Week 0

Roll no : 240801174

Name : Lavanya S

ROLL NO: 2408011YH NAME : LAVANIYA S

GE23131 - Programming Using C

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

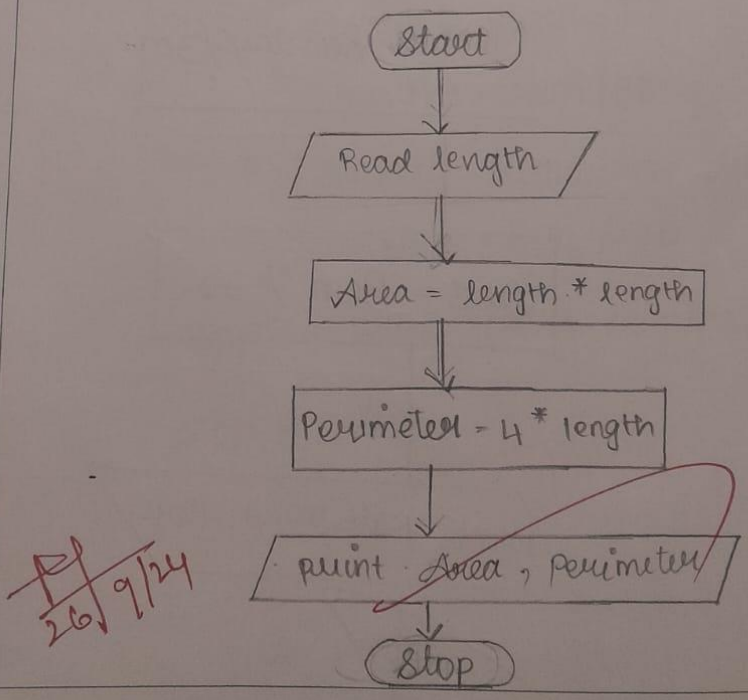
STEP 2 : Read length

STEP 3 : Calculate
Area = length * length

STEP 4 : Calculate
Perimeter = 4 * length

STEP 5 : Stop

Flowchart:



26/9/24

ROLL NO: 2408011YH NAME : LAVANYA S

GE23131 - Programming Using C

Ex. No.: 1 Date: 26/9/24

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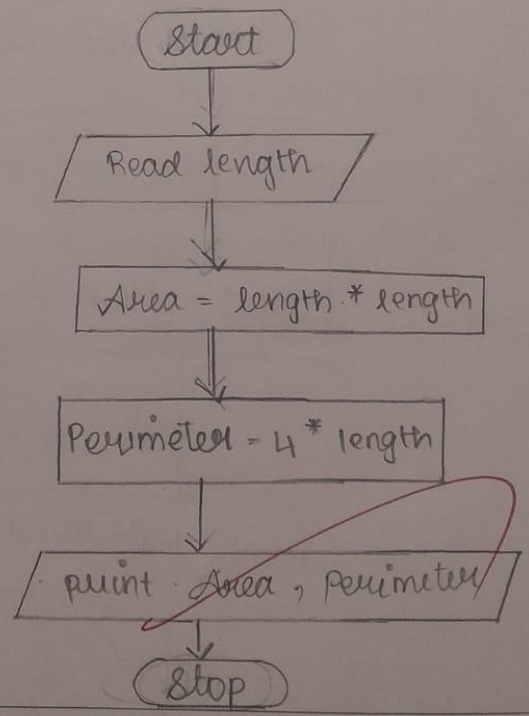
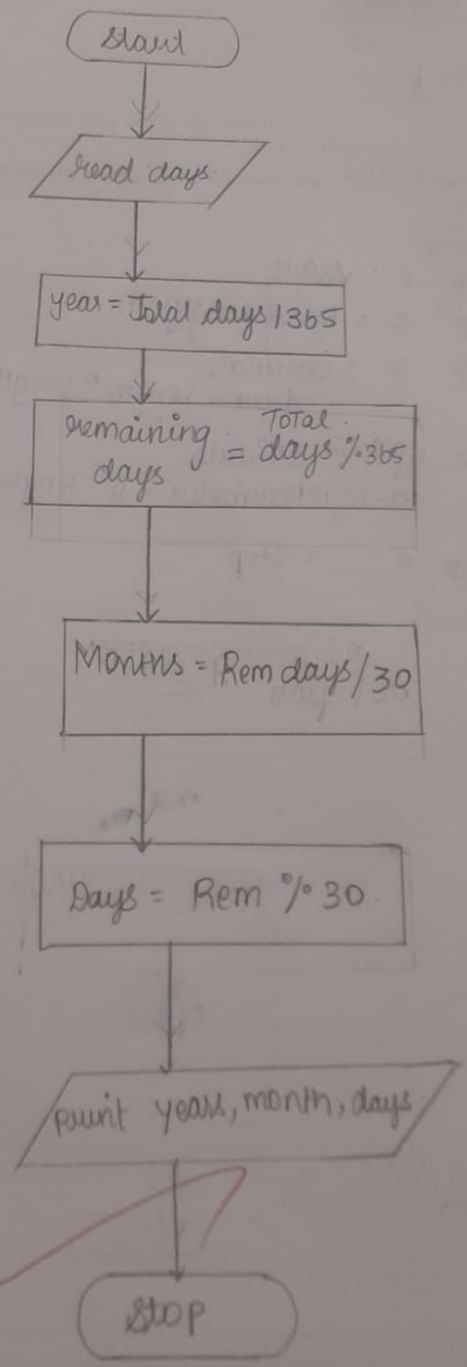


26/9/24

FLOW CHART



26/9/24

Roll No : 240801174 NAME : SAVANYA S

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Ex. No.: 3 Date: 26/9/24

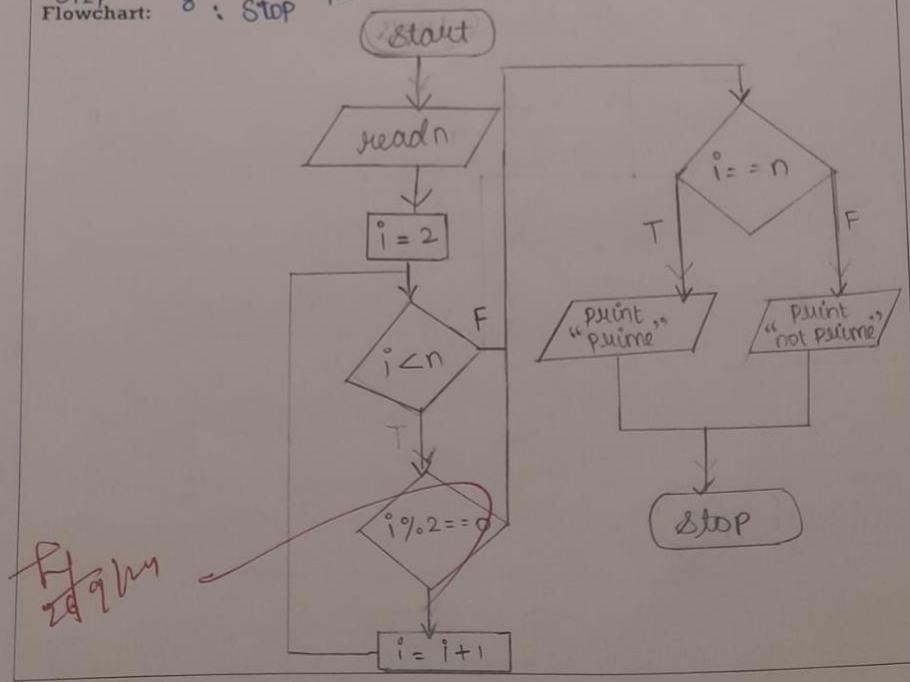
Prime Number

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 : If i=2 and i<n, go to step 7
STEP 4 : i%2==0, goto step 7
STEP 5 : i==n
STEP 6 : i= i+1, go to step 3
STEP 7 : if i==n, print "not prime
else print "prime"
STEP 8 : Stop

Flowchart:



Fri 26/9/24

Ex. No.: 4 Date: 28/9/24

Leap Year

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

Algorithm:

STEP 1 : Start

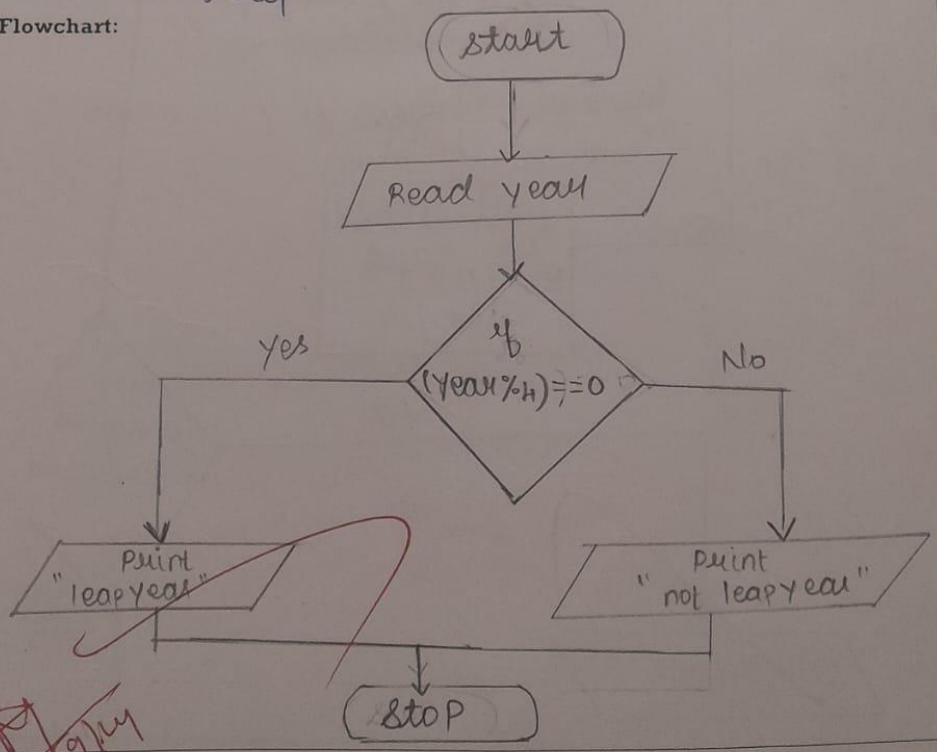
STEP 2 : Read year

STEP 3 : Rem = Year % 4

STEP 4 : If (Rem == 0) then
Print "leap year"
else
Print "not leap year"

STEP 5 : Stop

Flowchart:



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Ex. No.: 5 Date: 28/9/24

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 & reversed = 0

STEP 4 : while n>0
- Set digit = n mod =10
- update reversed = reversed x10 + digit
- update n = n ÷ 10

Flowchart:

STEP 5 : if original = reversed
print "palindrome"
else
print "not palindrome"

STEP 6 : Stop

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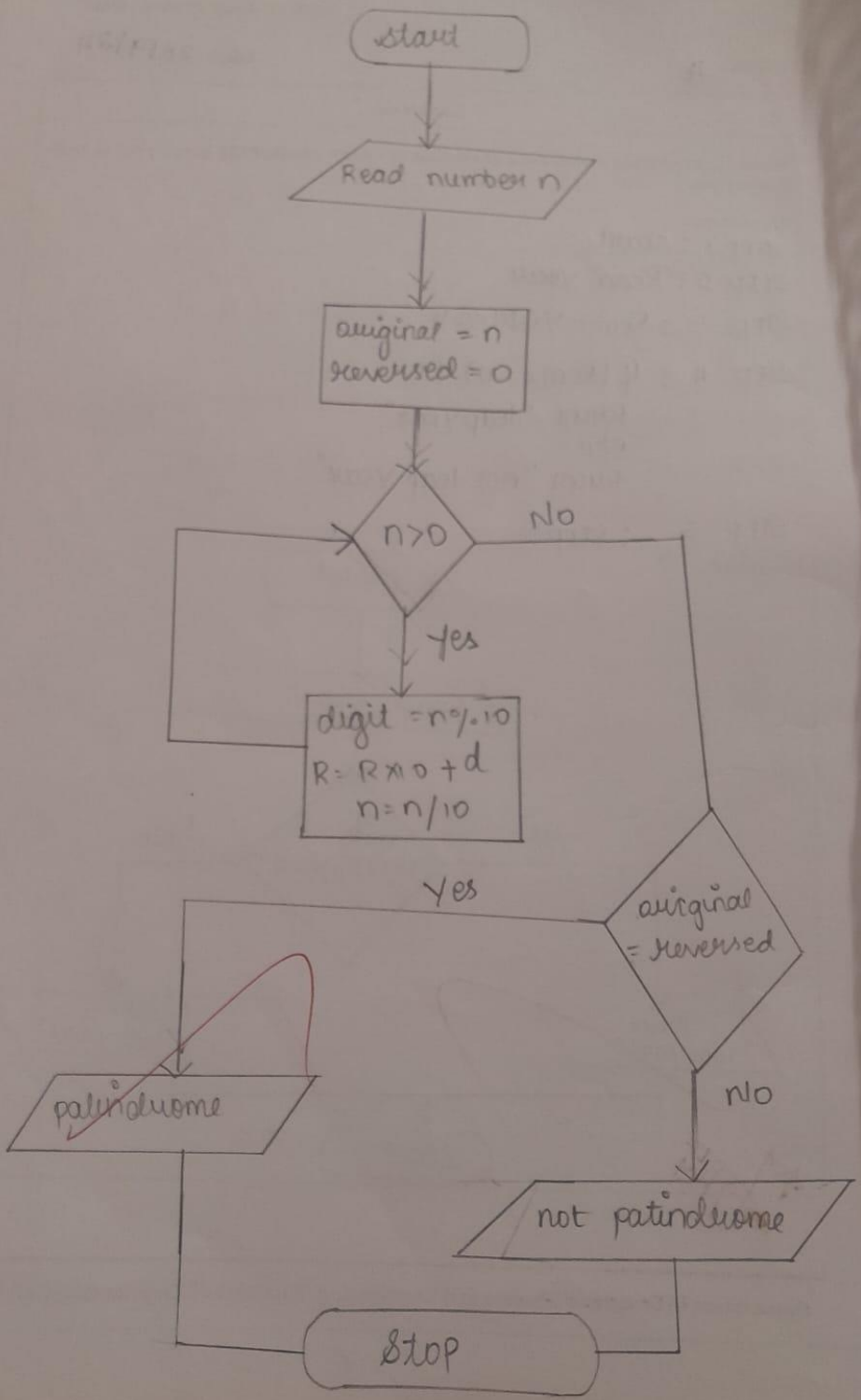
FLOW CHART


start
Read number n
original = n
reversed = 0
n>0
No
Yes
digit = n%10
R = R*10 + d
n = n/10
original = reversed
Yes
No
palindrome
not palindrome
Stop

ROLL NO : 240801174 NAME : JAYANYA.S

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Ex. No.: 6 Date: 28/9/24

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 : Input the number (n)

STEP 3 : Initialize
Sum = 0

STEP 4 : Repeat the following step while n is greater than 0

- Extract the last digit of n :
  digit = n % 10.
- Add the digits to Sum :
  Sum = Sum + digit
- Remove the last digit +
  n = n // 10.

Flowchart:

STEP 5 : Output the Sum

STEP 6 : Stop

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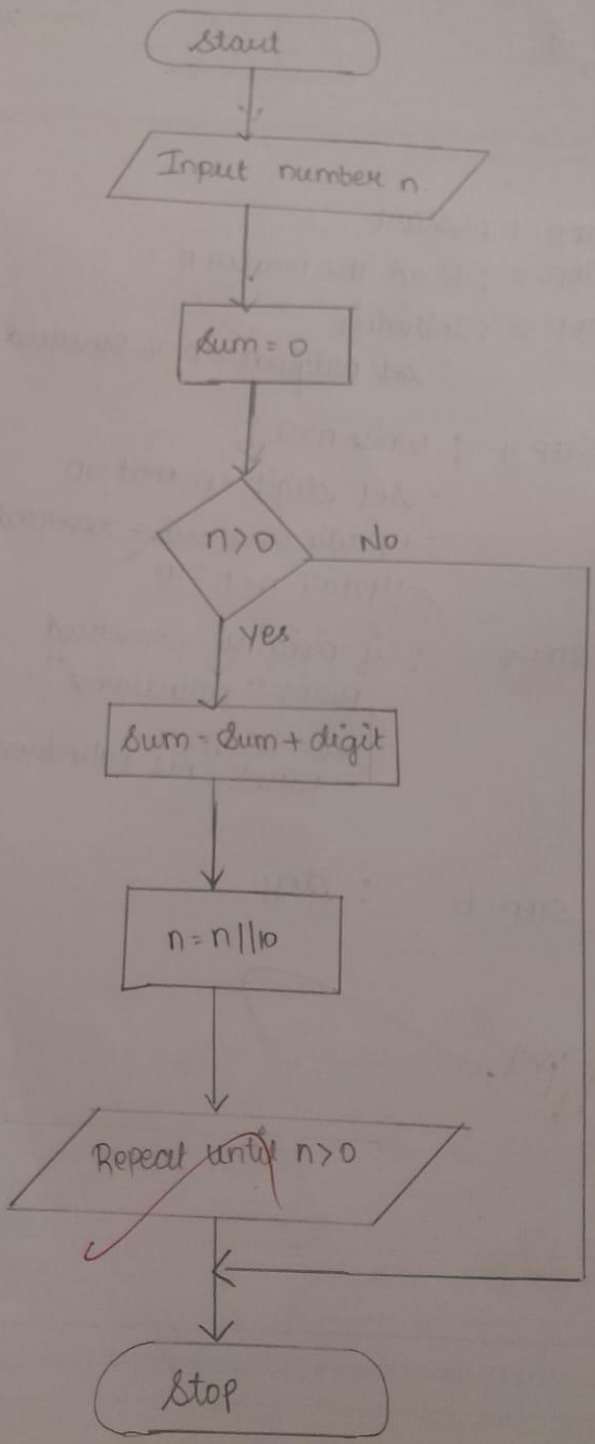
FLOW CHART


Start
Input number n
Sum = 0
n>0
No
Yes
Sum = Sum + digit
n = n/10
Repeat until n>0
Stop