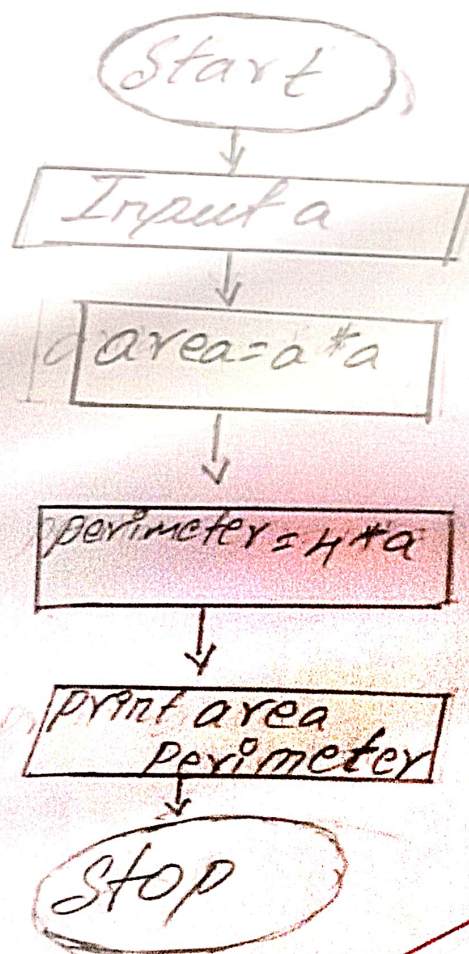Ex. No.:   Date:

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 Declare variable a

step:3 a*a and assign the value

step:4 4*a and assign the value to perimeter

step:5 print the value of area and perimeter

step:6 stop

Flowchart:

```
          ( Start )
              |
              v
        [ Input a ]
              |
              v
        [ area=a*a ]
              |
              v
      [ perimeter=4*a ]
              |
              v
      [ print area
        perimeter ]
              |
              v
         ( Stop )
```
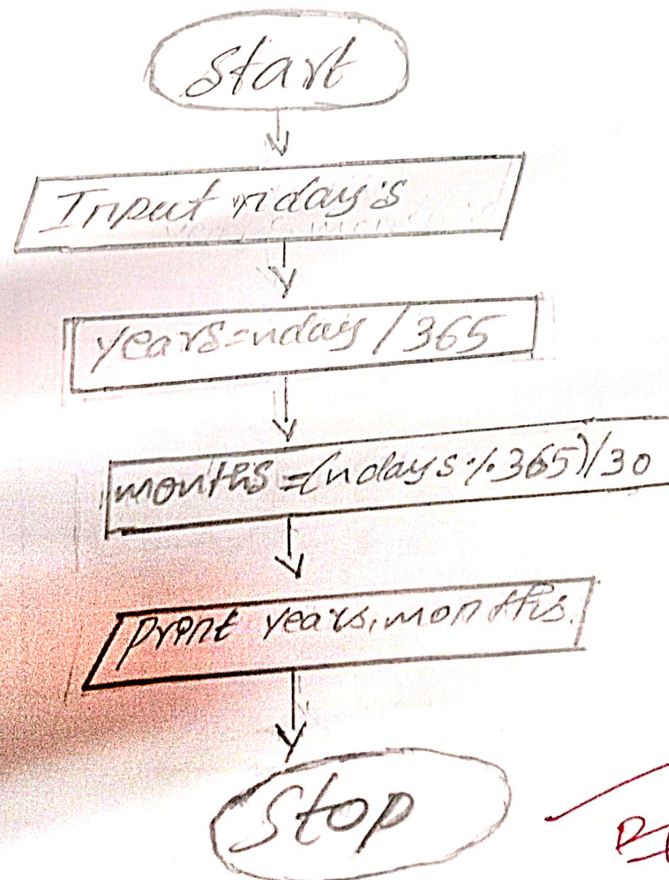
Ex. No.:

