Week 0

Roll no: 240801172

Name: Lakshmi.G

Name : G. Lakshmi Roll No: 240801172

GE23131 - Programming Using C

Ex. No.: 1 Date: 26.09.2024

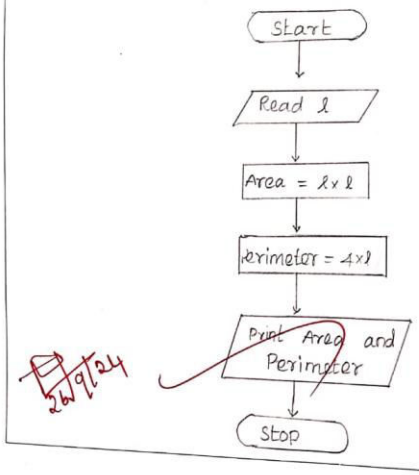
Calculate Area and Perimeter

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

Algorithm:

Step 1 : Start
Step 2 : Read length
Step 3 : Area = $l \times l$
Step 4 : Perimeter = $4 \times l$
Step 5 : Print Area and Perimeter
Step 6 : Stop

Flowchart:



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Ex. No.: 2 Date: 26.9.2024

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 No. of. days

Step 3: Years = days / 365

Step 4: Calculate the remaining days after calculating the years.
remaining_days = days % 365

Step 5: Calculate the number of months
months = remaining_days / 30

Flowchart:

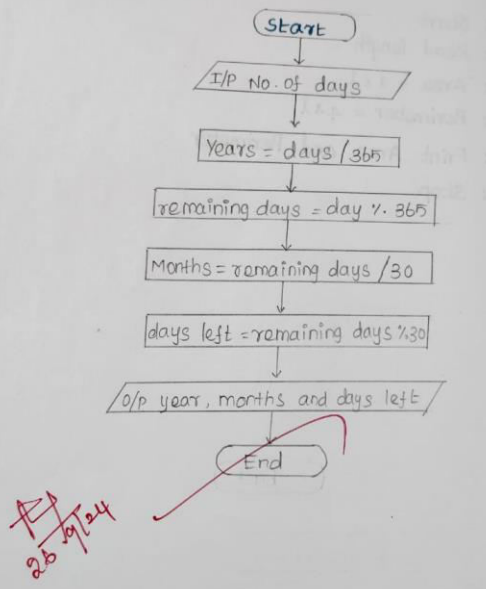
step 6: Calculate the remaining days after calculating months
days_left = remaining_days % 30

step 7: Output the year, months and days_left.

Step 8: End.

Name: G. Lakshmi

Roll NO: 240801172



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Name : G. Lakshmi Roll NO : 240801172

GE23131 - Programming Using C

Ex. No.: 3 Date: 26.09.2024

Prime Number

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

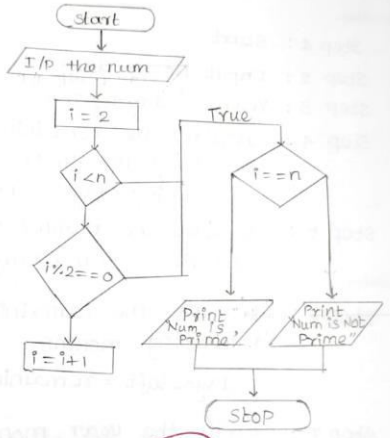
Algorithm:

Step 1 : Start
Step 2 : Input the number
Step 3 : If i=2 and i<n , go to step 7
Step 4 : i%2==0 , go to step 7
Step 5 : i==n
step 6 : i=i+1 , goto step 3
Step 7 : If the i==n
Print "Num is prime"
else
Print "Num is Not prime"
Step 8 : Stop.

Flowchart:

Name : G. Lakshmi

Roll No : 2408011172



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Name : G. Lakshmi Roll No : 2116231

GE23131 - Programming Using C

Ex. No.: 1 Date: 28.09.2024

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

Step 3 : If year % 4 == 0

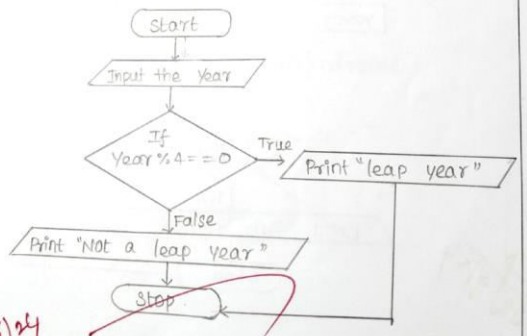
Print "leap year"

else

Print "Not a leap year"

Step 4 : stop

Flowchart:



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Name : G. Lakshmi Roll NO : 240801172

GE23131 - Programming Using C

Ex. No.: 5 Date: 28.09.2024

Palindrome Number

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

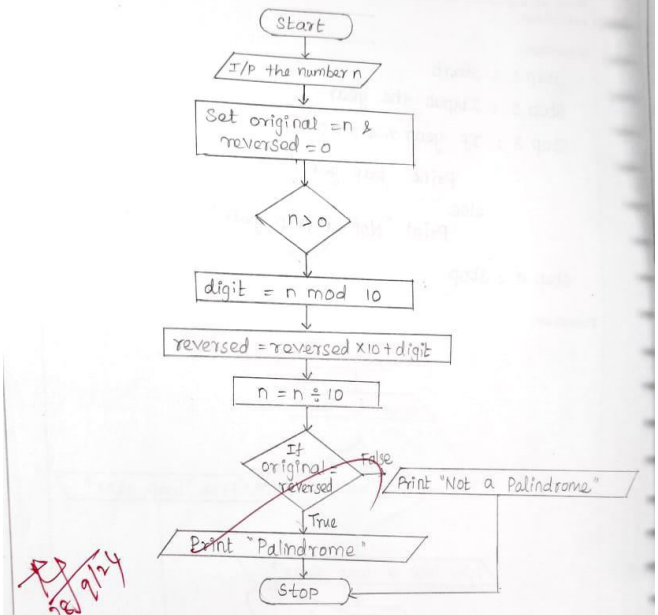
Algorithm:

Step 1 : Start
Step 2 : Input the number n
Step 3 : Set original = n & reversed = 0
Step 4 : While n > 0
    set digit = n mod 10
    update reversed = reversed x 10 + digit
    update n = n ÷ 10
Step 5 : If original = reversed
        Print "Palindrome"
    else
        Print "Not a Palindrome"
Step 6 : Stop.

Flowchart:

Name : G. Lakshmi

Roll NO : 240801172



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Name : G. Lakshmi Roll No : 240801172

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Ex. No.: 6 Date: 28.09.2024

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 the number (n)

Step 3 : Initialize sum = 0

Step 4 : Repeat the following steps while n is greater than 0 (n>0)

Step 5 : Extract the last digit of n :
digit = n % 10

Step 6 : Add the digits to sum :
sum = sum + digit

Flowchart:

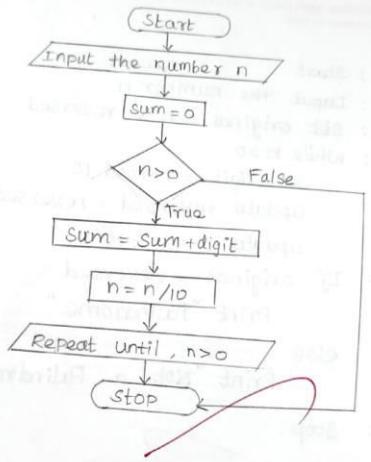
Step 7 : Remove the last digit from n :
n = n / 10

Step 8 : Output the sum

Step 9 : Stop.

Name : G. Lakshmi

Roll NO: 240801172



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