

# **RAJALAKSHMI ENGINEERING COLLEGE**

**An Autonomous Institution, Affiliated to Anna University**

**Rajalakshmi Nagar, Thandalam – 602 105**

Programming Using C

WEEK 0

2024-2025

By

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**B.Tech-AIML**

**241501127**

Ex. No.: 01

Date: 24/10/2024

## Calculate Area and Perimeter

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

## Algorithm:

Step: 1: Start

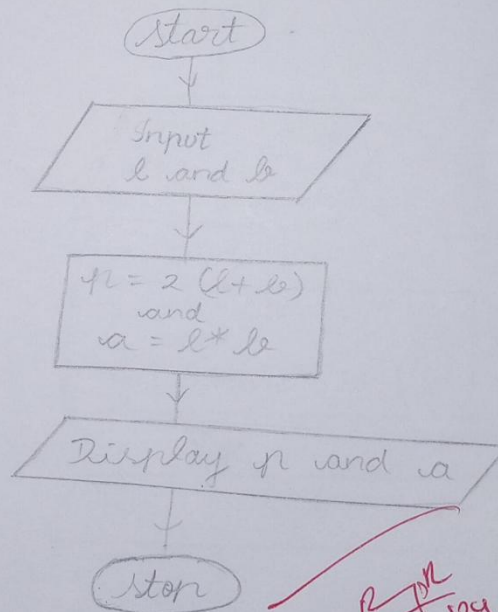
Step: 2: Input length in 'l' and breadth in 'b' as integer

Step: 3: Solve  $p = 2(l+b)$  and  $a = l * b$ 

Step: 4: Print perimeter p and area a

Step: 5: Stop

## Flowchart:



RPR  
24/10/24

Ex. No.: 011

Date: 24/10/2024

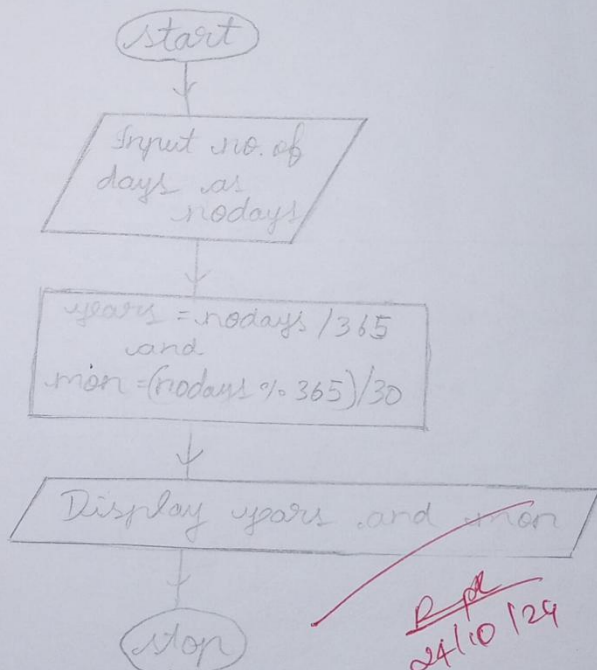
## Days to Year Conversion

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

## Algorithm:

- step: 1: Start  
step: 2: Input number of days in noday as integer  
step: 3: Solve  $\text{years} = \text{noday} / 365$  and  $\text{months} = (\text{noday} \% 365) / 30$   
step: 4: Print years and months  
step: 5: Stop

## Flowchart:





Ex. No.: 111

Date: 24/10/2024

**Prime Number**

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

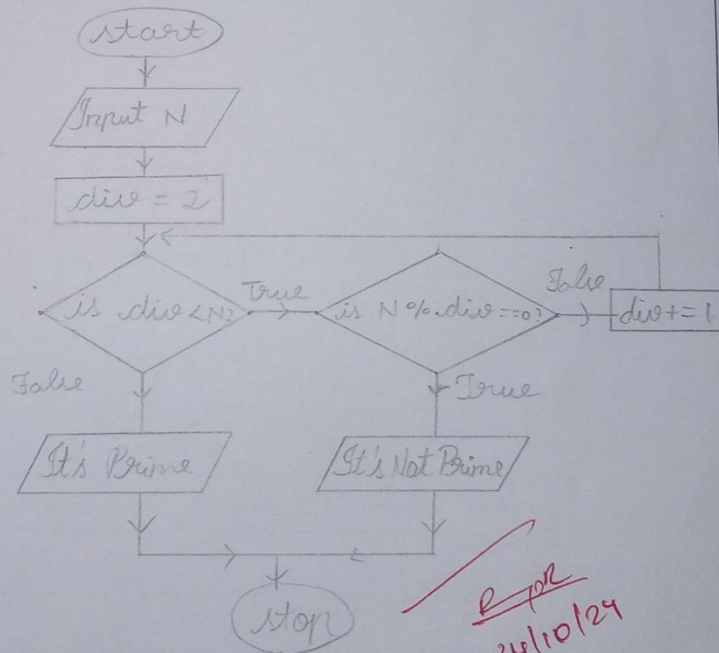
**Algorithm:**

step: 1: start

step: 2: Input  $n$ ,  $div = 2$ step: 3: check if  $div < n$ , else It's Primestep: 4: check if  $n \% div == 0$ , else increase  $div$  by 1

step: 5: Display It's Not Prime

step: 6: stop

**Flowchart:**

Ex. No.: IV

Date: 24/10/2024

**Leap Year**

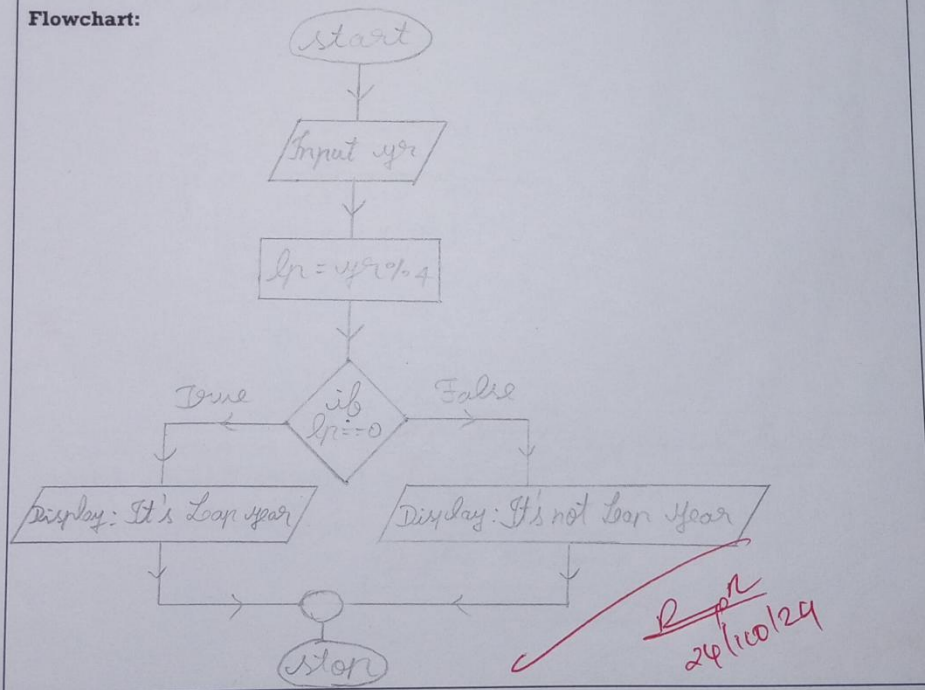
Write an Algorithm and draw a Flowchart to check whether the given year is Leap year or not.

**Algorithm:**

step: 1: start

step: 2: Input the year in  $yr$ step: 3: solve  $lr = yr \% 4$ step: 4: Display Leap year  $lr$ , if  $lr == 0$ ,  
else, not Leap year

step: 5: stop

**Flowchart:**



Ex. No.: 7

Date: 24/10/2024

**Palindrome Number**

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

**Algorithm:**

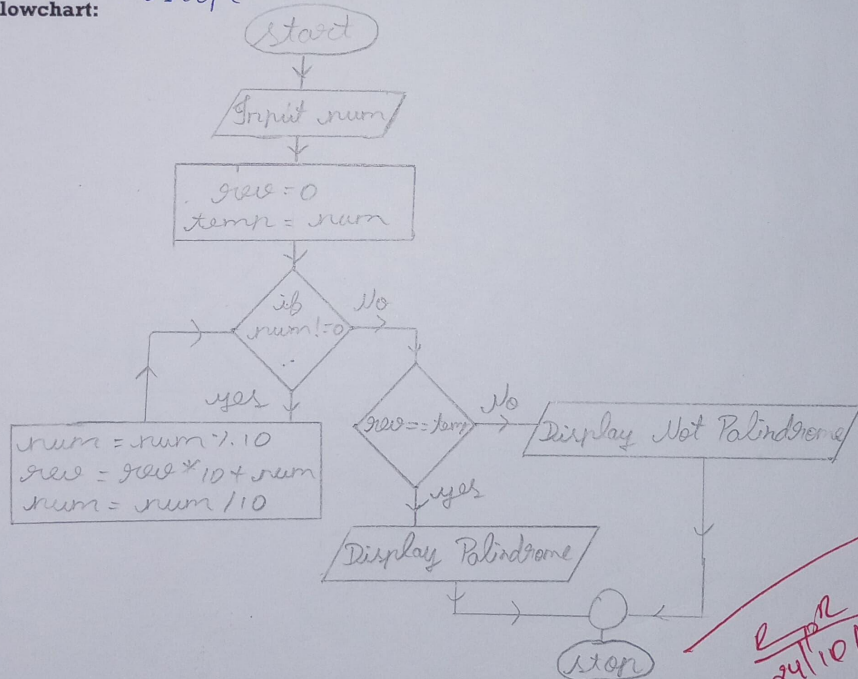
step: 1: start

step: 2: Input num as integer

step: 3: Declare rev=0 and temp=num

step: 4: when num!=0, else check rev==temp  
if not then display Not Palindromestep: 5: solve  $num = num \% 10$ ;  $rev = rev * 10 + num$ ;step: 6: check if  $rev == temp$  then display  
It's Palindrome

step: 7: stop

**Flowchart:**

Ex. No.: VIIDate: 24/10/2024**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  $n$ step: 3: Declare  $sum = 0$ step: 4: check if  $n > 0$ , else print  $sum$ step: 5: solve  $sum = sum + n \% 10$  and  $n = n / 10$   
then repeat step 4

step: 6: stop

**Flowchart:**