Date:

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 Declare the variable ndays, year, months

step:3 Display a message to get input from user stored it in ndays

step:4 years = ndays / 365

step:5 months = (ndays % 365) / 30

step:6 print years and months

step:7 stop

Flowchart:

Start

↓

Input ndays

↓

years = ndays / 365

↓

months = (ndays % 365)/30

↓

print years, months
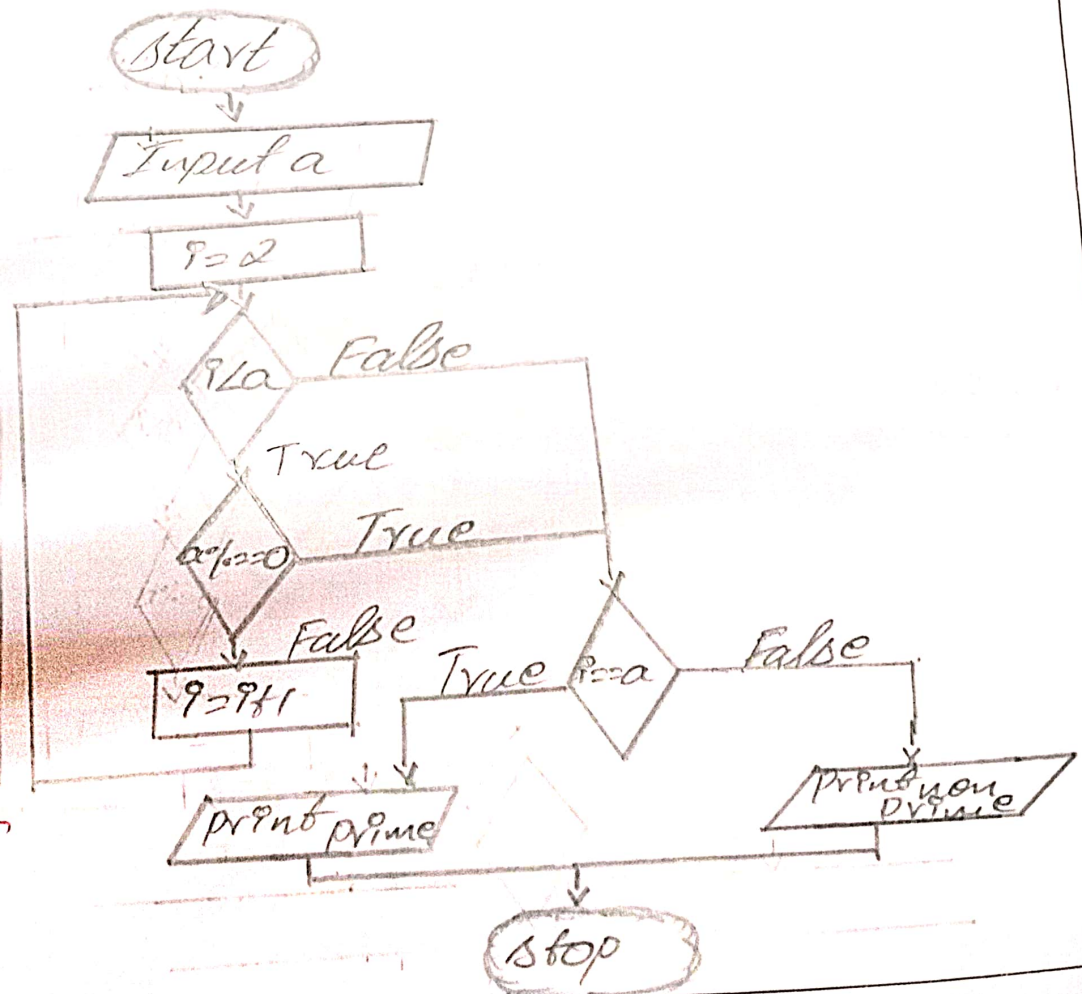
↓

Stop

Ex. No.:

Date:

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   Declare the value

Step:3   start the loop i from 1 to a-1

Step:4   if a is divided by i, then print it is not a prime

Step:5   if a is not divided by i then print it is prime

Step:6   stop

Flowchart:

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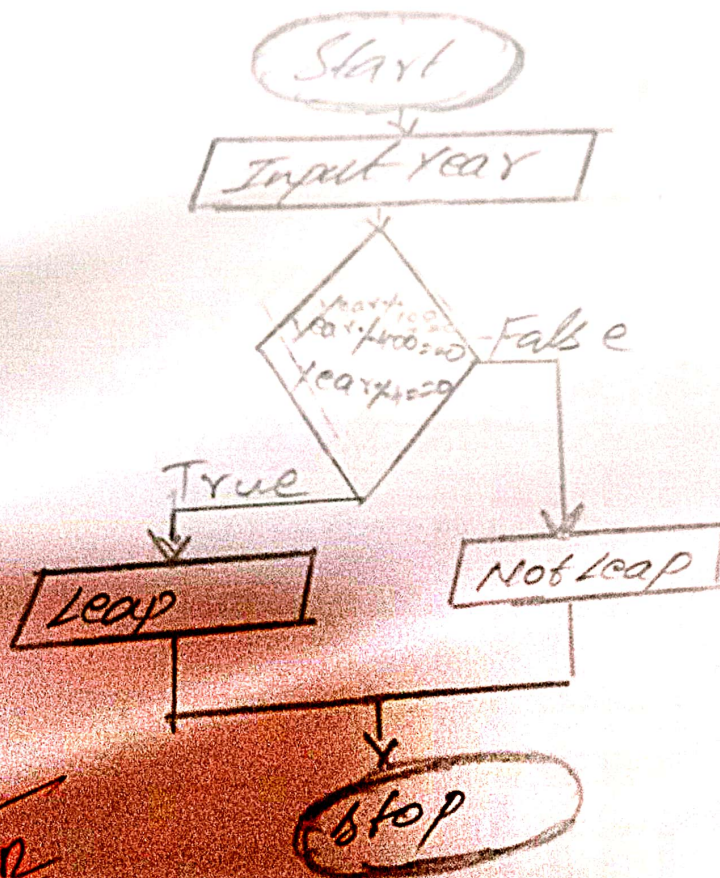
Ex. No.:

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   Declare the variable

step:3   Display a message to get input from user and stored

step:4   Year%400==0 and Year%4==0

step:5   Is True Print leap

step:6   otherwise Print not leap

step:7   stop

Flowchart:

Start

Input year

Year%400==0 year%400==0 year%4==0 — False
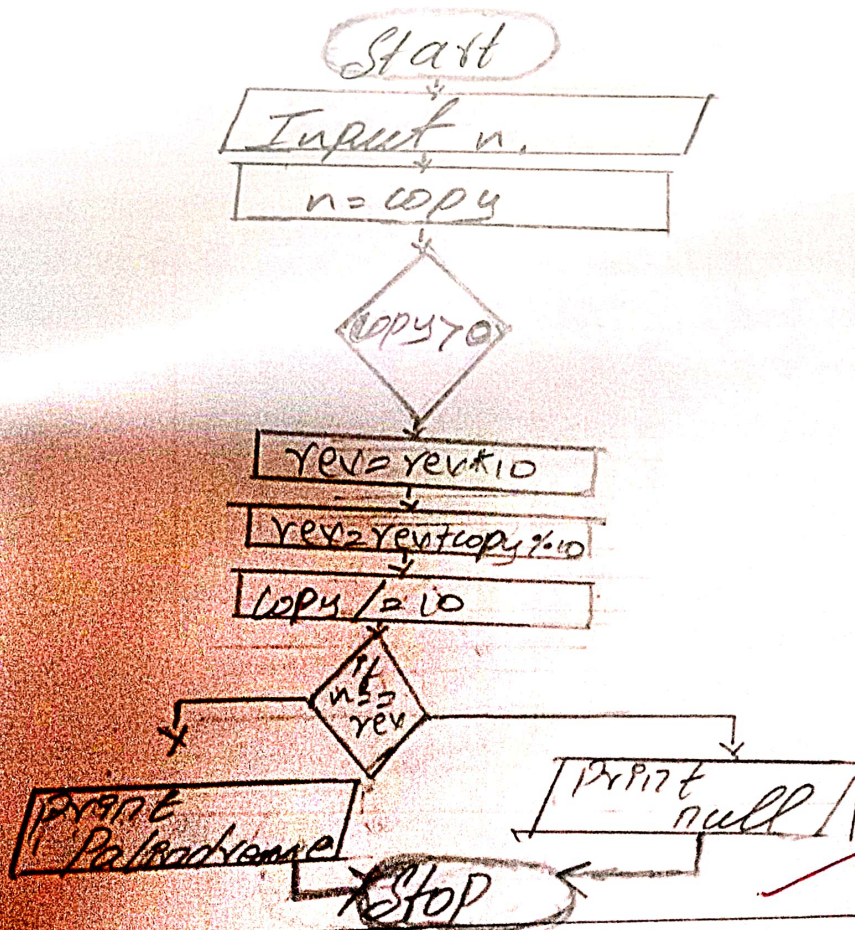
True

Leap

Not Leap

Stop

Ex. No.:

Date:

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 Declare the variable

Step:3 Display a message to get input from user and stored

Step:4 Declare n = copy

Step:5 By while loop, copy > 0

Step:6 rev = rev * 10

Step:7 rev = rev + (copy % 10)

Step:8 copy /= 10

Step:9 if n == rev, print palindrome otherwise print null

Step:10 STOP

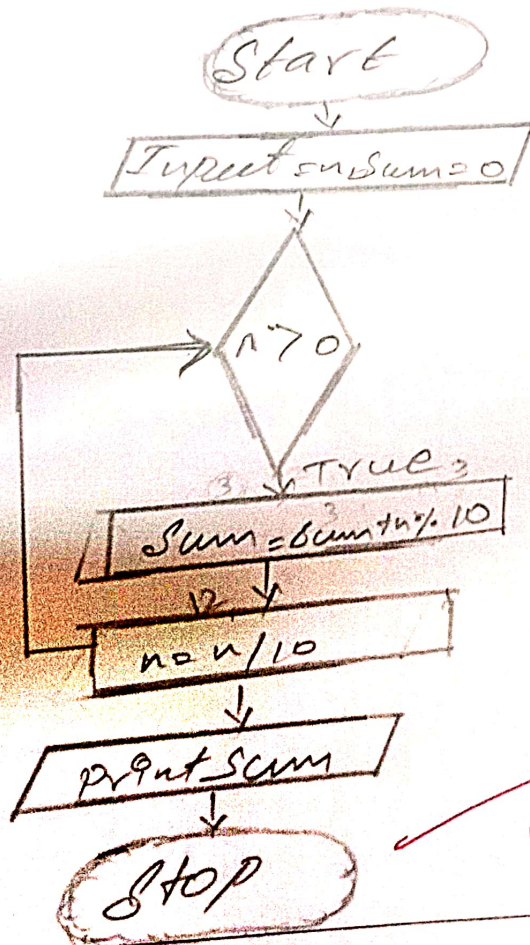**Flowchart:**

Ex. No.:

Date:

Sum of Digits

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

Algorithm:

Step:1   Start
Step:2   Declare the variable sum = 0
Step:3   Display a message to get input user an stored
Step:4   using while loop and continue loop until n becomes 0
Step:5 $(n \% 10 + sum)$
Step:6 $n = n/10$
Step:7   print sum
Step:8   stop

Flowchart:

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