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

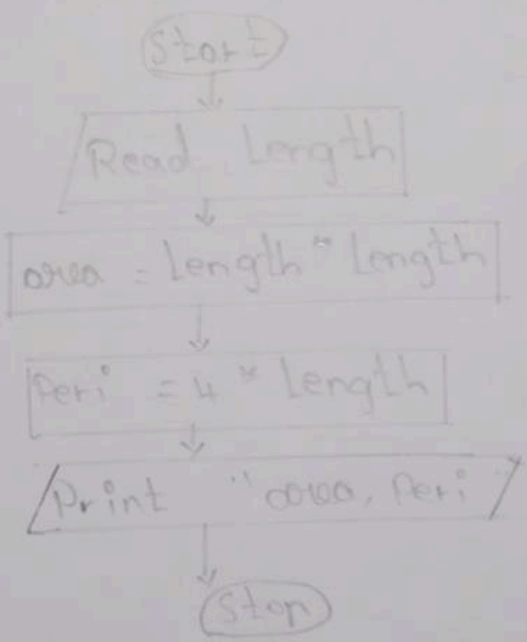
Calculate Area and Perimeter

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
Peri = 4 * Length
step 5 : Print "area, Peri"
step 6 : stop

Flowchart:



Ex. No.: 11 Date: 26/9/24

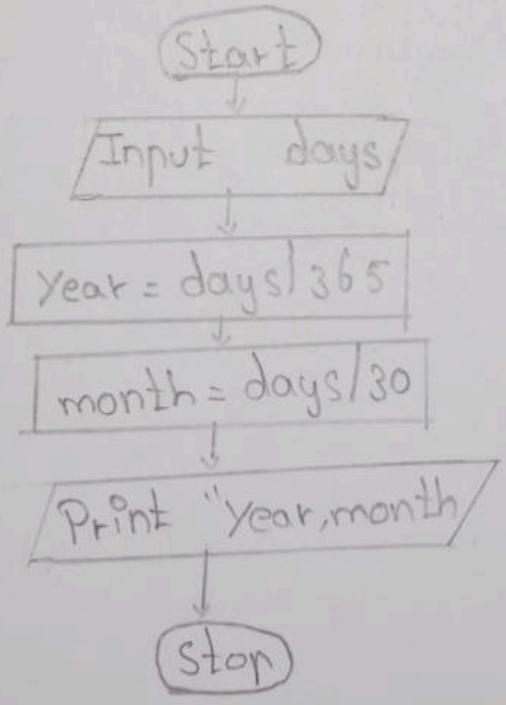
Days to Year Conversion

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

Algorithm:

Step 1 : Start
Step 2 : Get days
Step 3 : Calculate year = days/365
Step 4 : Calculate month = days/30
Step 5 : Print "year, month".
Step 6 : Stop

Flowchart:



Ex. No.: 111 Date: 3/10/24

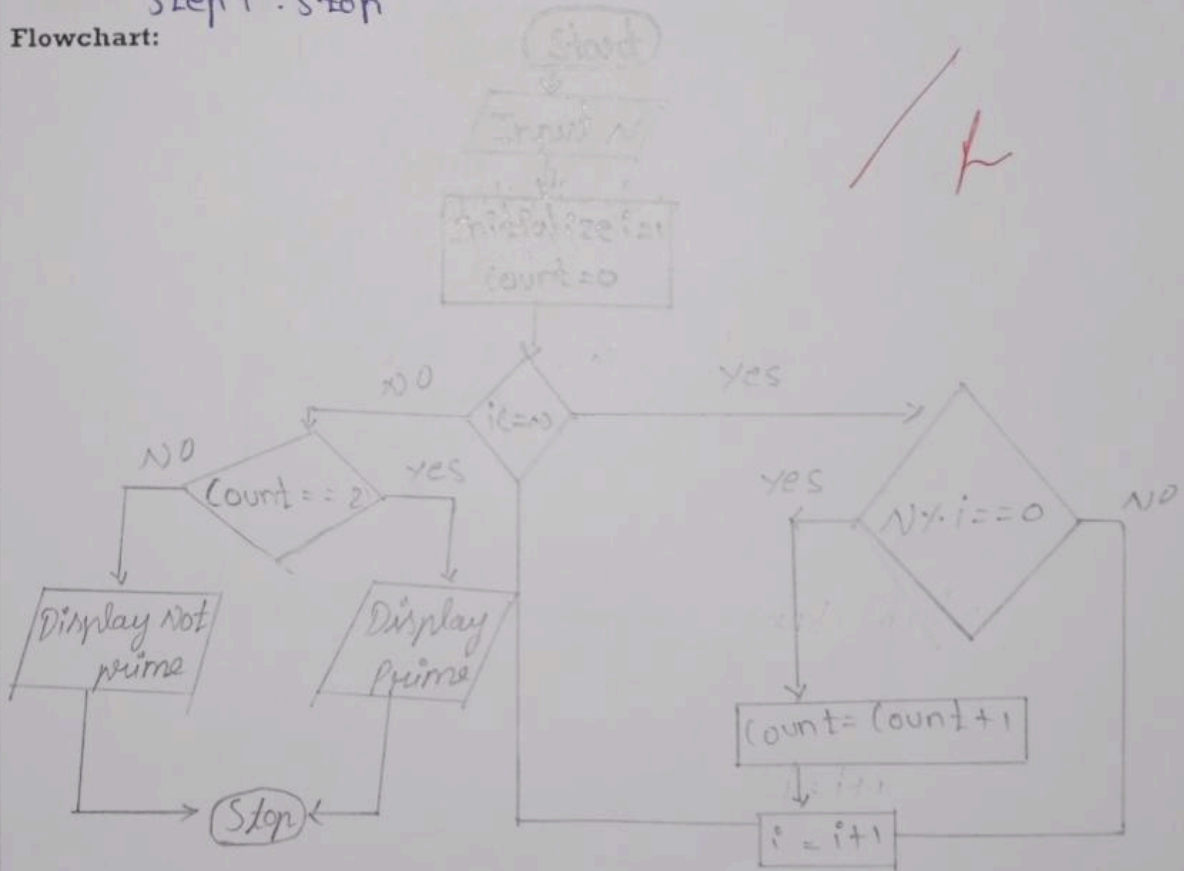
Prime Number

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

Algorithm:

Step1 : Start
Step 2 : Input any natural No. "N"
Step 3 : Initialize i=1, count=0.
Step 4 : If i<=N then go to step 5 else go to Step 8.
Step 5 : If N%i=0, then go to step 6 else go to Step 7.
Step 6 : count = count + 1
Step 7 : i = i+1 and go to step 4.
Step 8 : If count == 2, then display "Prime", else display "Not prime"
Step 9 : stop

Flowchart:



Ex. No.: 14 Date: 3/10/24

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 : Input year

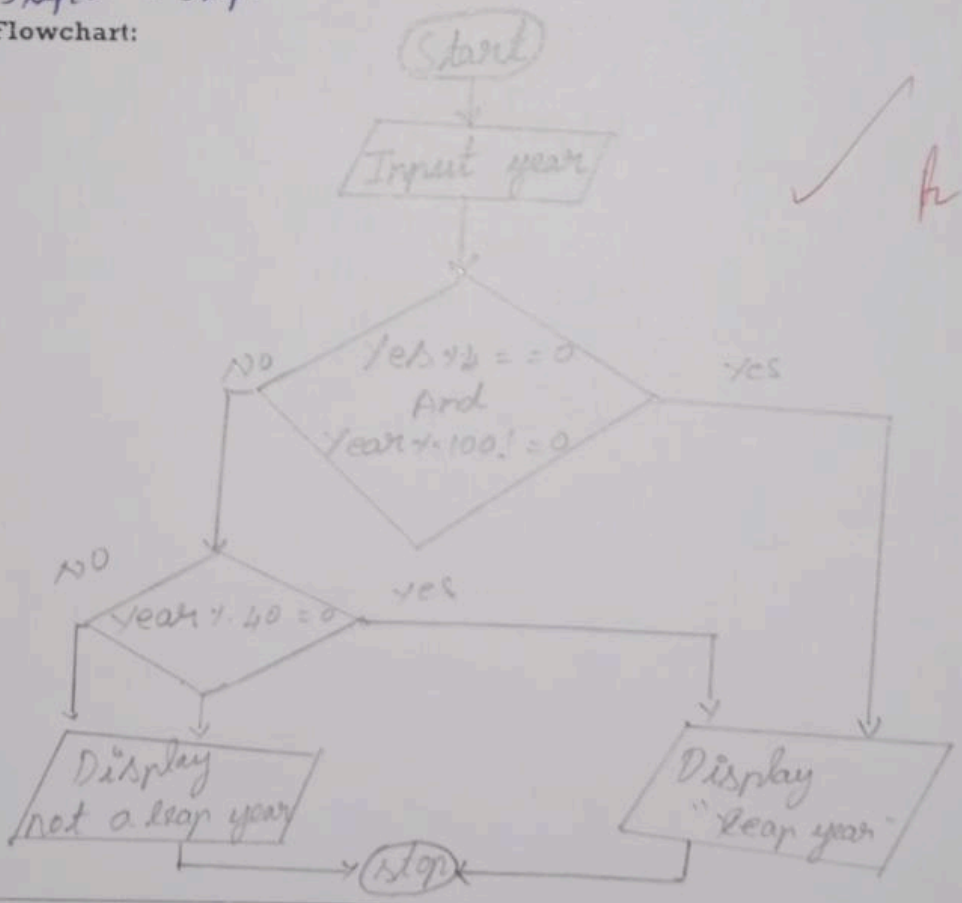
Step 3 : If (year % 4 == 0 AND year % 100 != 0) OR (year % 400 == 0) then go to step 4 else go to step 5.

Step 4 : Display "Leap year"

Step 5 : Display "Not a leap year"

Step 6 : Stop

Flowchart:



Ex. No.: V **Date:** 3/10/24

Palindrome Number

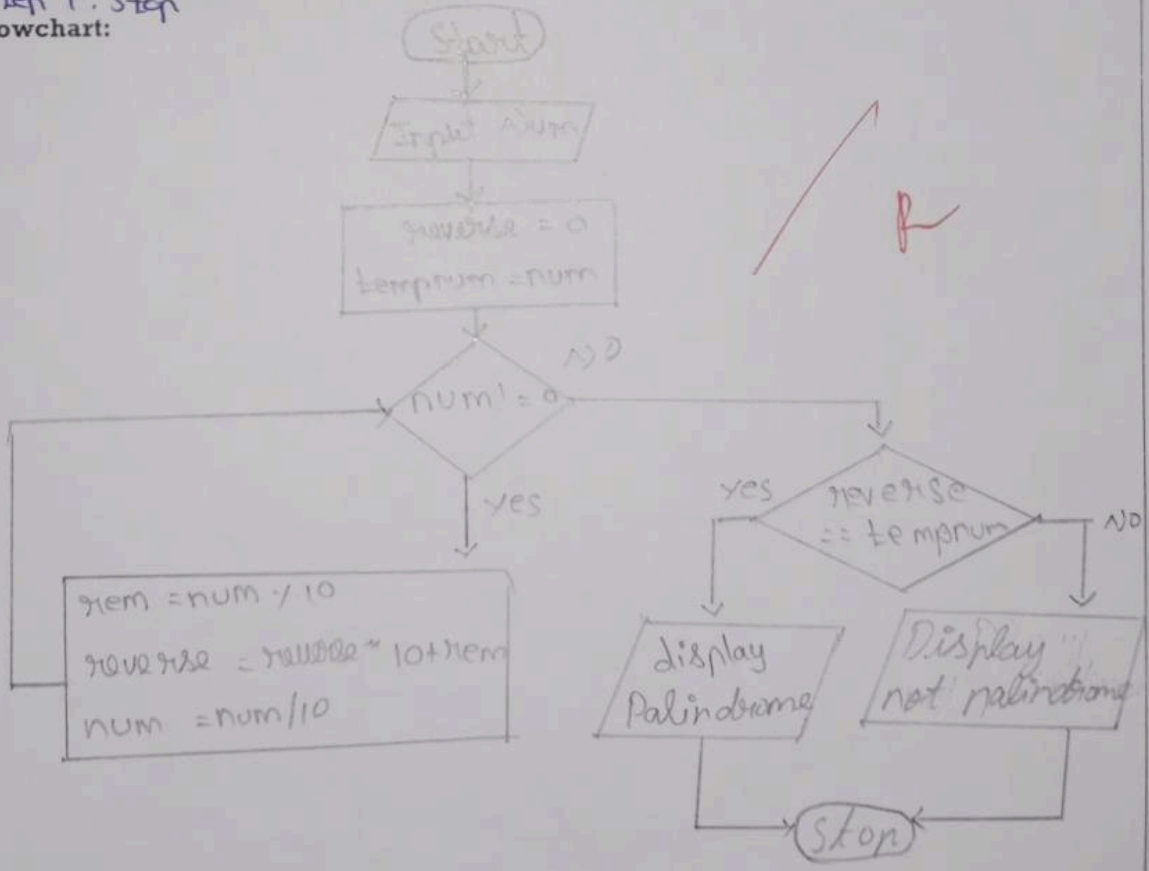
Write an Algorithm and draw a Flowchart to check whether the given number is palindrome number or not.

Algorithm:

Step1 : Start
Step2 : Input num
Step3 : Declare and initialize the variable reverse and assign input to a temp variable temp Num = num
Step4 : Start the while loop until num != 0 becomes false.
- rem = num % 10
- reverse = reverse * 10 + rem
- num = num / 10

Step5 : Check if reverse == temp Num
Step6 : If it is true then display "Palindrome" else display "Not a Palindrome".
Step7 : Stop

Flowchart:



Ex. No.: V1 Date: 3/10/24

Sum of Digits

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

Algorithm:

Step1 : Get the Number
Step2 : Construct a variable to hold the total and initialize it to
Step3 : Repeat Step2 & 3 until the result is not 0.
Step4 : Divide the number by 10 to obtain the right most digit using the remaining "percent" operator, then add to be total.
Step5 : Use the '/' operator to divide the integer by 10 to eliminate the last digit on the right
Step6 : Display the sum (total)
Step7 : Stop

Flowchart: