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

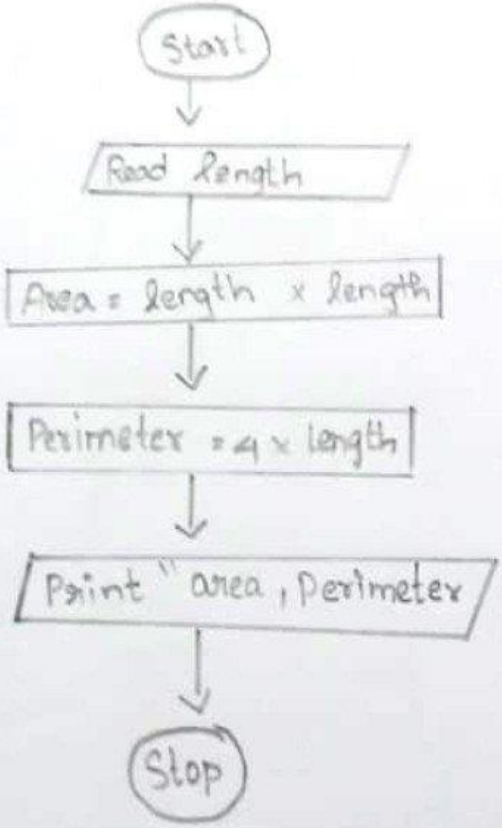
Step 3: Area = length x length

Step 4: Perimeter = 4 x length

Step 5: Print " area . perimeter"

Step 6: Stop.

Flowchart:



Ex. No.: 2 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 : Input Read days

Step 3 : Initialize years = 0 and month = 0

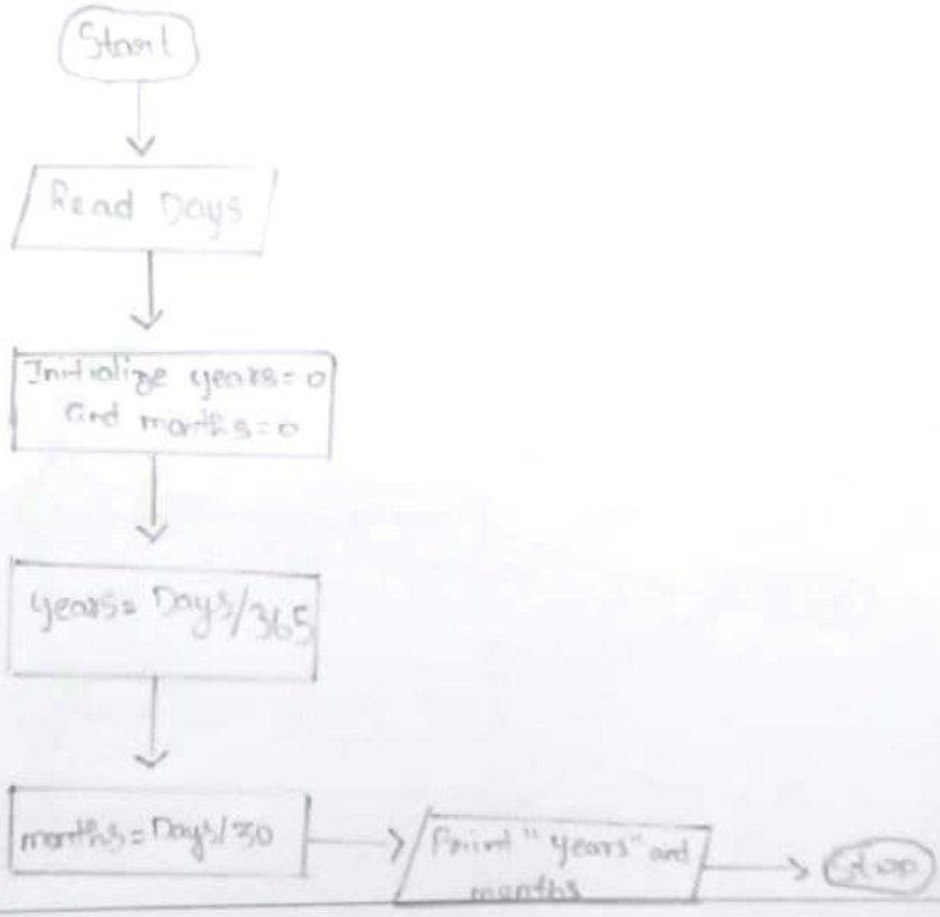
Step 4 : year = Days / 365

Step 5 : months = Days / 30

Step 6 : Print "years" and "months"

Step 7 : Stop.

Flowchart:



Ex. No.: 3

Date: 26/9/24

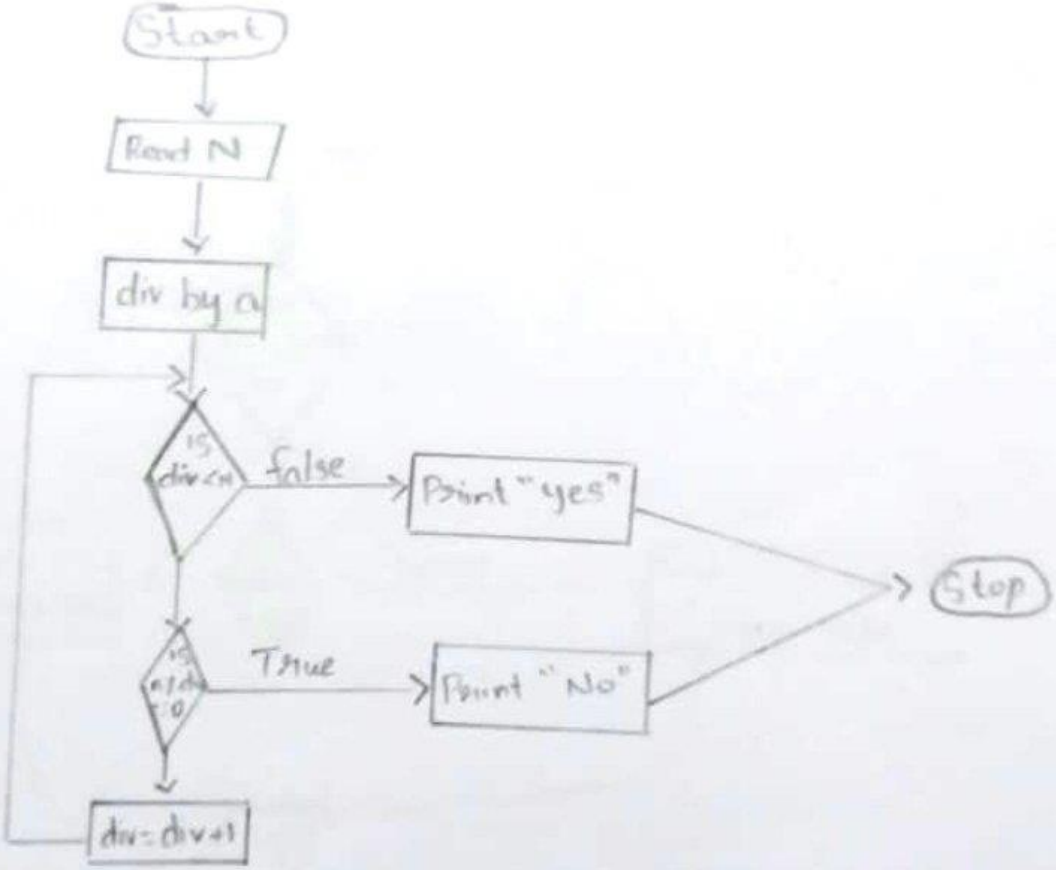
Prime Number

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 i=1
Step 4: If n==1 then
Print "n is not a Prime Number"
Go to Step 8
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:



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

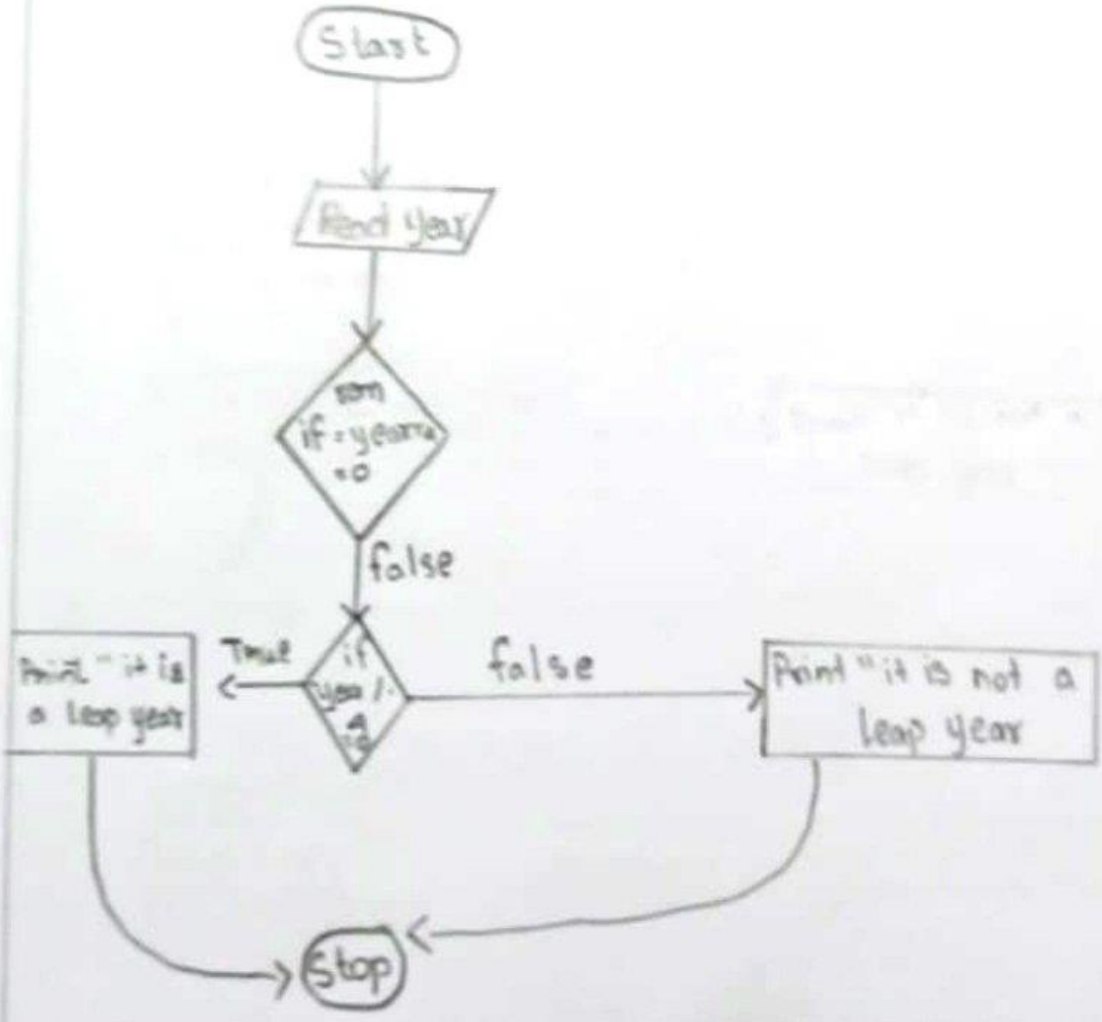
Print " it is a leap year"

else

Print " it is not a leap year"

Step 5 : Stop.

Flowchart:



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

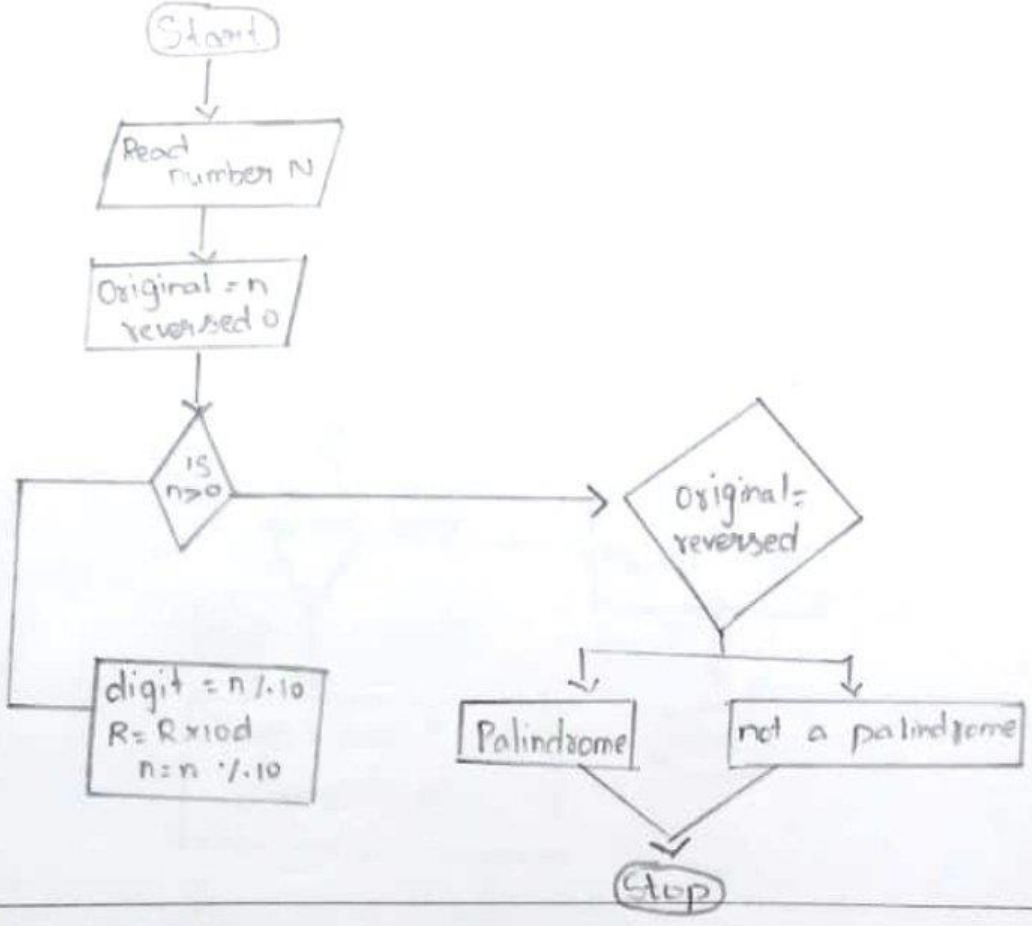
Step 4: while n > 0
- ·) Set digit = n mod 10
- •) update reversed = reversed × 10 + digit
- ·) update n = n / 10

Step 5: if original = reversed
- ·) Print "Palindrome"

Step 6: Else:
- ·) Print "not Palindrome".

Flowchart:

Step 7: Stop.



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, from 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: