

Algorithm & Flowchart

Ex. No.:

Date:

Calculate Area and Perimeter

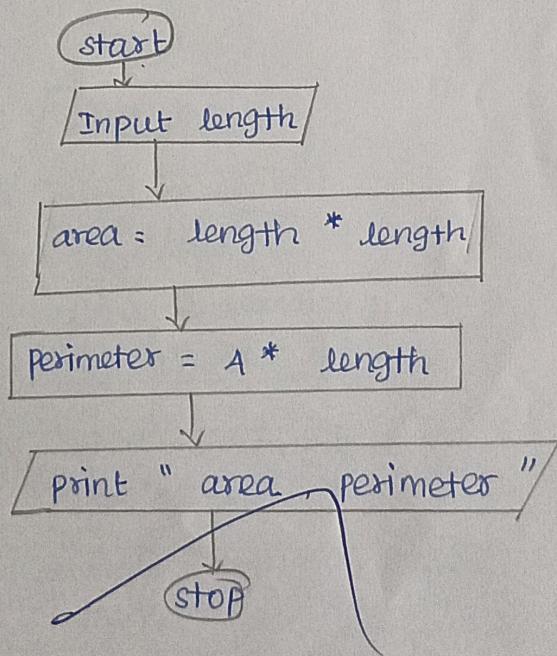
Write an Algorithm and draw a Flowchart to Calculate the area and perimeter of a square.

Name : P. Ranjani

Reg NO : 240901085

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:

Ex. No.:

Date:

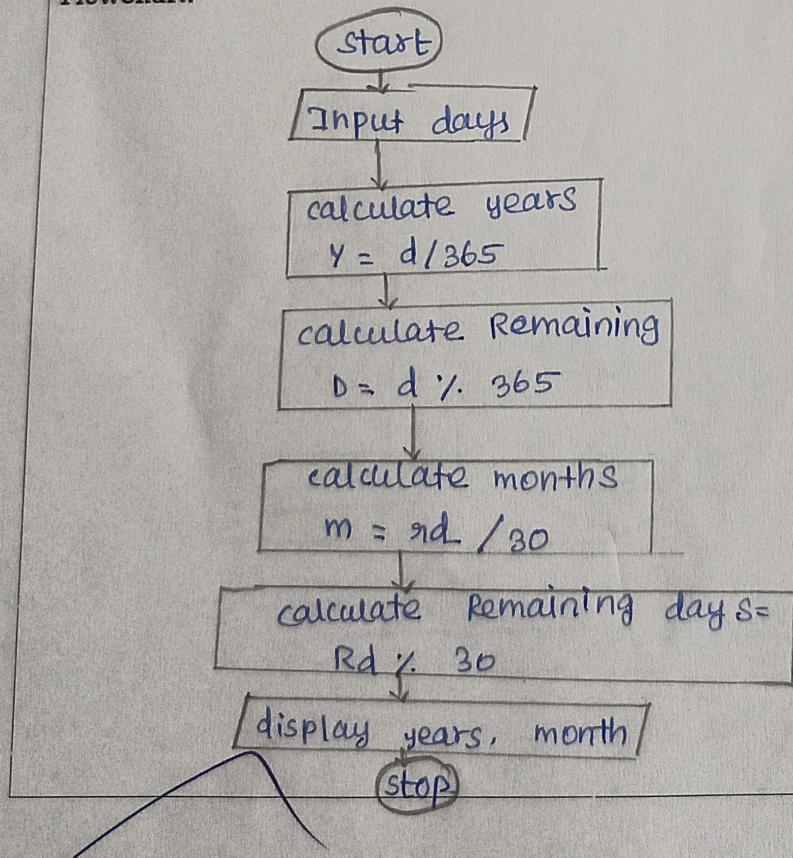
Days to Year Conversion

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

Name : P. Ranjani
Reg No : 240901085

Algorithm:

- Step 1 : start
- Step 2 : Input total number of days
- Step 3 : compute years (years = total days div 365)
- Step 4 : compute remainder (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 year, months
- Step 8 : stop.

Flowchart:

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Prime Number

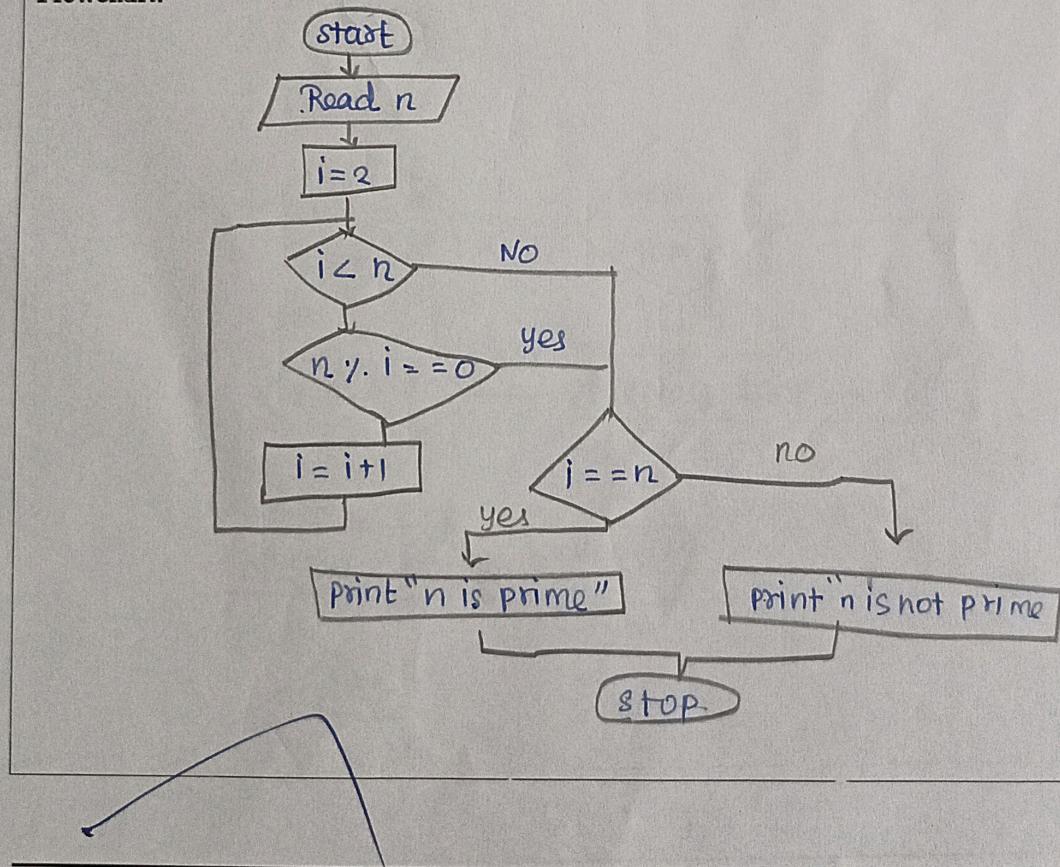
Write an Algorithm and draw a Flowchart to check whether the given number is Prime or not.

Algorithm:

Step 1 : Start
 Step 2 : Read num
 Step 3 : Set i = 2
 Step 4 : Repeat step 5 & 6 until $i \leq n$
 Step 5 : (check whether the num is divisible or not)
 If $n \% i == 0$ then go to step 7
 else go to step 6.
 Step 6 : Set $i = i + 1$

Step 7 : if $i == n$ then print "num is prime"
 Else
 Print "number is not prime"
 Step 8 : Stop.

Flowchart:



Ex. No.:

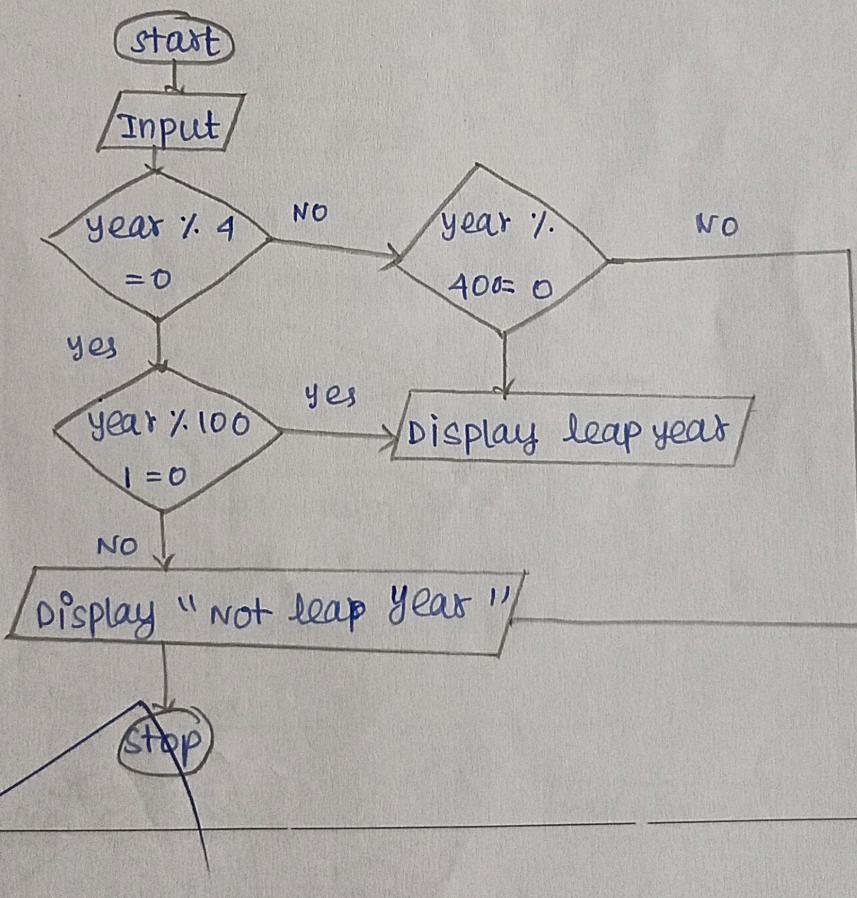
Date:

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 $\text{Year} \% 4 = 0$, then go to step 4.
- Step 4 : If $\text{Year} \% 100 = 0$ go to step 5
- Step 5 : If $\text{Year} \% 400 = 0$
Print "leap year"
else
Print "not leap year"
- Step 6 : Stop.

Flowchart:

Ex. No.:

Date:

Palindrome Number

Name : P. Ranjani
 Reg NO : 240901085

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

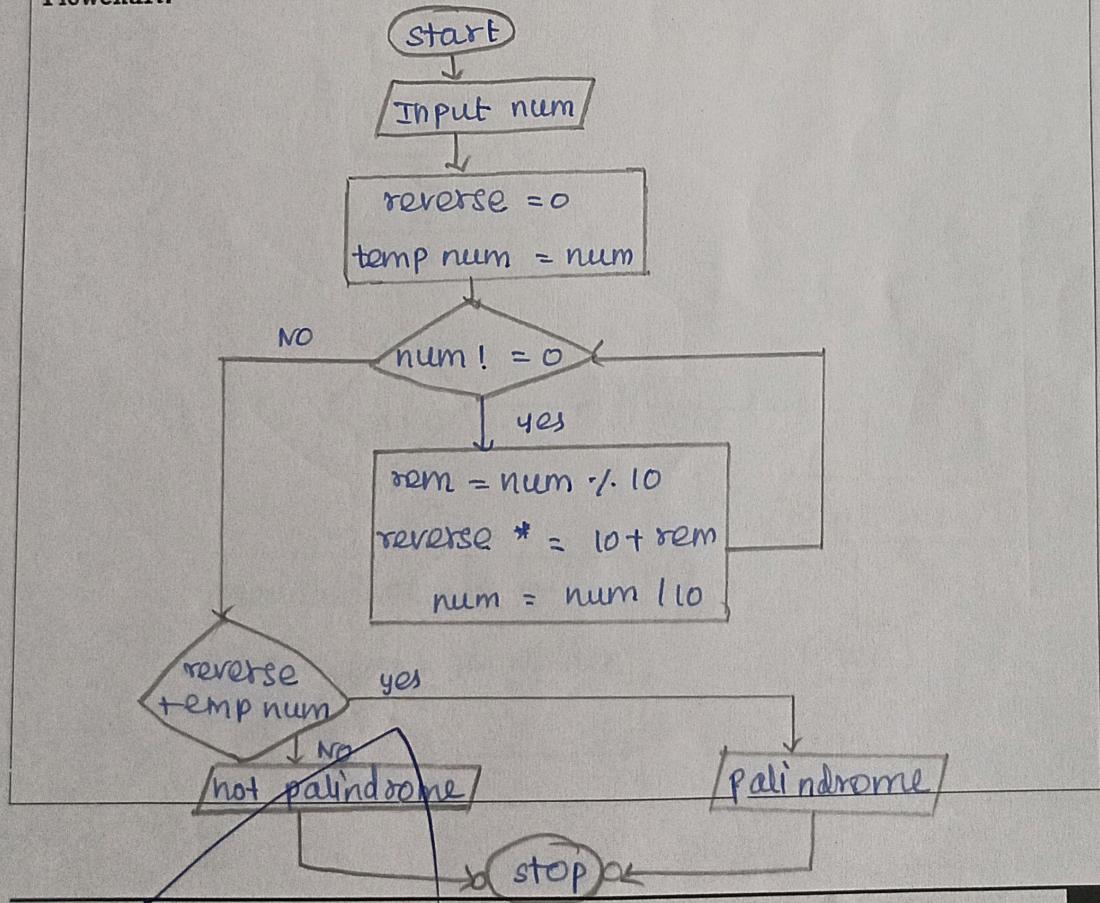
Algorithm:

- 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:



Ex. No.:

Date:

Sum of Digits

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

Name : P. Ranjani

Reg No : 240901085

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: