Calculate Area and Perimeter

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

Algorithm:

Step 01 : start

Step 02 : Read value of length

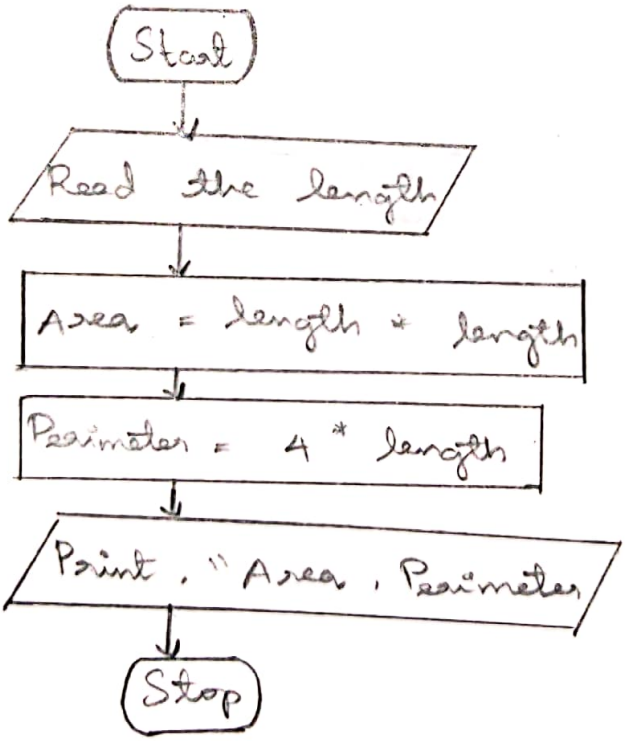
Step 03 : Calculate Area = length * length

Step 04 : Calculate Perimeter = 4 * length

Step 05 : Print, " Area, Perimeter ".

Step 06 : Stop

Flowchart:



RPR

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]. INPUT Total days

Step 3 : [Compute years]. YEARS = total days div 365.

Step 4 : [Compute remaining DAYS]. REM = total days mod 365

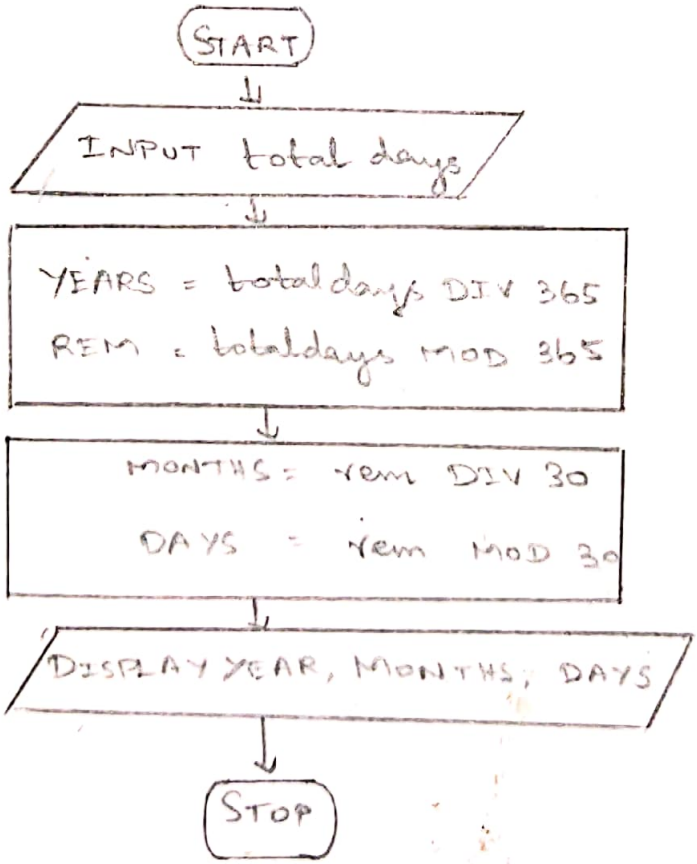
Step 5 : [Compute MONTHS]. MONTHS = REM div 30

Step 6 : [Compute remaining DAYS]. DAYS = REM mod 30

Step 7 : DISPLAY YEARS, MONTHS, DAYS.

Step 8 : STOP.

Flowchart:



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 f = 1

Step 4 : if n == 1 then print "n is not prime numbers" go to step 8

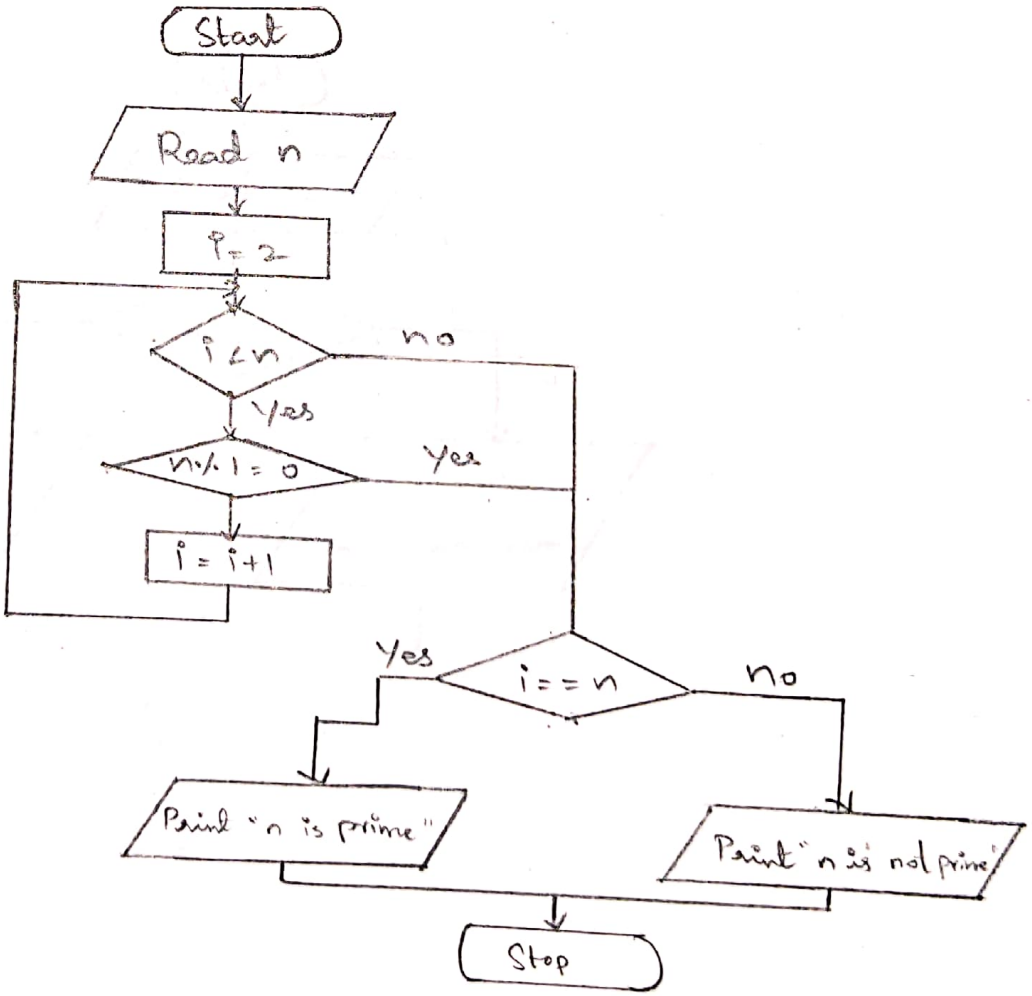
Step 5 : For i = 2 to n-1

Step 6 : If n%i == 0 then set f = 1 and break else goto step 5

Step 7 : if f == 1 then print "n is not prime number" else print "n is prime numbers".

Step 8 : Stop

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

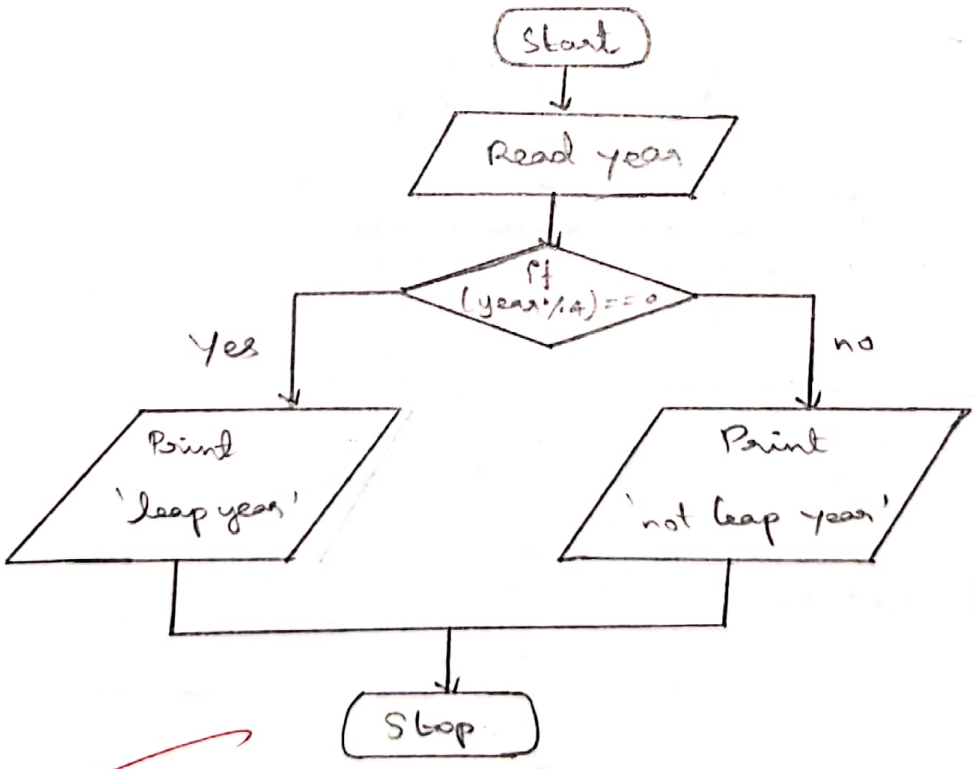
Step 2 : Read year

Step 3 : rem = year % 4

Step 4 : if (rem == 0) then print 'leap year' else print 'not leap year'.

Step 6 : Stop.

Flowchart:



BPR

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 value for number & store in a temporary variable (num)

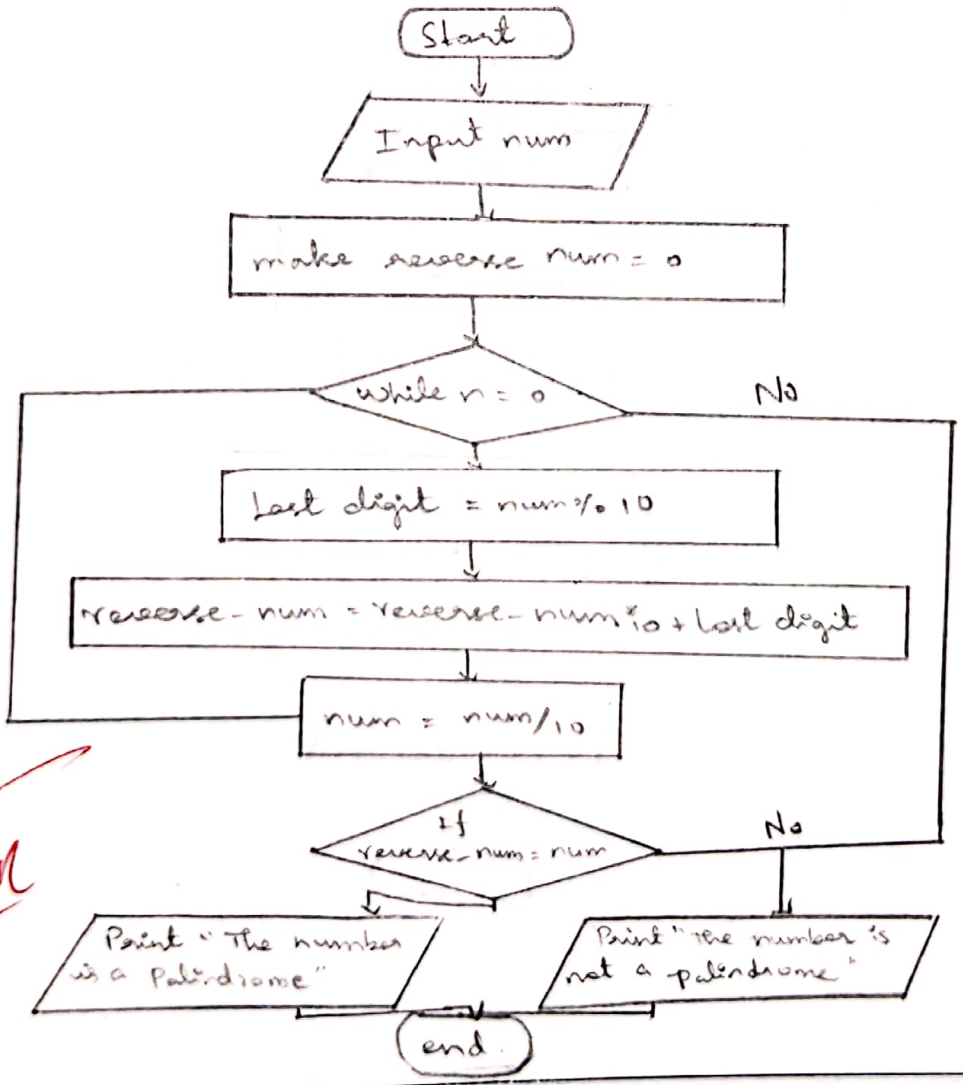
Step 3 : Make variable reverse_num

Step 4 : While num > 0
last_digit = num % 10
reverse_num = reverse_num * 10 + last_digit
num = num / 10

Step 5 : If reverse_num = num then print "the number is a palindrome" else print "the number is not a palindrome".

Step 6 : End.

Flowchart:



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 n

Step 3 : Initialise Sum = 0

Step 4 : remainder = n%10

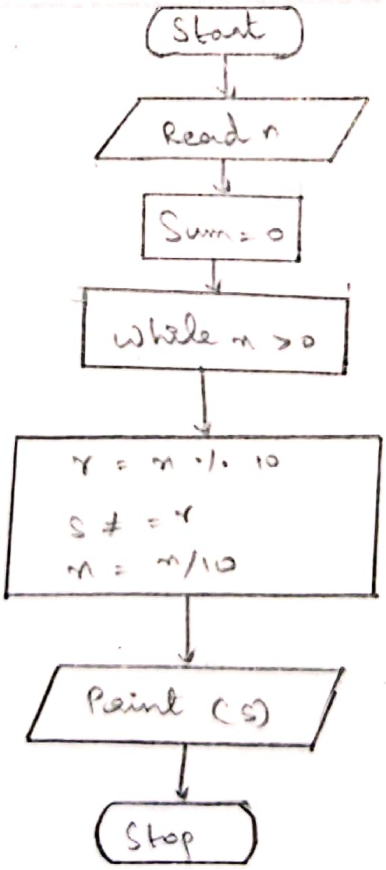
Sum = Sum + remainder ⇒ (n = n/10)

Step 5 : If (n>0), go to step 4 else go to step 6.

Step 6 : Print Sum

Step 7 : Stop.

Flowchart:



RJM