Algorithm & Flowchart

Ex. No.: **Date:**

Calculate Area and Perimeter

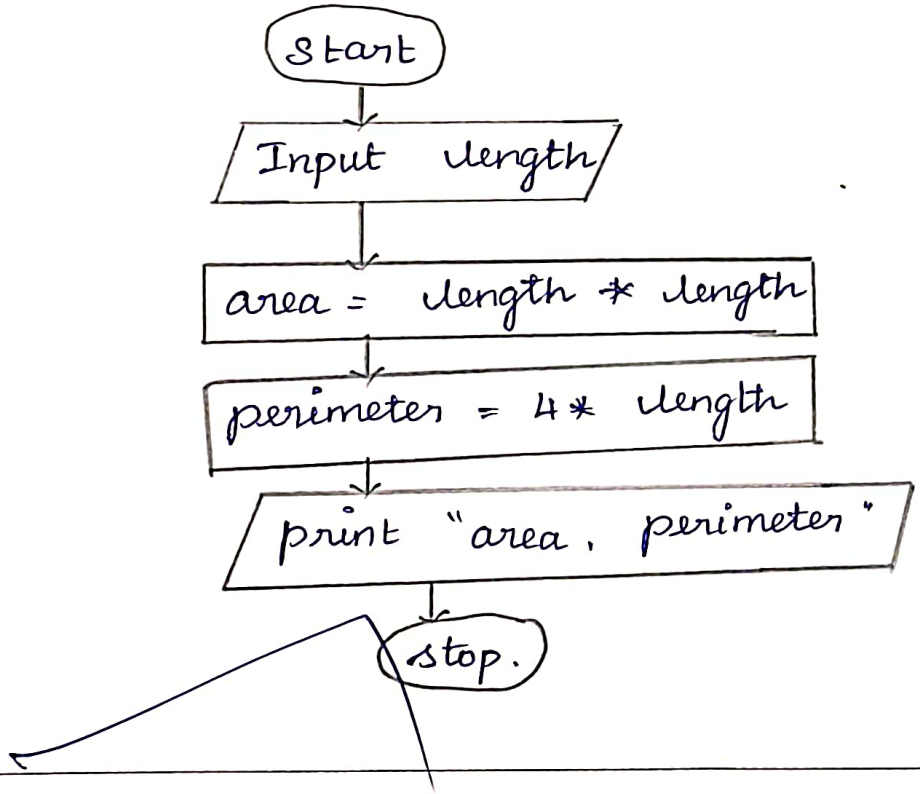
Write an Algorithm and draw a Flowchart to Calculate the area and perimeter of a square.

Name: Renuga Devi .S
Roll No: 2409010886

Algorithm:

step 1 : start
step 2 : Input length
step 3 : Calculate area = length * length
step 4 : Calculate perimeter = 4 * length
step 5 : print "area, perimeter"
step 6 : stop.

Flowchart:



Name : Renuga.D.T

Ex. No.: **Date:** Roll NO : 2116901086

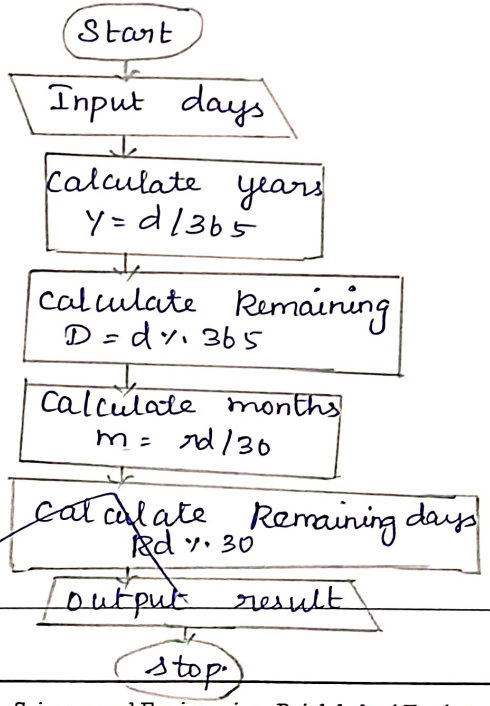
Days to Year Conversion

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
Step 3 : Compute years (years = td div 365)
Step 4 : Compute remaining days (REM = total days mod 365)
Step 5 : Compute remaining days (days REM mod 30)
step 6 : Display years, month
Step 7 : stop.

Flowchart:



Name: Renuga Devi

Ex. No.: Date: Roll No: 2116401086

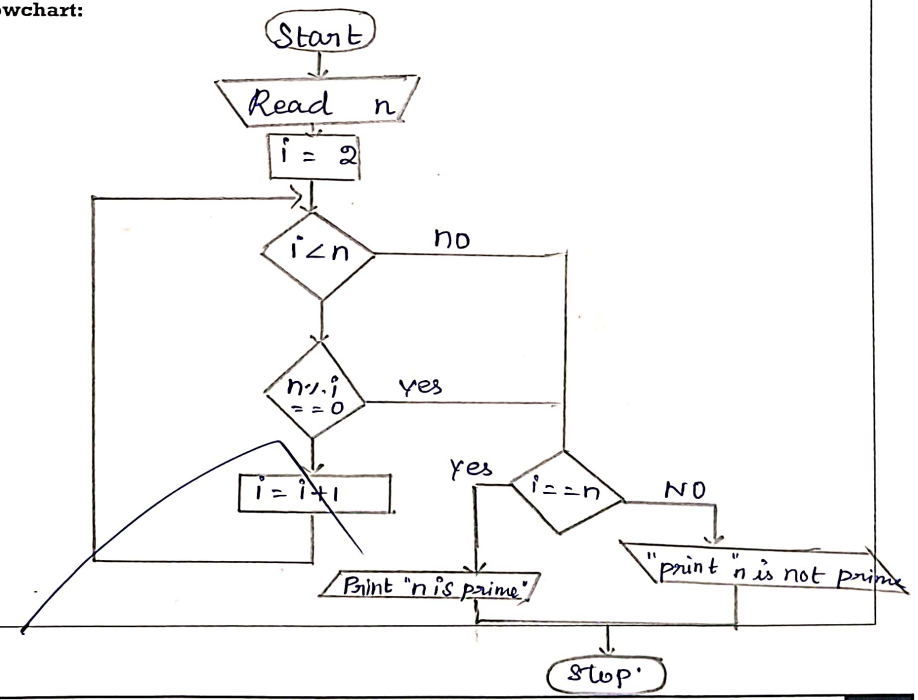
Prime Number

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

Algorithm:

Step 1: start
Step 2: Read num
step 3: set i = 2
Step 4: Repeat step 5 & 6 until i < num
Step 5: Check the conditions
Step 6: set i = i+1
Step 7: if i == num then print "num is prime" else "num is not prime"
Step 8: stop.

Flowchart:



Name: Renuga Devi
Ex. No.: Date: Roll No: 2410901086

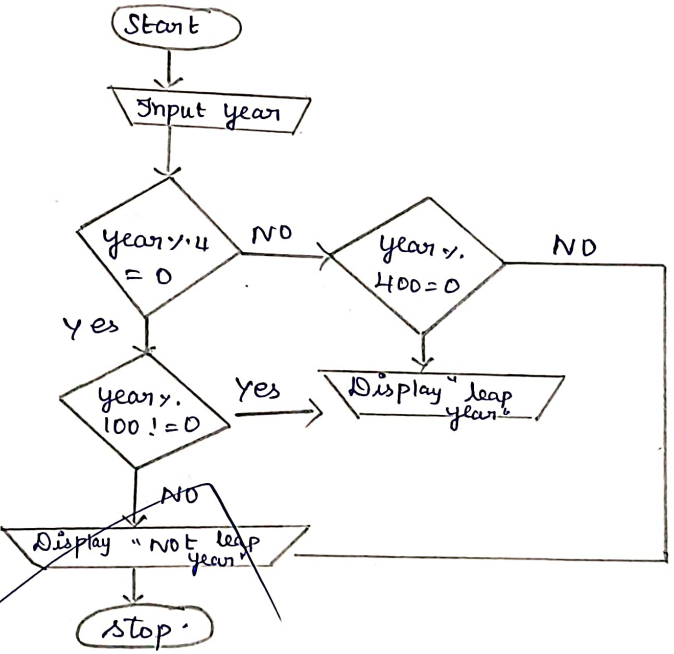
Leap Year

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 year
Step 3 : If year %. 4 == 0 go to step 4.
Step 4 : If year %. 100 == 0 go to step 5
Step 5 : If year %. 400 == 0
print "leap year"
else
print "Not leap year"
Step 6 : stop.

Flowchart:



Name : Renugadevi
Ex. No.: Date: Roll No : 240901086

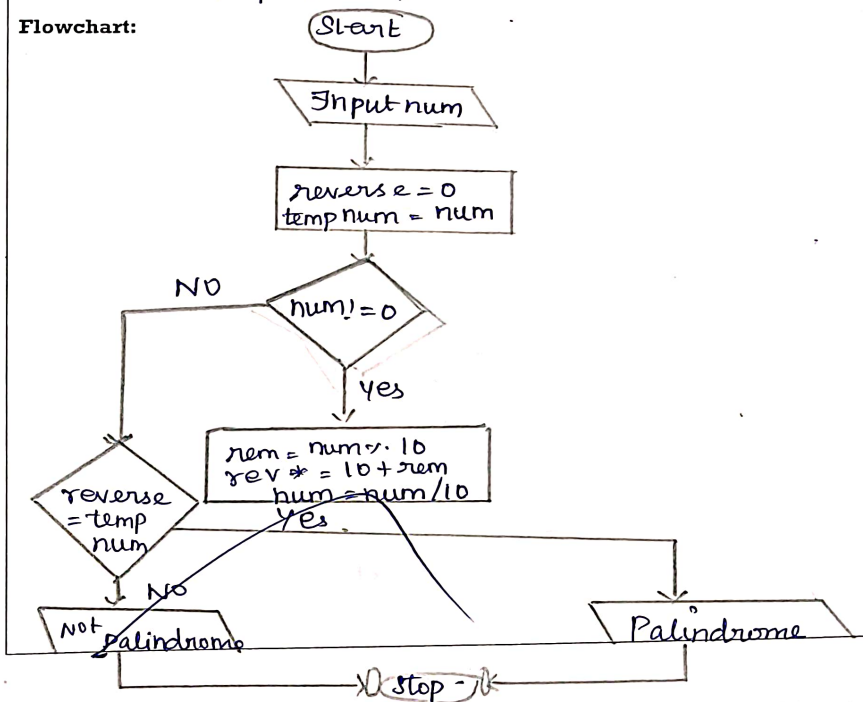
Palindrome Number

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 n
Step 3 : Declare temp = n, rev = 0
Step 4 : rem = n % 10
Step 5 : rev = rev * 10 + rem
Step 6 : n = n / 10
Step 7 : if (n > 0) then goto step 4 to 6 else go to step 8
Step 8 : if (temp == rev) then print "palindrome num" else "print not palindrome num".
Step 9 : Stop.

Flowchart:



Name : Renuga Devi

Ex. No.: Date: Ro/No : 2409010026

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: Read a-no. A
Step 3: Assign sum = 0
Step 4: R = A % 10
Step 5: Sum = Sum + R
Step 6: A = A / 10
Step 7: if (A > 0) go to step 4
Step 8: Display Sum
Step 9: stop.

Flowchart: