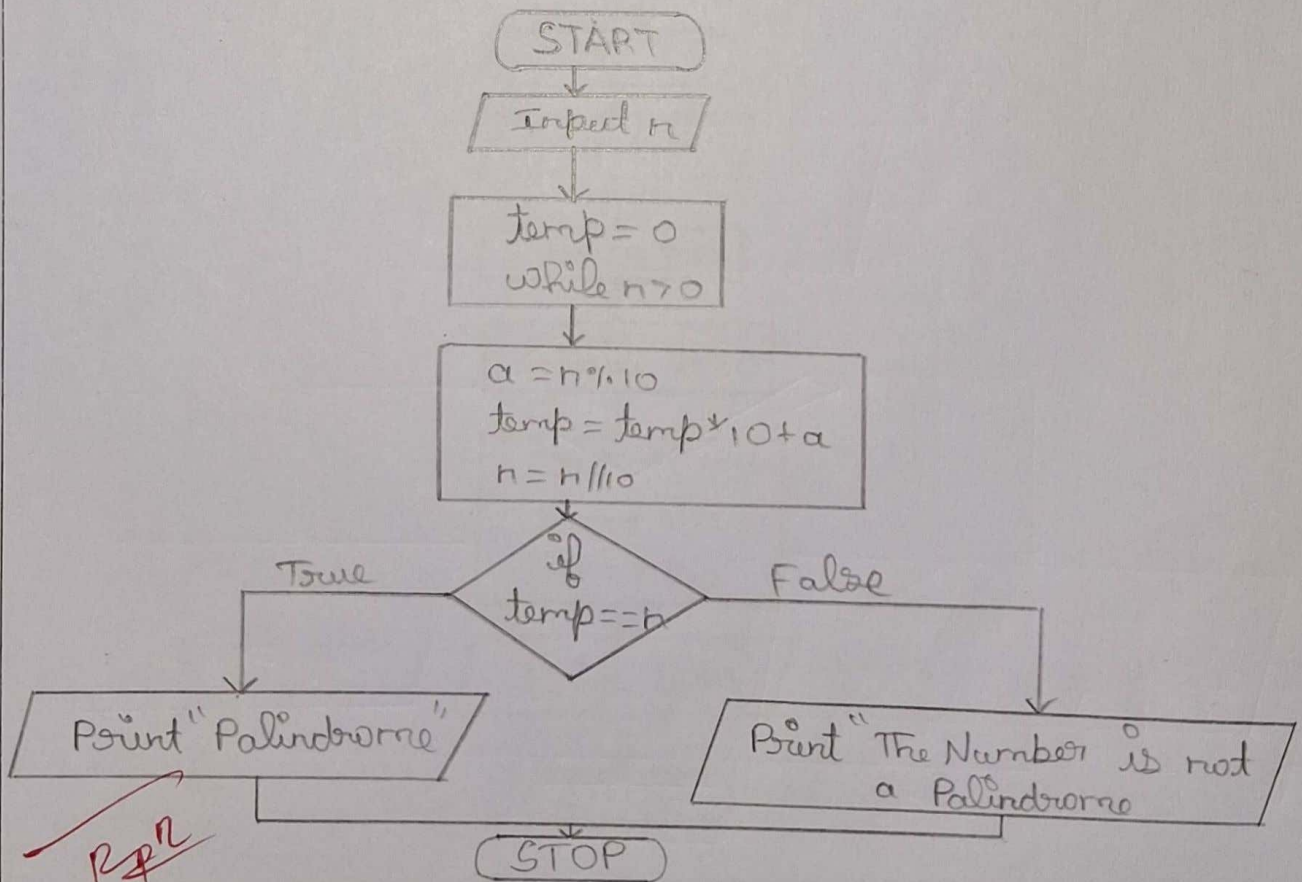
Palindrome Number

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

Algorithm:

Step 1 : Start the program
Step 2 : Read n
Step 3 : Initialize temp = n
Step 4 : Do a = n%10 in a loop which checks if n>0
Step 5 : rev = rev * 10 + a
Step 6 : n = n/10
Step 7 : If (n<0) then go to Step 4 to 6 else go to Step 8
Step 8 : If (temp = rev) then print "Palindrome no." else print "Non Palindrome no."
Step 9 : Stop the program

Flowchart:



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Ex. No.: VI **Date:** 22/10/2024

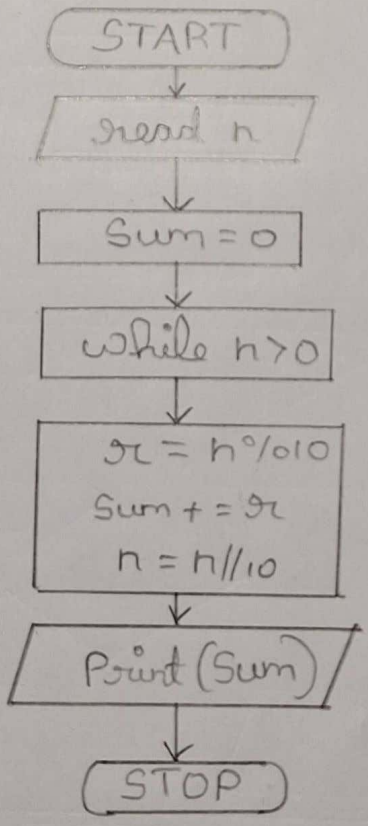
Sum of Digits

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

Algorithm:

Step 1 : Start the program
Step 2 : Read n
Step 3 : Initialize Sum = 0
Step 4 : remainder = n%.10
Sum = Sum + remainder
n = n/10
Step 5 : If (n>0), go to Step 4 else go to Step 6
Step 6 : Print Sum
Step 7 : Stop the program

Flowchart:



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