# Algorithm & Flowchart

Ex. No.: 01 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 'a' from the User

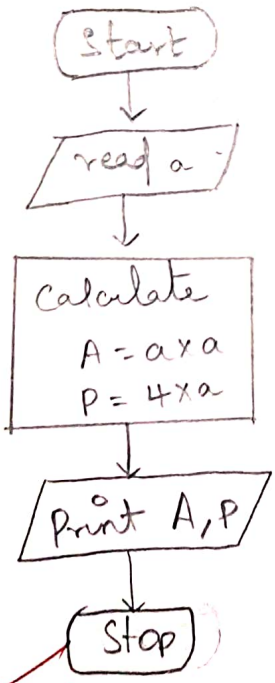
Step:3 : Initialize Area and Perimeter of Square is Zero.

Step:4 : Calculate area as a*a and perimeter as 4*a and store in A and P.

step 5 : Print area and Perimeter

step 6 : Stop.

**Flowchart:**

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Ex. No.: 02

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 total number of days

step:3 Initialize days in years to 365 and days in months to 30.

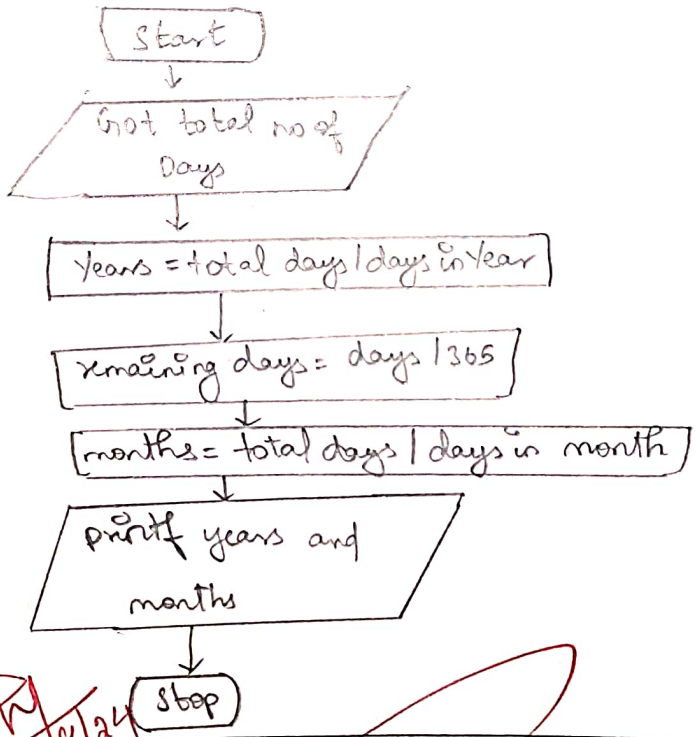
Step:4 Years = total days / days in Year

Step:5 : months = total days / days in month.

Step:6: Print Years and months

step:7: Stop.

**Flowchart:**

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Ex. No.: 03 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 Get n from user

Step:3 Set p=2

step:4 Check if n<2 then go to step5 else goto step6

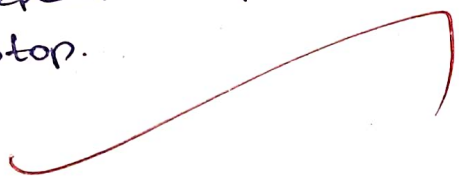
Step:5 Printf "not Prime" and go to step 8

step:6 if n%2=0 print "not prime "else" print Prime".

Step:7 Repeat step 6 and 7 until p = sqrt(n)

Step:8 Stop.

**Flowchart:**



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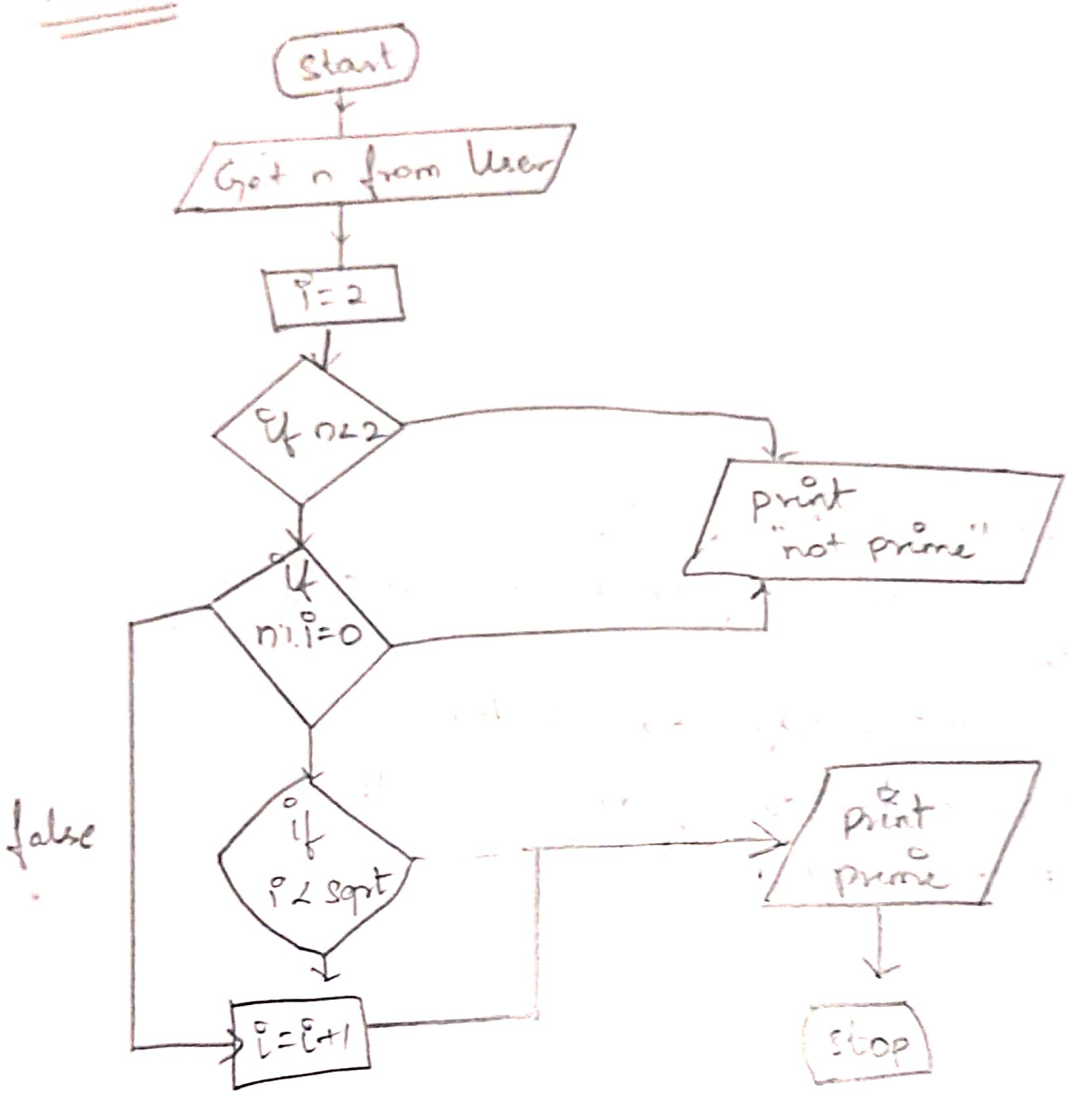
Flow chart


Start
Get n from User
i=2
if n<2
print "not prime"
if n%i=0
false
if i<sqrt
print prime
i=i+1
Stop

Ex. No.: 04 Date: 28/9/24

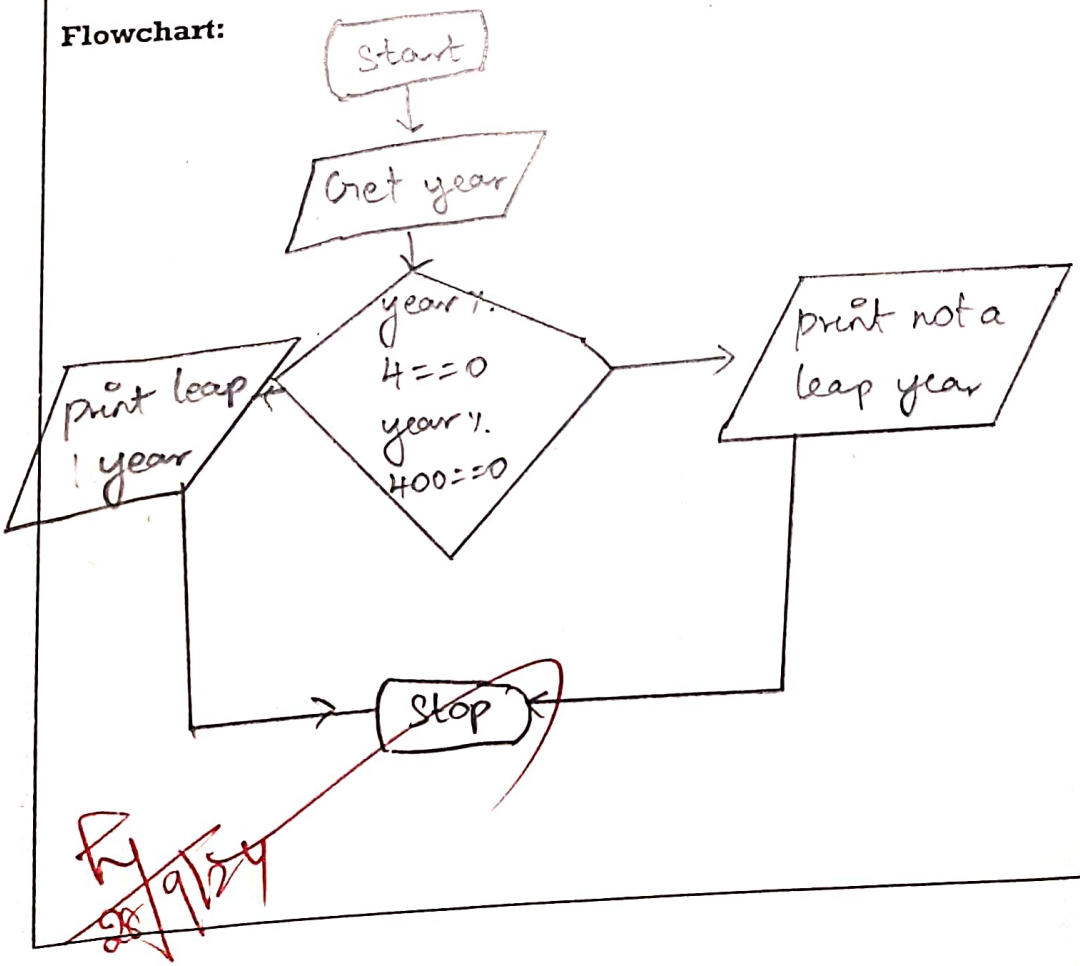
## Leap Year

**Write an Algorithm and draw a Flowchart to check whether the given year is Leap year or not.**

**Algorithm:**

Step 1: Start
Step 2: Get year from the user.
Step 3: Check weather year%.4==0 and y%.100!=0 or y%.400==0. if it is true then goto step 4 else go to step 5.
step 4: print "leap year".
Step 5: print "not a leap year".
Step 6: stop.

**Flowchart:**

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Ex. No.: 05 Date: 28/9/24

## 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: Get n from user

Step 3: Step p=0, a=n

Step 4: check whether n>0, go to steps else go to step 7.

Step 5: p = (p*10) + (n%10)

Step: 6: n=n/10, go to step 4.

Step: 7: check whether a==p, true go to step 8 else goto step 9.

**Flowchart:**

Step: 8: print palindrome, not palindrome.

Step: 9 Stop.

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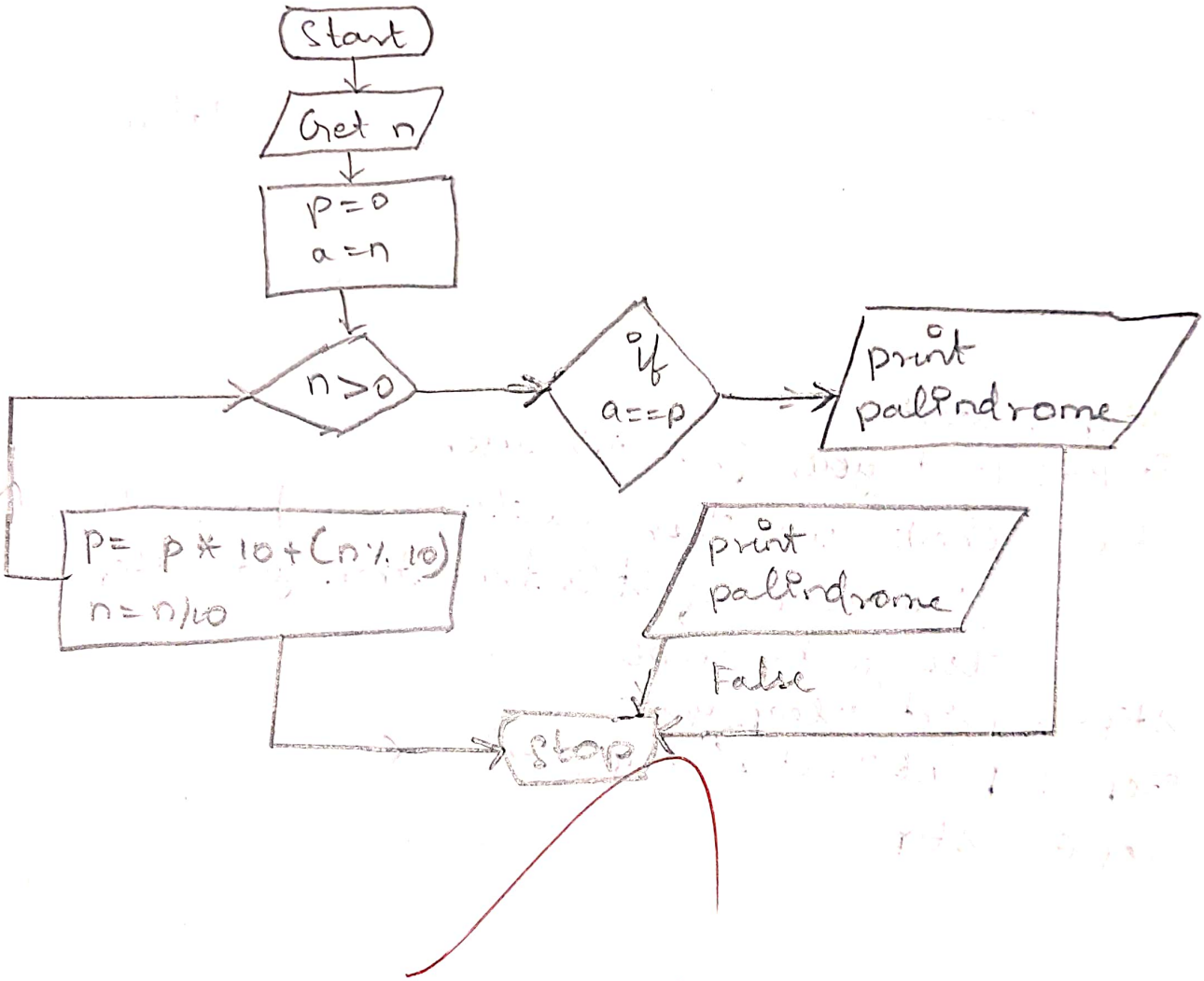
flowchart.


Start
Get n
p=0
a=n
n>0
if
a==p
print
palindrome
p= p * 10+(n % 10)
n=n/10
print
palindrome
False
stop

Ex. No.: 06 Date: 28/9/24

## 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: Get n from the user
step 3: Initialize sum is equal to Zero
Step 4: Check n>0, got to step 5
step 5: sum = sum + (n%10)
Step 6: n=n/10, go to step 4
step 7: print "sum".

**Flowchart:**

step 8: stop.

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Flowchart: