Ex. No.: 1

Date: 18/10/24

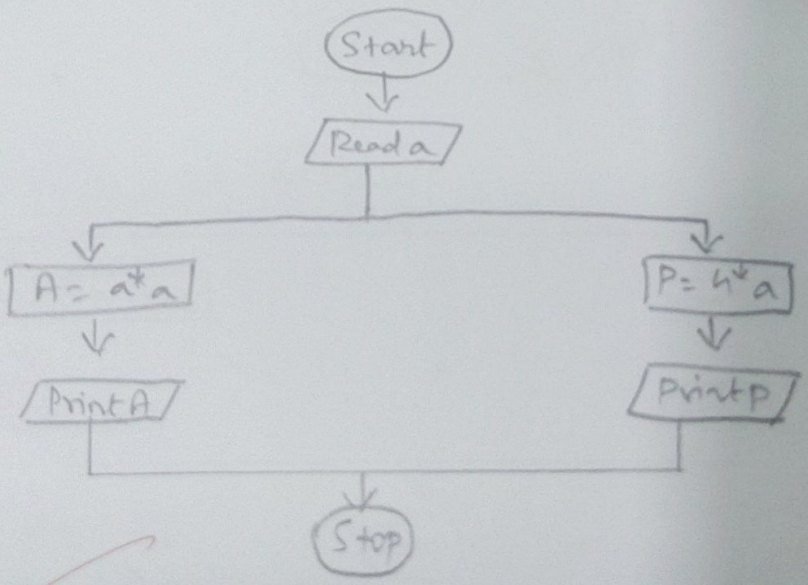
Calculate Area and Perimeter

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

Algorithm:

Step 1: Start
Step 2: Input a as value of side
Step 3: A = a*a
Step 4: print A as area of Square
Step 5: P = 4*a
Step 6: print P as Perimeter of Square
Step 7: Stop

Flowchart:



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Ex. No.: 2 **Date:** 18/10/24

Days to Year Conversion

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

Algorithm:

Step1: Start

Step2: Get input for number of days, n

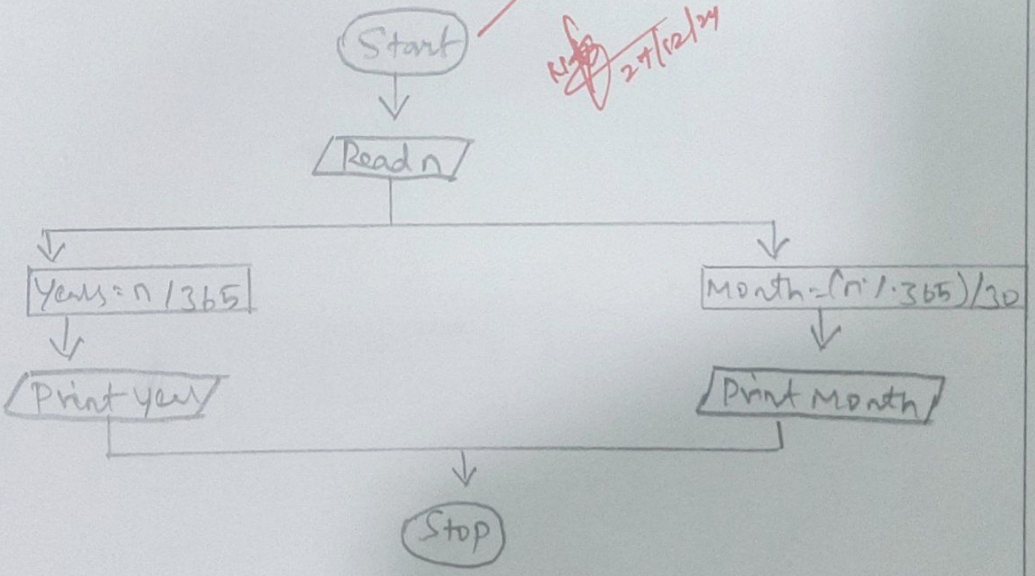
Step3: years = n/365

Month = (n%365)/30

Step4: Print year, Month

Step5: Stop

Flowchart:



Ex. No.: 3 Date: 18/10/24

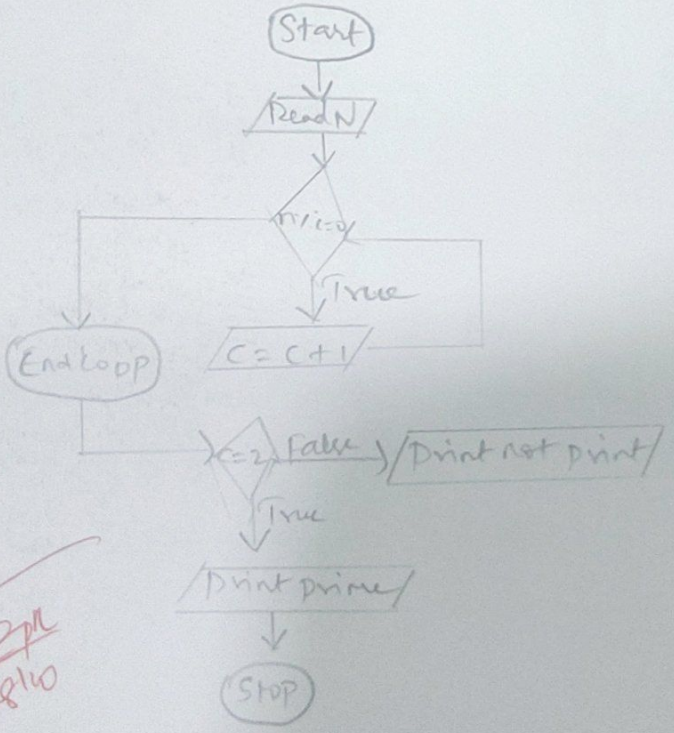
Prime Number

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

Algorithm:

Step1: Start the program
Step2: Get input "n" from the user as a number
Step3: Check if n=0 or n=1
Step4: If step_3 is true, Print n is not a prime number
Step5: Otherwise check if n>1
Step6: If step 5 is true, initialize a loop, with variable i with range 2 to n
Step7: In the loop, check if n%i==0;
Step8: If step_7 is true, Print n is not a prime number

Flowchart:



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Ex. No.: 4 Date: 18/10/24

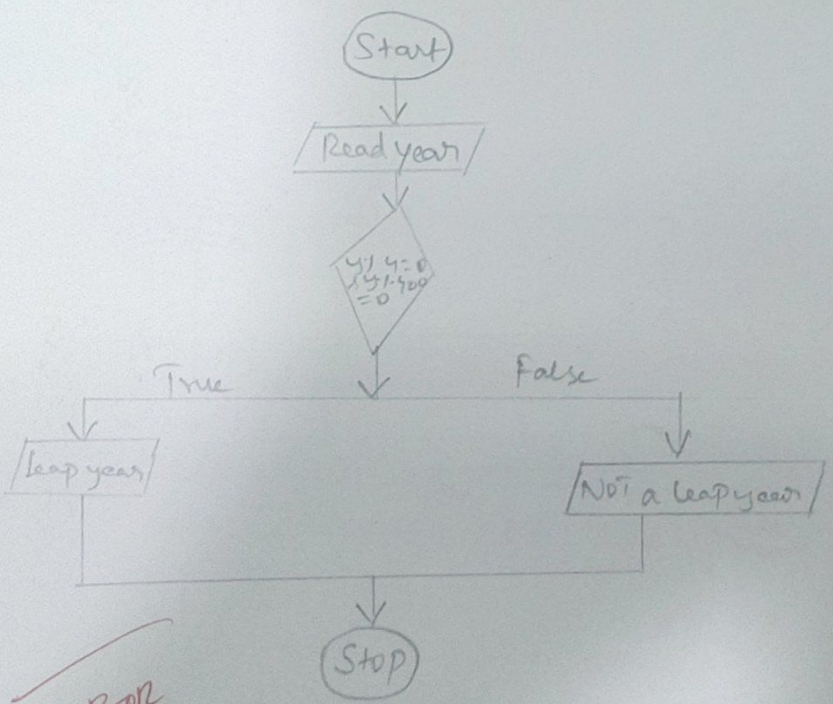
Leap Year

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

Algorithm:

Step1: Start
Step2: Assign value to the variable L
Step3: Check if year is divisible by 4 but not 100, Displays "LEAPYEAR"
Step4: Check is leap year is divisible by 400, Displays "LEAPYEAR"
Step5: Otherwise, print not leap year
Step 6: Stop

Flowchart:



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Ex. No.: 5 **Date:** 18/10/24

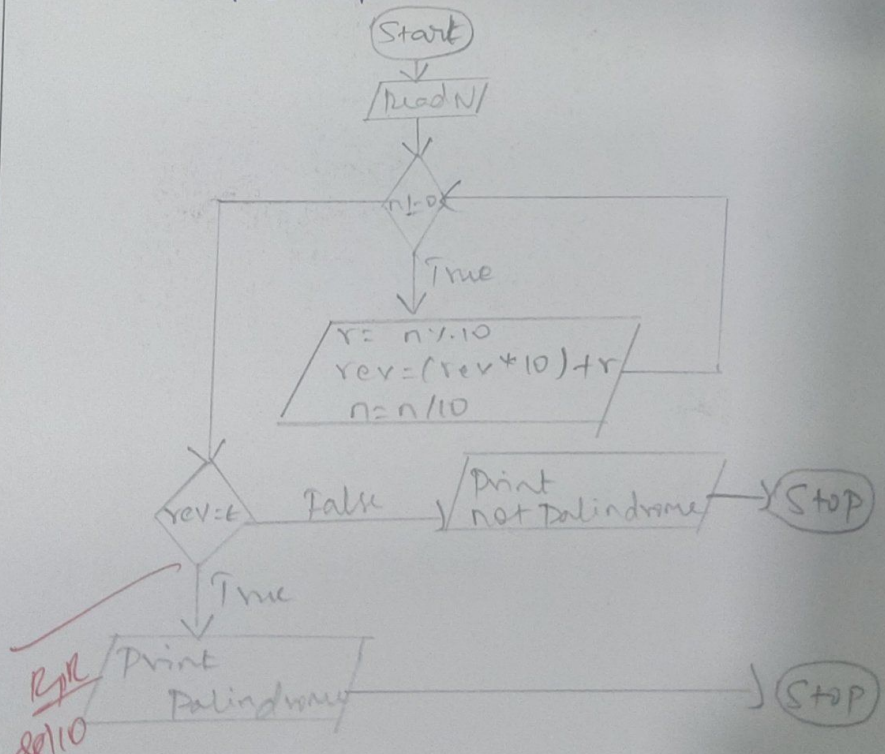
Palindrome Number

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

Algorithm:

Step1: Start
Step2: Read a number n
Step3: Declare 'rev' = 0
Step4: Assying 'n' to temp variable 'E'
Step5: while loop n != 0
Step6: r = n%.10
Step7: rev = (rev *10) + n
Step8: n = n/10
Step9: Exit loop
Step10: Check if rev = int, Print palindrome
Step11: Otherwise, Print not palindrome
Step12: Stop

Flowchart:



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Ex. No.: 6 Date: 18/10/24

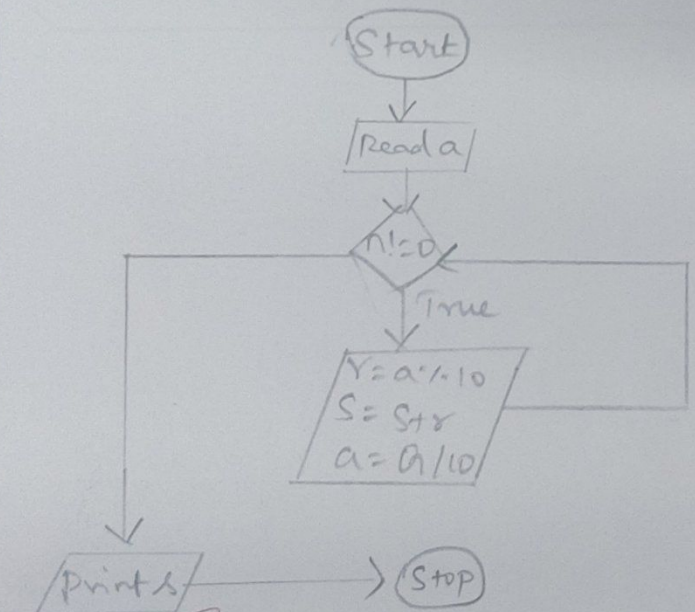
Sum of Digits

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

Algorithm:

Step 1: Start
Step 2: Read a, S=0
Step 3: While loop, a!=0
Step 4: r= a%.10, S=(S+r, n=n/10
Step 5: Print S
Step 6: Stop

Flowchart:



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