

Ex. No.: 01

Date: 18/10/2024

**Calculate Area and Perimeter**

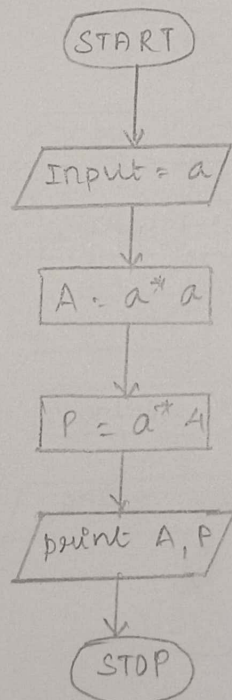
Write an Algorithm and draw a Flowchart to Calculate the area and perimeter of a square.

**Algorithm:**STEP 01: Read the value of  $a$ .STEP 02: Calculate the area ( $\text{Area} = a * a$ )

STEP 03: print Area

STEP 04: Calculate the perimeter ( $\text{Perimeter} = a * 4$ )

STEP 05: print Perimeter

**Flowchart:**

RPR  
28/10

Ex. No.: 02

Date: 18/10/2024

**Days to Year Conversion**

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

**Algorithm:**

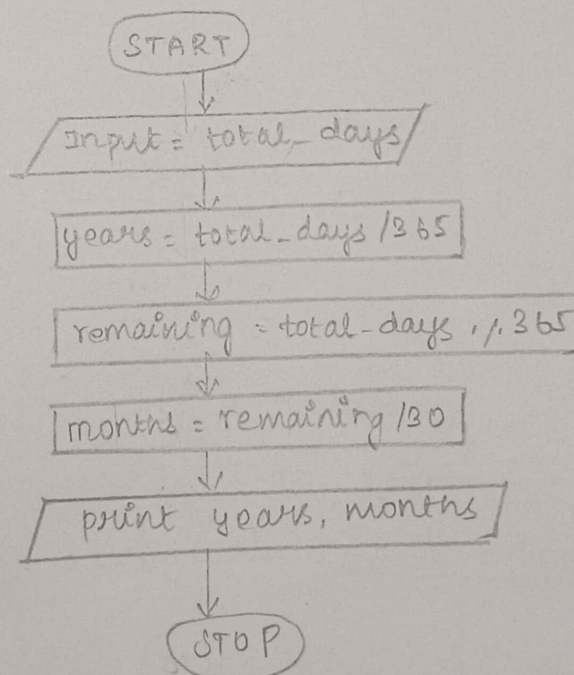
STEP 01: Read the value for total days.

STEP 02:  $\text{Years} = \text{total days} / 365$

STEP 03:  $\text{Remaining - days} = \text{total days} \% 365$

STEP 04:  $\text{months} = \text{remaining - days} / 30$

STEP 05: Display years, months.

**Flowchart:**

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Ex. No.: 03

Date: 18/10/2024

**Prime Number**

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

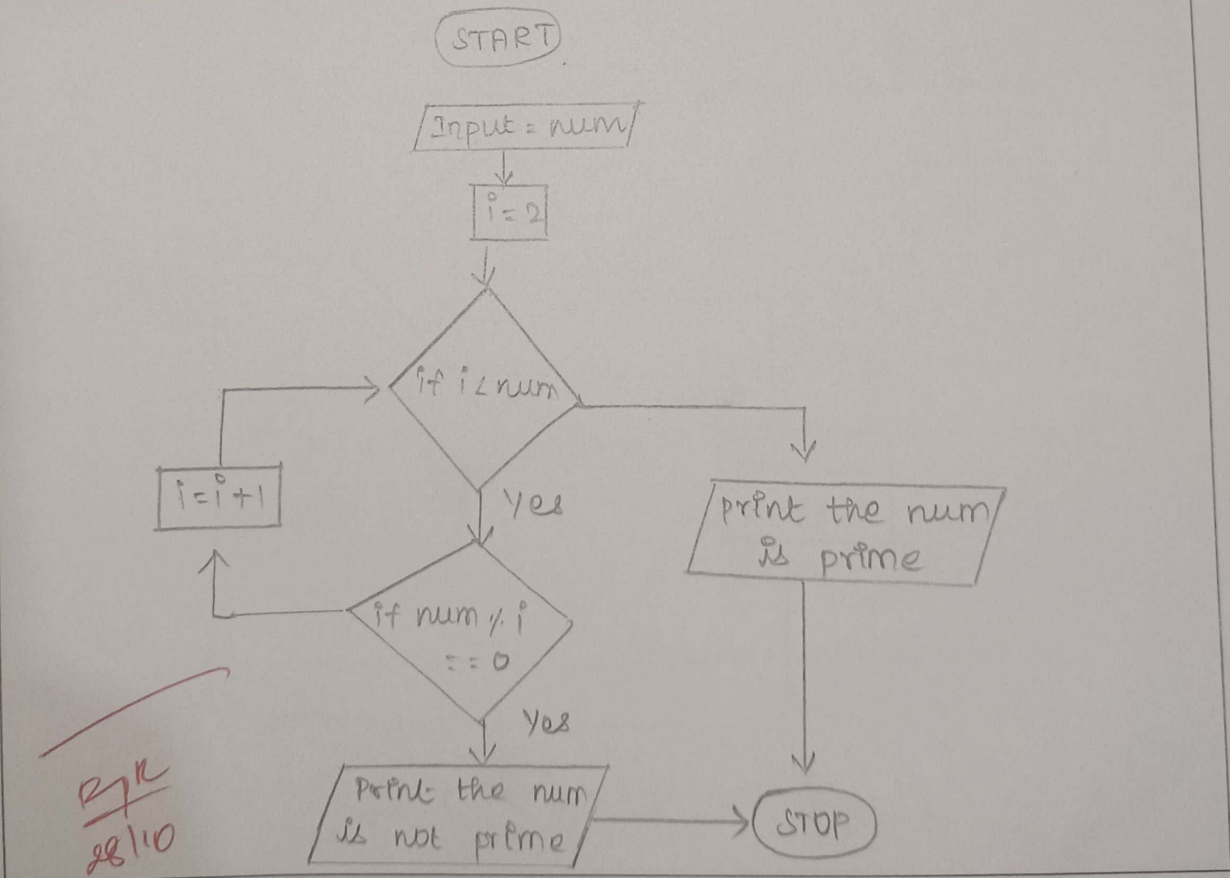
**Algorithm:**

STEP 01 : Read the value of num

STEP 02 : Divide the value of num by numbers, from 2 to num-1 by iterating for loop.

STEP 03 : If num is divisible by loop iterator, then increment  $x$ . If  $\text{num} \% x = 0$ , print num is a prime number.

STEP 04 : Else, print num is not a prime number.

**Flowchart:**

Ex. No.: 04

Date: 18/10/2024

**Leap Year**

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

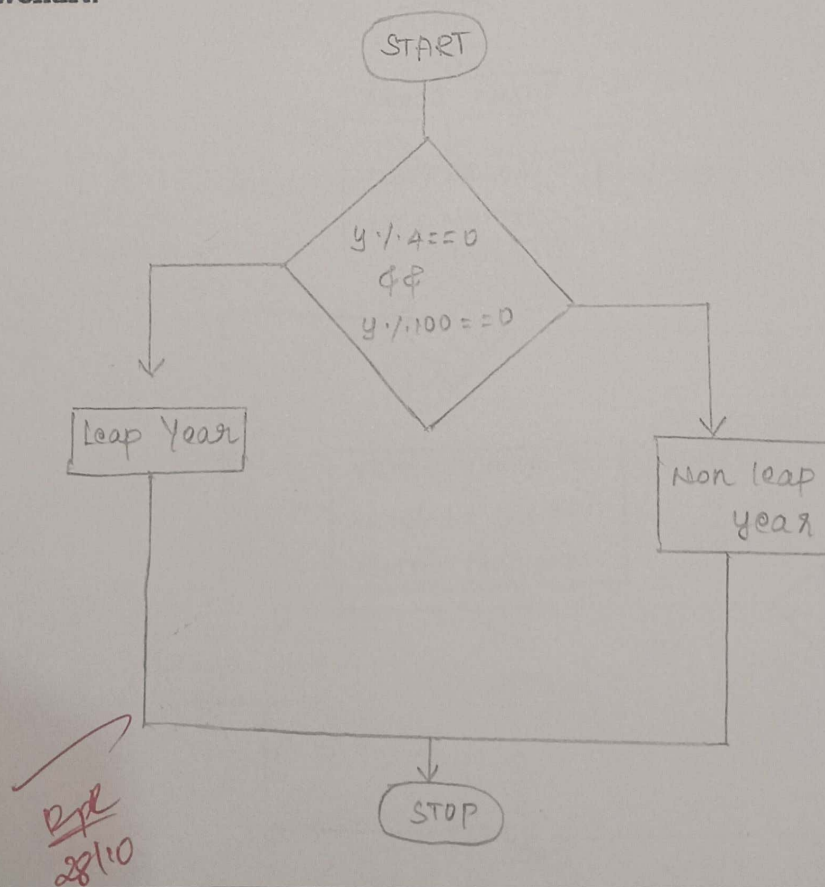
**Algorithm:**

STEP 01 : Read the value of year

STEP 02 : Divide the year by 4.

STEP 03 : If the remainder is 0, print Leap Year

STEP 04 : Else, print Not a Leap Year.

**Flowchart:**



Ex. No.: 05

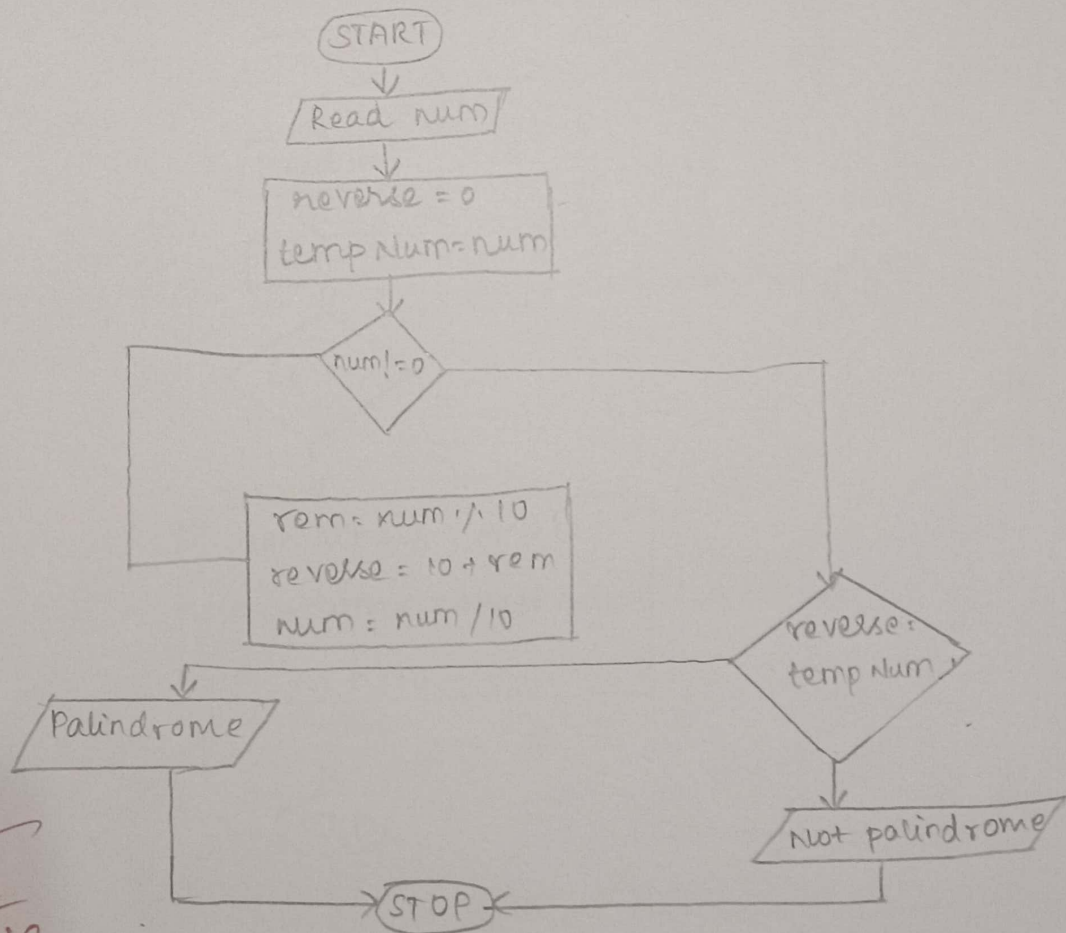
Date: 18/10/2024

**Palindrome Number**

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

**Algorithm:**

- STEP 01 : Read the input number from the user.
- STEP 02 : Declare and initialise the variable reverse and assign input to a temp variable tempNum = num
- STEP 03 : Start the while loop until num != 0 becomes false
- STEP 04 : check if reverse == tempNum
- STEP 05 : If its true, then the number is a palindrome.  
If not, the number is not a palindrome.

**Flowchart:**

Ex. No.: 06

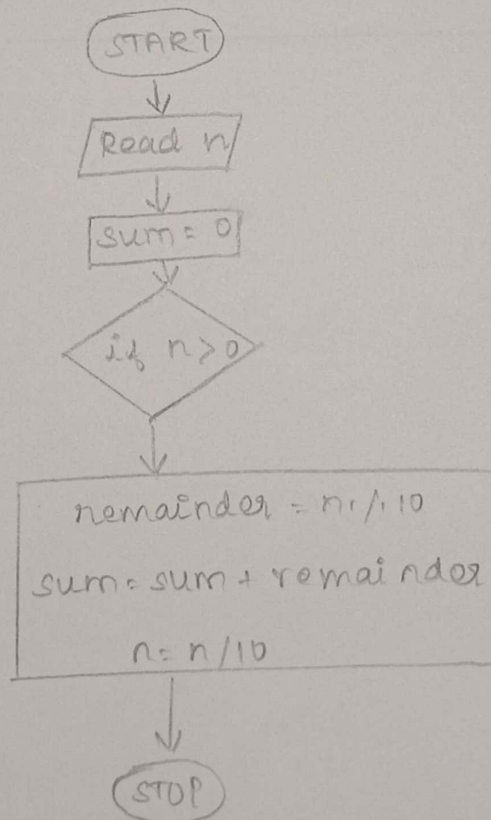
Date: 18/10/2024

**Sum of Digits**

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

**Algorithm:**

- STEP 01 : Get number by user.
- STEP 02 : Get the modulus / remainder of the number
- STEP 03 : Sum the remainder of the number
- STEP 04 : Divide the number by 10
- STEP 05 : Repeat the step 2 while the number is greater than 0.
- STEP 06 : Display the output.

**Flowchart:**

*Rpr*  
*28/10*