Ex. No.: 01 **Date:** 25/9/24

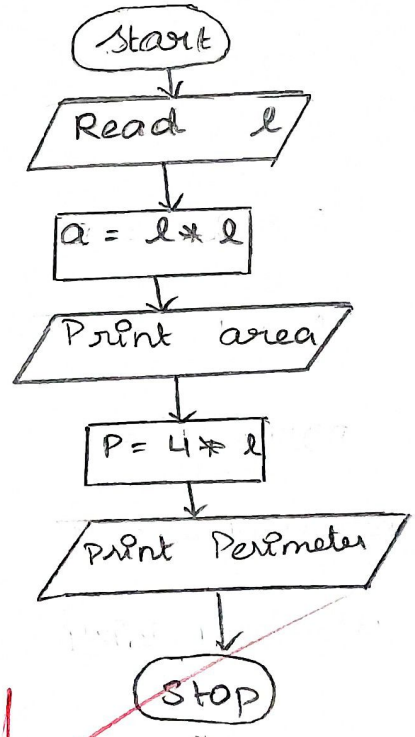
Calculate Area and Perimeter

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

Algorithm:

Step 1 : Start
Step 2 : Read l
Step 3 : Area = l * l
Step 4 : Perimeter area
Step 5 : Print area 4 * l
Step 6 : Print Perimeter
Step 7 : Stop.

Flowchart:



25/9/24.

Ex. No.: 2 **Date:** 25/09/24

Days to Year Conversion

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

Algorithm:

Step1 : Start

Step2: Input no of Days

Step3: Calculate the no. of years = days // 365

Step4: Calculate the remaining days after calculating years. Remaing days = days % 365

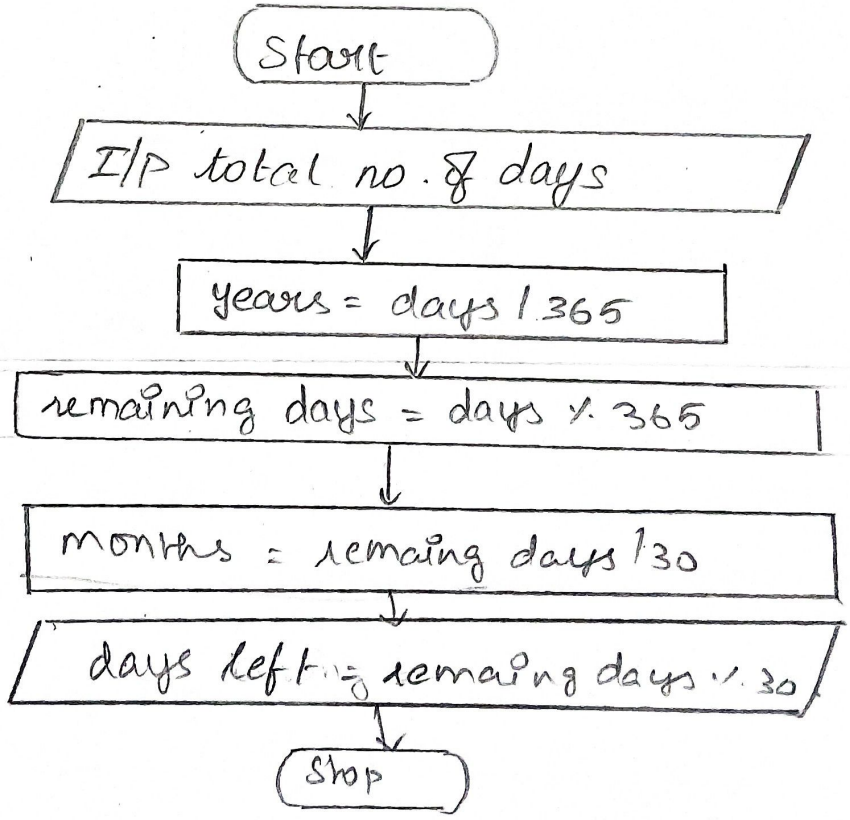
Step 5 : calculate the no. of months
months = remaining days / 30

Step6 : calculate the remaining days after calculating months days-Left = Remaing days % 30

Step 7: Output the years, months and days-left

Step 8 : End.

Flowchart:



Ex. No.: 3 **Date:** 25/09/24

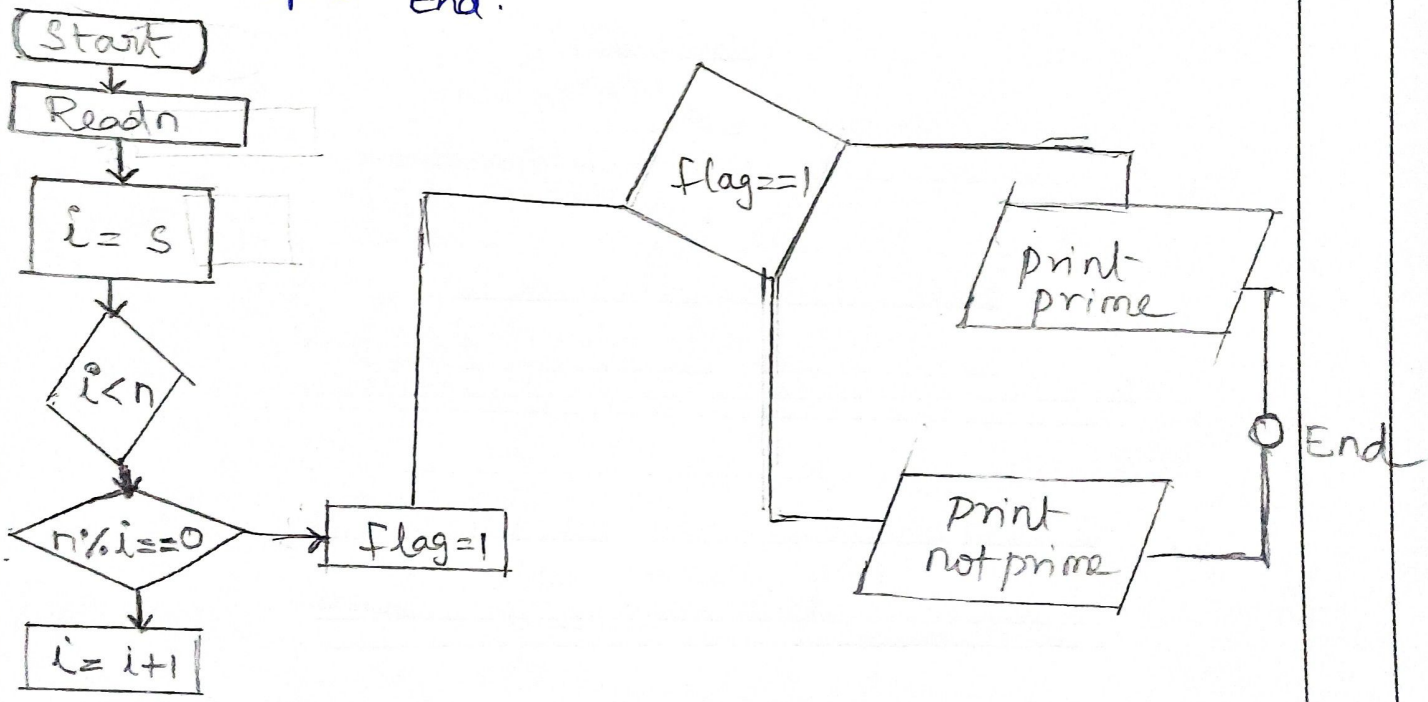
Prime Number

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

Algorithm:

Step 1: Take num as input
Step 2: Initialize a variable temp to 0
Step 3: Iterate a "for" loop from 2 to num/2
Step 4: If num is divisible by loop, then increment temp,
Step 5: If the temp is equal to 0,
return "Num is prime"
else
return "Num is not prime"
Step 6: End.

Flowchart:



Ex. No.: 4 **Date:** 25/09/24

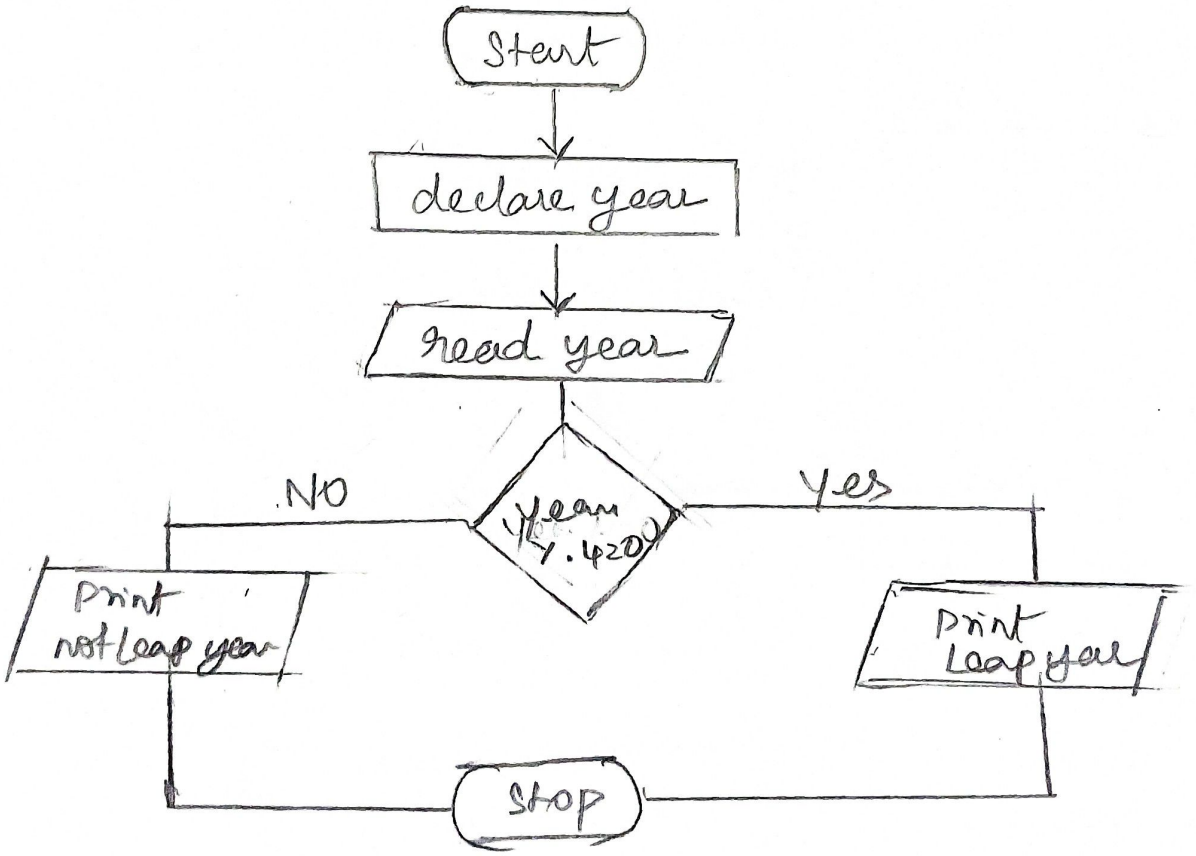
Leap Year

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

Algorithm:

Step1: Start
Step2: Declare year
Step3: Read year
Step4: Check if year % 4 = 0
Step5: print "leap year"
else
print "not leap year"
Step6: Stop

Flowchart:



Ex. No.: 5 **Date:** 25/09/24

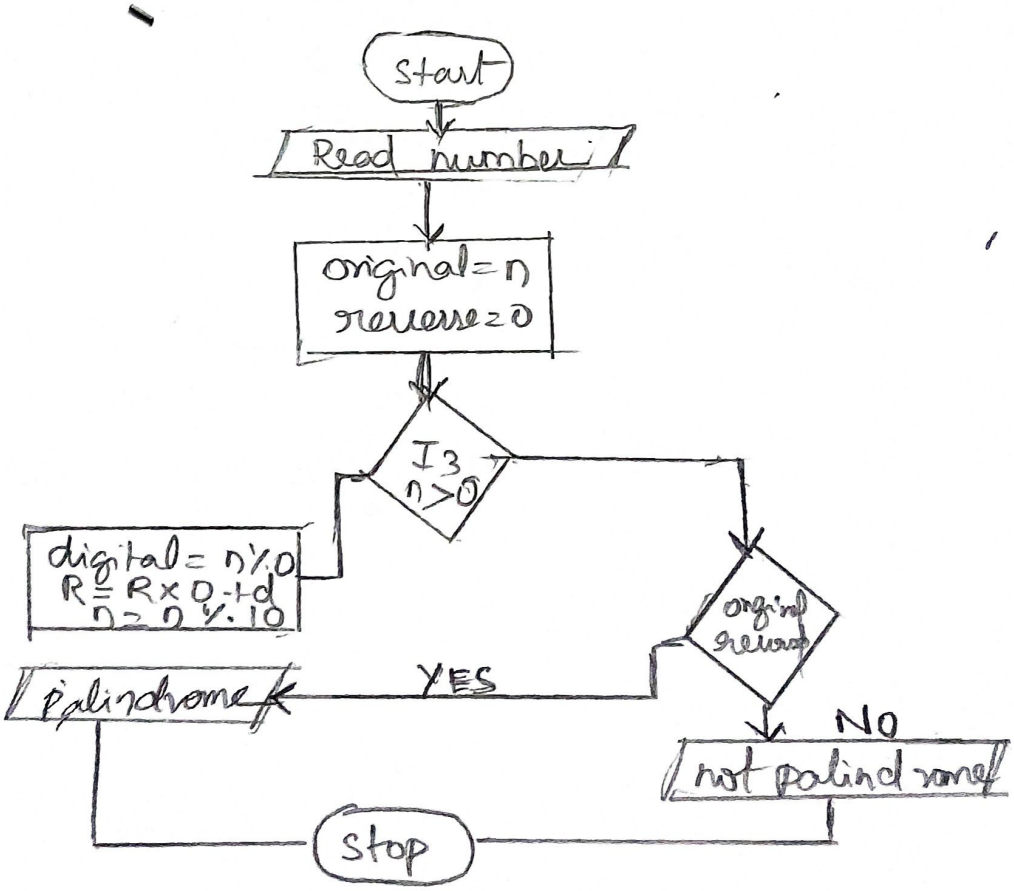
Palindrome Number

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 number n
Step 3: Initialize; Set original = n is reversed = 0
Step 4: while n > 0
Set digit = n mod 10
update reversed = reversed x 10 + digit
update n = n ÷ 10
Step 5: if original = reversed
print "palindrome"
else
print "not palindrome"
Step 6: End.

Flowchart:



Ex. No.: 6

Date: 25/09/24

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: Input the number (n)
Step 3: Initialize Sum = 0
Step 4: Repeat the following steps while n is greater than 0. n > 0
- Extract the last digit of n digit = n % 10
- Add the digit to Sum Sum = Sum + digit
- Remove the last digit n. n = n / 10

step 5: O/P the sum
Step 6: End.

Flowchart: