

Week 1-0:

Name: magesh V

Reg no: 240801187

Roll no: 240801187  
Ex. No.: 1  
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:  $a = l * l$
- step 4:  $p = 4 * l$
- step 5: print a, p
- step 6: stop

Flowchart:

```
graph TD; Start([start]) --> Read[/read l/]; Read --> A[a = l * l]; A --> P[p = 4 * l]; P --> Print[/print a, p/]; Print --> Stop([stop]);
```

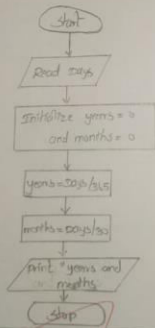
Department of Computer Science and Engineering, Rajalakshmi Engineering College

### 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
- Step 3: Calculate the no. of years  
 $\text{years} = \text{days} // 365$
- Step 4: Calculate the remaining days after calculating years  
 $\text{remaining days} = \text{days} \% 365$
- Step 5: Calculate the number of months  
 $\text{months} = \text{remaining days} // 30$
- Step 6: Calculate the remaining days after calculating months  
 $\text{days left} = \text{remaining days} \% 30$
- Step 7: Output the years, months & days left.
- Flowchart: stop.



Roll Number: 24C201187  
Ex. No.: 6

Date: 22/9/24

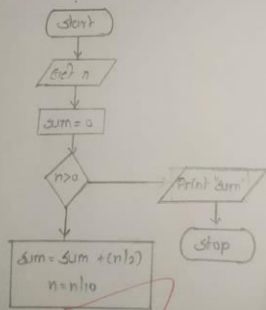
### Sum of Digits

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

Algorithm:

Step 1: Start  
Step 2: Get n, print the user  
Step 3: Initialize sum is equal to zero  
Step 4: Check  $n > 0$  true go to step 5 else go to step 6  
Step 5:  $sum = sum + (n \% 10)$   
Step 6:  $n = n / 10$ , go to step 4  
Step 7: Print "sum"  
Step 8: Stop

Flowchart:



Roll no: 26091187

NAME: V. NAGAB  
CSE2131 - Programming Using C

Ex. No.: 5

Date: 20/9/24

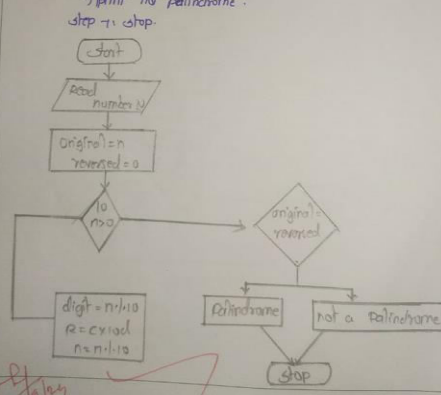
### Palindrome Number

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 and reversed = 0  
Step 4: while n > 0  
    { set digit = n mod 10  
    update reversed = reversed \* 10 + digit  
    update n = n / 10  
Step 5: if original == reversed  
    print "palindrome"  
Step 6: Else  
    print "not palindrome".

Flowchart:



Roll no: 24050187

Ex. No.: 11

Date: 28/7/24

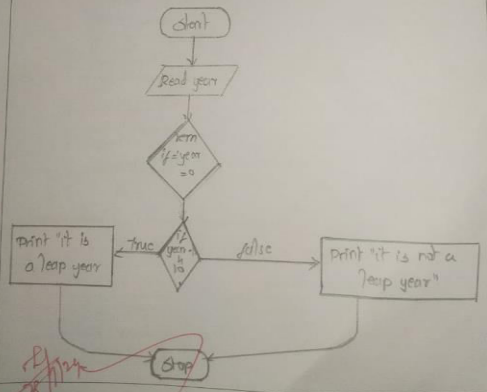
### Leap Year

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 year  
step 3:  $rem = year / 4$   
step 4: if  $[rem == 0]$  then  
    print "it is a leap year"  
    else  
    print "it is not a leap year"  
step 5: stop.

Flowchart:



Roll no: 04205187  
 Ex. No.: 3

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: Read n  
 step 3: set t = 1  
 step 4: if n = 1 then  
     Print "n is not a prime number"  
     Go to step 6.  
 step 5: For i = 2 to n - 1  
 step 6: If n % i == 0 then  
     set f = 1 & break else go to step 5  
 step 7: If f = 1 then  
     Print "n is not a prime number"

Flowchart:

