NAME: LAKSHANA.V

REGISTER NUMBER: 240801171

WEEK-0

Ex. No.: 1 240801171 **Date:** 26/9/24

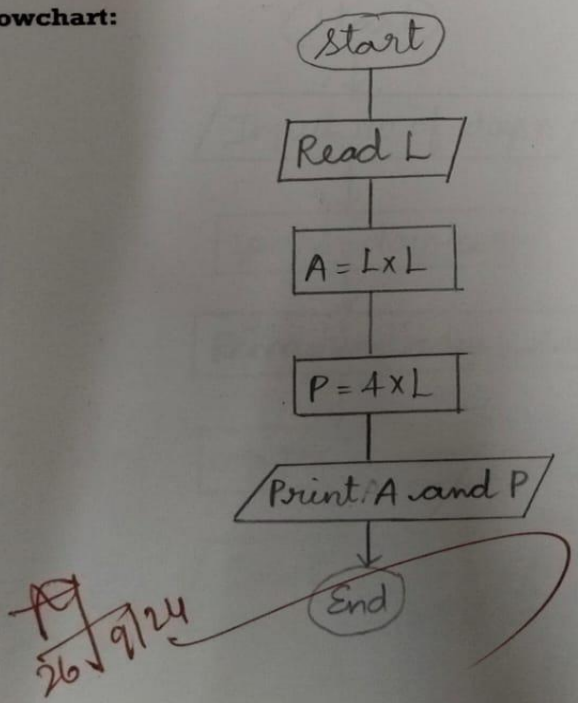
Calculate Area and Perimeter

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: A = L x L
step 4: P = 4 x L
step 5: Print A
step 6: Print P
step 7: End

Flowchart:



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Ex. No.: 2 240801171 **Date:** 26/9/24

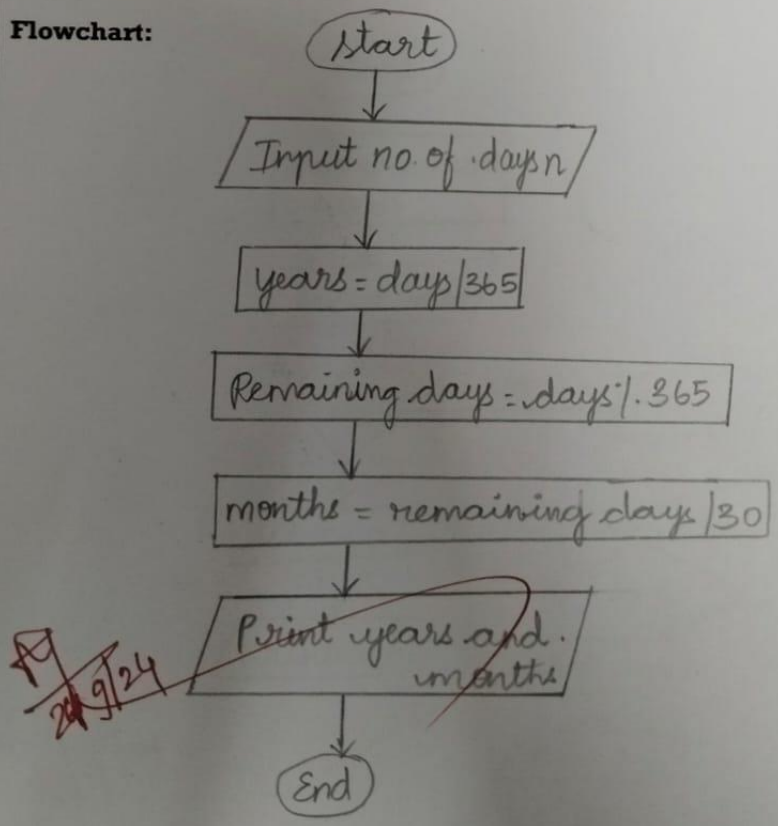
Days to Year Conversion

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

Algorithm:

step 1: Start
step 2: Input no. of days n
step 3: years = days / 365. Calculate years
step 4: remaining days = days % 365
step 5: months = remaining days / 30
step 6: Print years and months
step 7: End

Flowchart:



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Ex. No.: 3 240801171 Date: 26/9/24

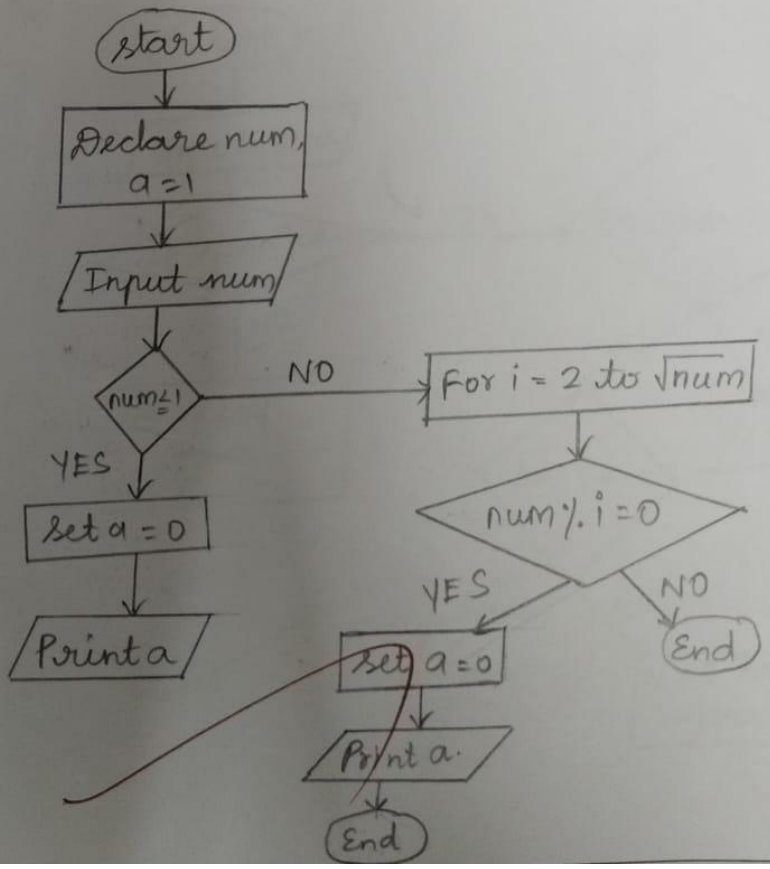
Prime Number

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

Algorithm:

step 1: Start
step 2: Input num and initialise a = 1
step 3: If num <= 1, set a to 0
step 4: For i from 2 to square root of num.
If num is divisible by i, set a to 0
step 5: If a = 1, then number is prime, otherwise not
step 6: Print whether the number is prime or not
step 7: End.

Flowchart:



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Ex. No.: 4 240801171 Date: 28/9/24

Leap Year

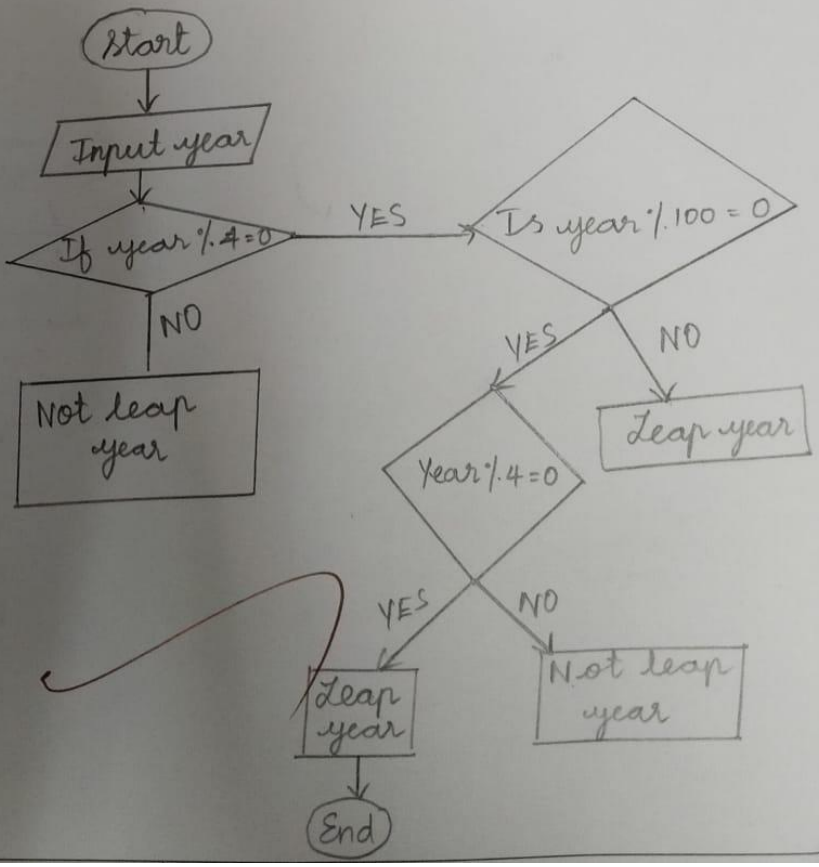
Write an Algorithm and draw a Flowchart to check whether the given year is Leap year or not.

Algorithm:

step 1: start
step 2: Input year
step 3: year divisible by 4
- If year divisible by 100
  - → the year divisible by 400
  - → Else, it is not leap year
- Else, it is leap year

step 4: Else, it is not leap year
step 5: Print whether it is leap year or not
step 6: End.

Flowchart:



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Ex. No.: 5 240801171 Date: 28/9/24

Palindrome Number

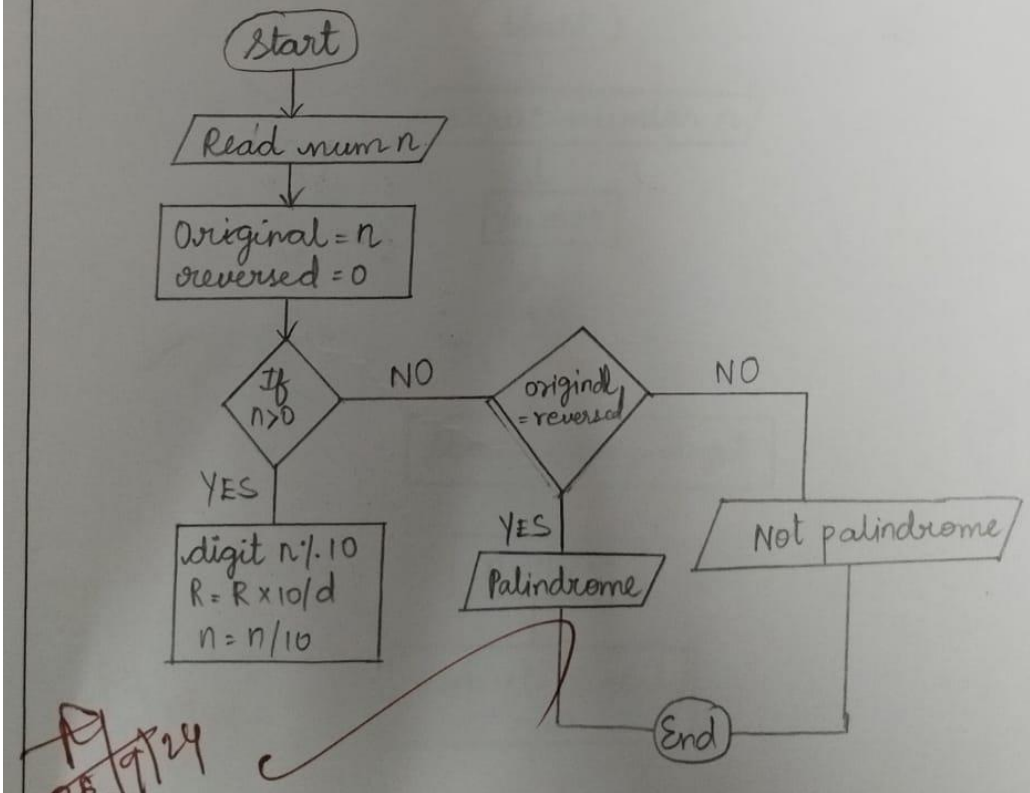
Write an Algorithm and draw a Flowchart to check whether the given number is palindrome number or not.

Algorithm:

start 1: start
step 2: Read the number n
step 3: Initialise set = n and reversed = 0
step 4: while n > 0
- set digit = n % 10
- update reversed = reversed x 10 + digit
- update n = n ÷ 10

step 5: if original = reversed, Print Palindrome
step 6: Else, print not palindrome
step 7: End

Flowchart:



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Ex. No.: 6 240801171 Date: 28/9/24

Sum of Digits

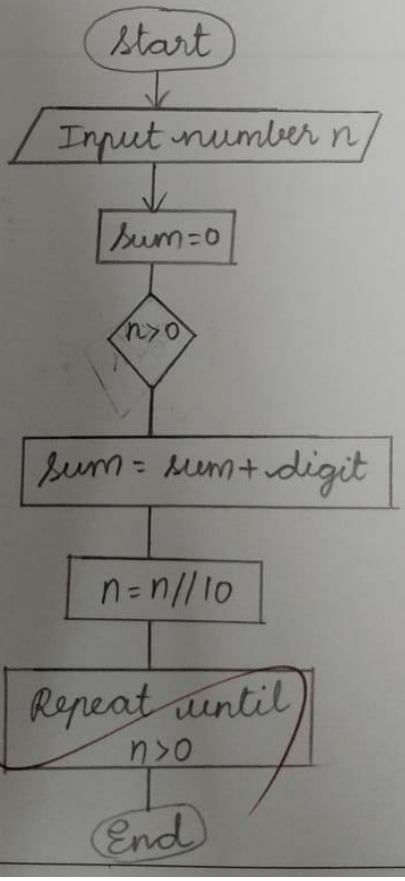
Write an Algorithm and draw a Flowchart to calculate the sum of digits in the given number.

Algorithm:

step 1: Start
step 2: Input num n
step 3: Initialise sum=0
step 4: Repeat the steps till n>0
- digit = n % 10
- sum = sum + digit
- n = n//10

step 5: Print sum
step 6: End

Flowchart:



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