

Date: 3.10.24

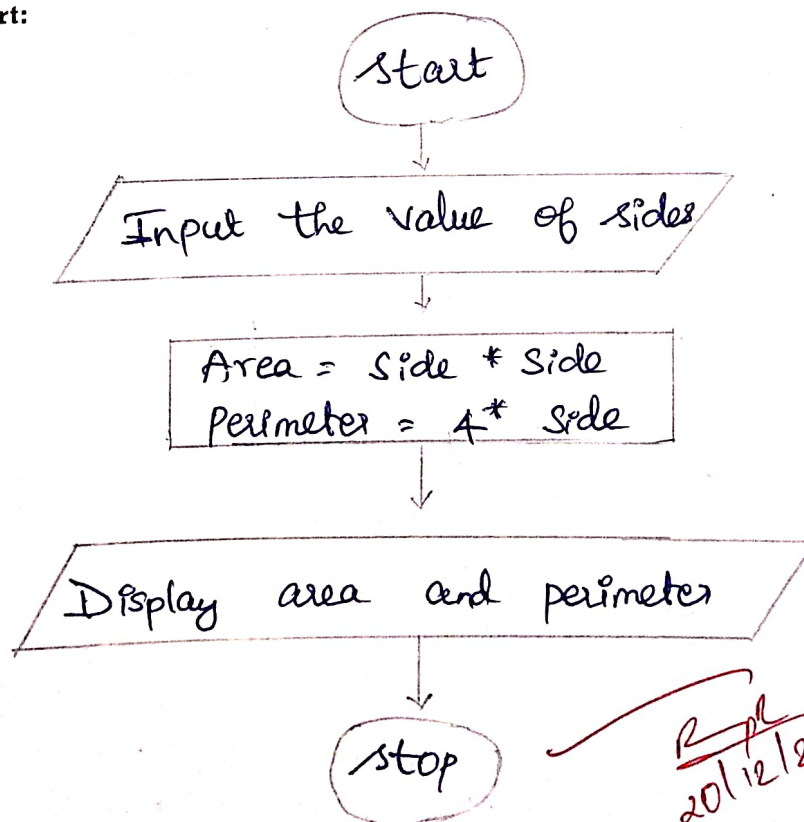
Ex. No.: 01

**Calculate Area and Perimeter**

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

**Algorithm:**

- Step 1  $\Rightarrow$  Start  
Step 2  $\Rightarrow$  Get the value of side  
Step 3  $\Rightarrow$  Area = Side \* Side  
Step 4  $\Rightarrow$  Perimeter = 4 \* Side  
Step 5  $\Rightarrow$  Display Area and Perimeter  
Step 6  $\Rightarrow$  Stop.

**Flowchart:**

Ex. No.: 02

Date: 2.10.24

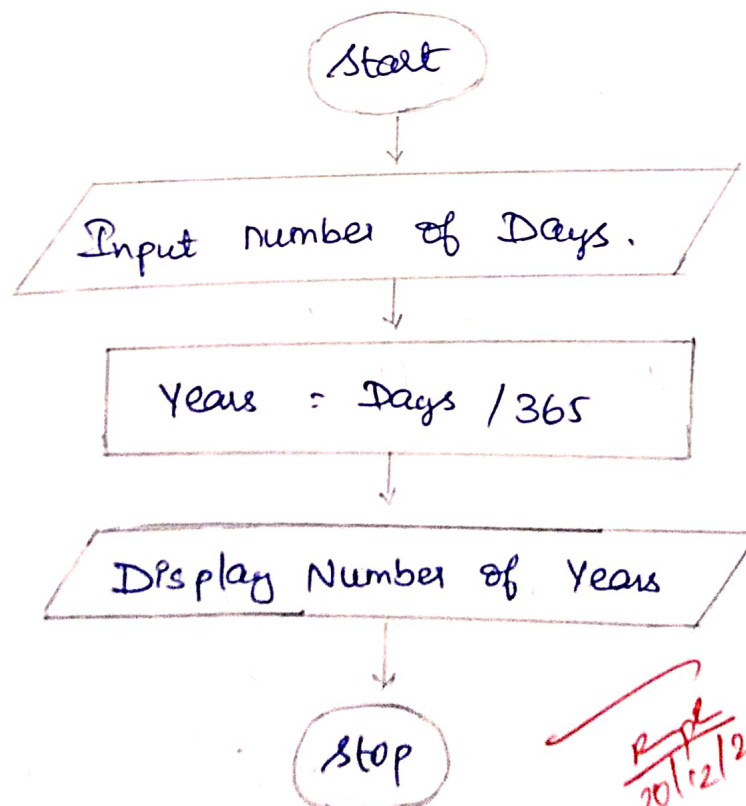
## Days to Year Conversion

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

## Algorithm:

Step 1  $\Rightarrow$  StartStep 2  $\Rightarrow$  Get the no. of DaysStep 3  $\Rightarrow$  Days to years = No. of days / 365Step 4  $\Rightarrow$  Display No. of yearsStep 5  $\Rightarrow$  Stop.

## Flowchart:



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Ex. No.: 03

Date: 3 - 10 - 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: Read the value of  $n$

STEP 3: set  $i=1$ , and  $count = 0$

STEP 4: If  $i \leq n$ , is true go to step 5, else go to step 8

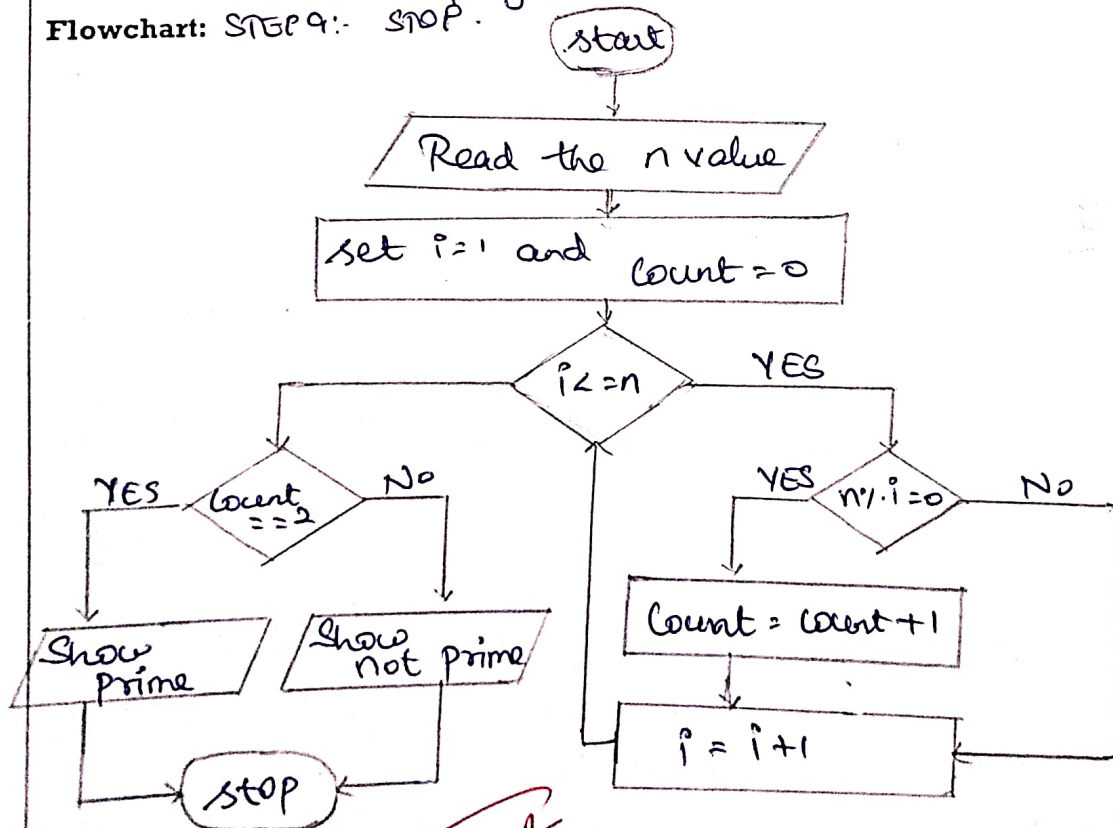
STEP 5: check the condition  $n \% i == 0$  if true then go to step 6, else go to step 7.

STEP 6: set  $count = count + 1$

STEP 7:  $i = i + 1$ , then go to step 4

STEP 8: check the count, if it's  $= 2$ , display prime else display not a prime.

Flowchart: STEP 9: STOP.



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Ex. No.: 09

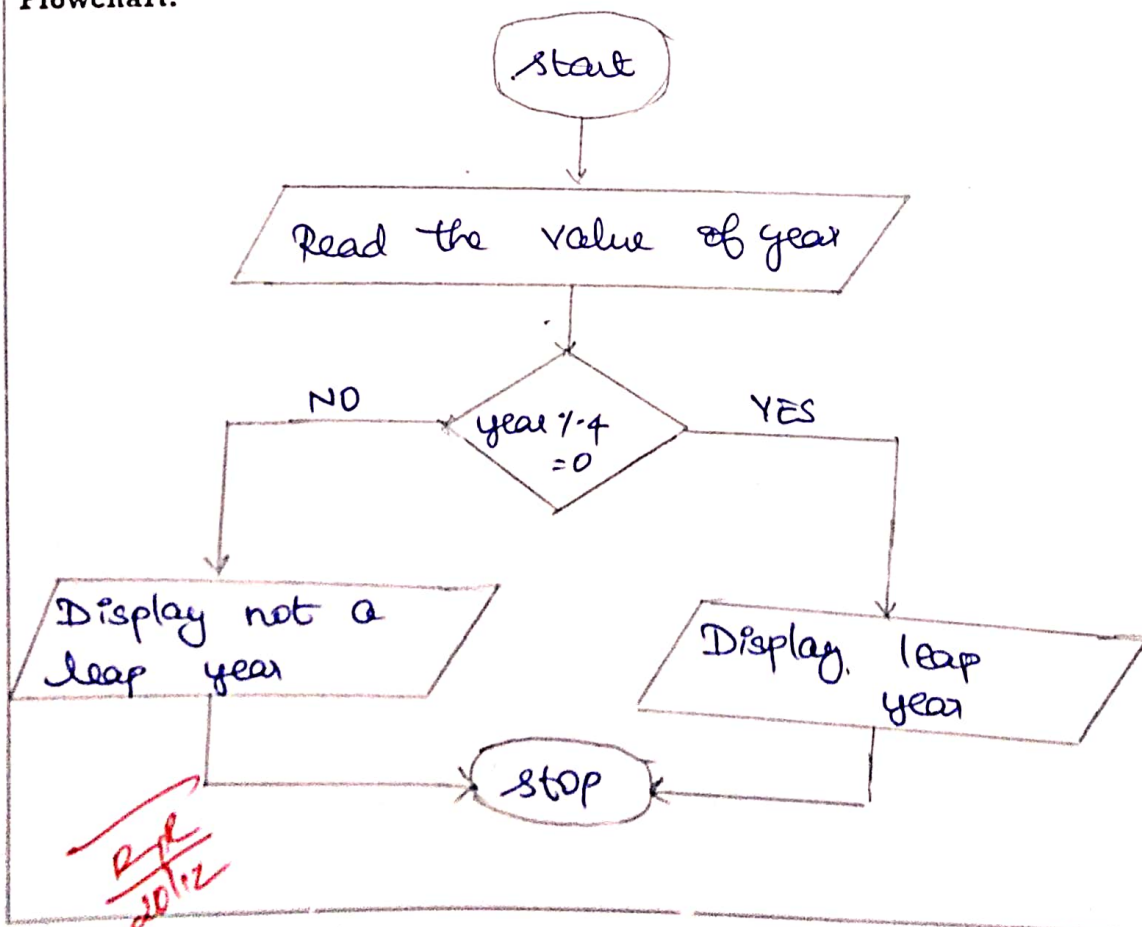
Date: 03.10.24

**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 : Read value of year  
STEP 3 : If (year % 4 = 0 AND year % 100 != 0)  
STEP 4 : Display leap year  
STEP 5 : Else Display not a leap year  
STEP 6 : STOP.

**Flowchart:**



Ex. No.: 05

Date: 03.10.24

### 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 input

STEP 3: Declare variable; Reverse, and temp num = num

STEP 4: Start while loop till num != 0 is false

$num = num / 10$

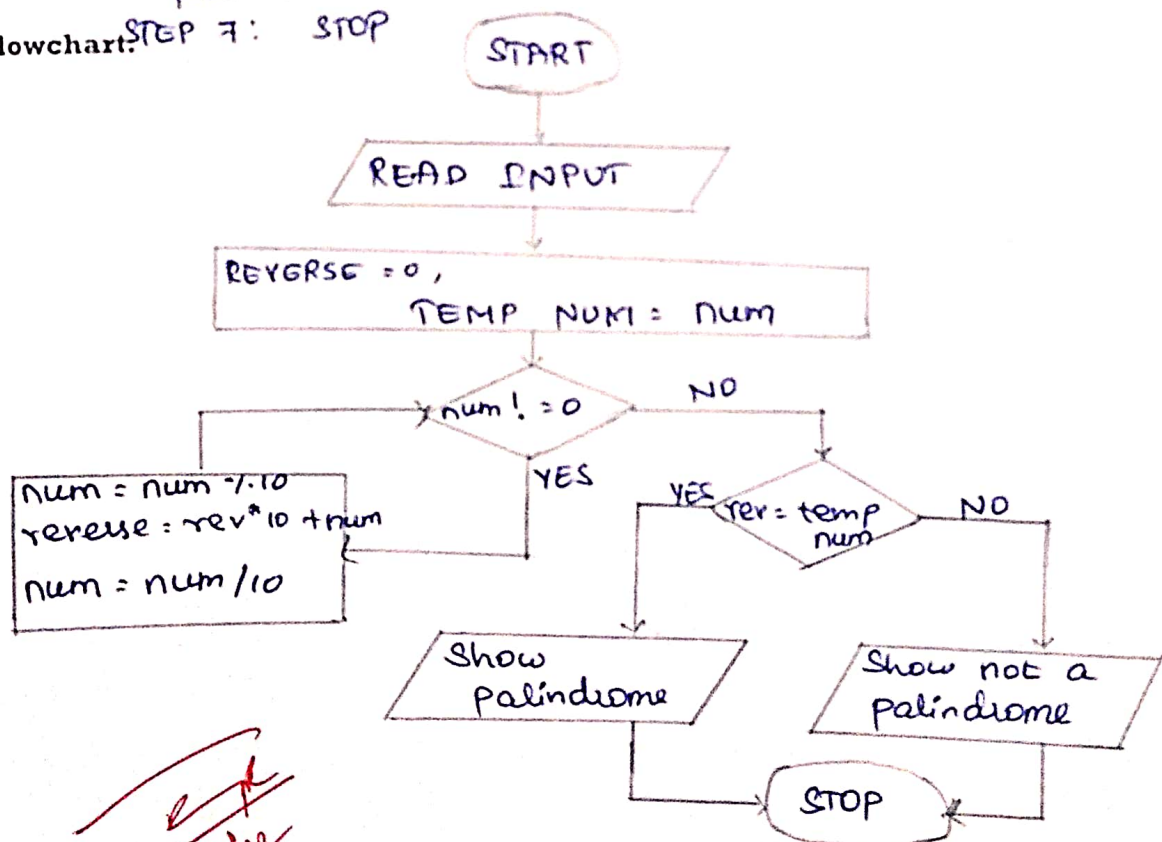
$reverse = (reverse * 10) + num$

$num = num / 10$

STEP 5: If reverse == temp num

STEP 6: If true, display palindrome, else not a palindrome

Flowchart: STEP 7: STOP



Ex. No.: 06

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## Sum of Digits

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

## Algorithm:

- STEP 1: Get the number  
 STEP 2: Declare Variable : Total, initialize total  
 STEP 3: Using while loop, If the number is greater than zero, Get the last digit by modulus operator and add the digit to total.  
 STEP 4: If the number is less than zero, use absolute value  
 STEP 5: Using '/' operator and dividing by 10 to get the first digits of the given number  
 Flowchart: STEP 6: Display total.

