

Ex. No.: I

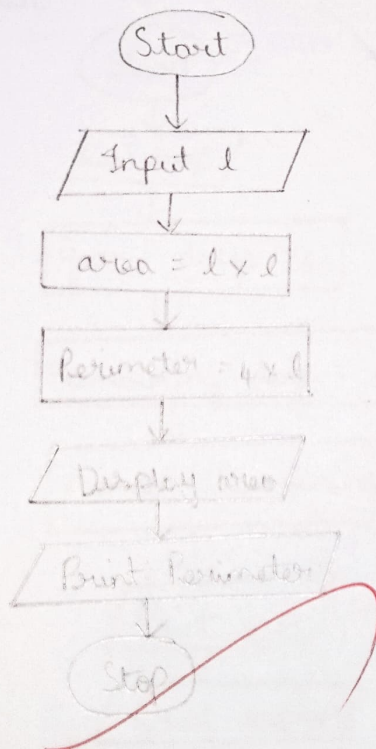
Date: 21/09/24

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 l
- Step 3: $area = l \times l$
- Step 4: $Perimeter = 4 \times l$
- Step 5: Display area
- Step 6: Display Perimeter
- Step 7: Stop

Flowchart:

21/9/24

Ex. No.: II

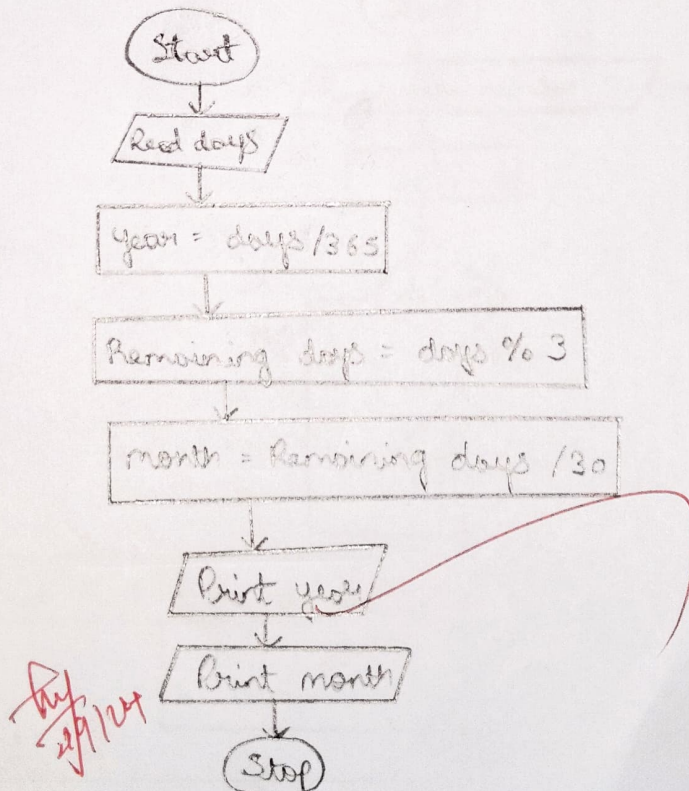
Date: 21/09/24

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 : Read days
- Step 3 : $\text{year} = \text{days} / 365$
- Step 4 : Remaining days = $\text{days} \% 365$
- Step 5 : $\text{month} = \text{Remaining days} / 30$
- Step 6 : Print year
- Step 7 : Print month
- Step 8 : Stop

Flowchart:

Ex. No.: III

Date: 21/09/24

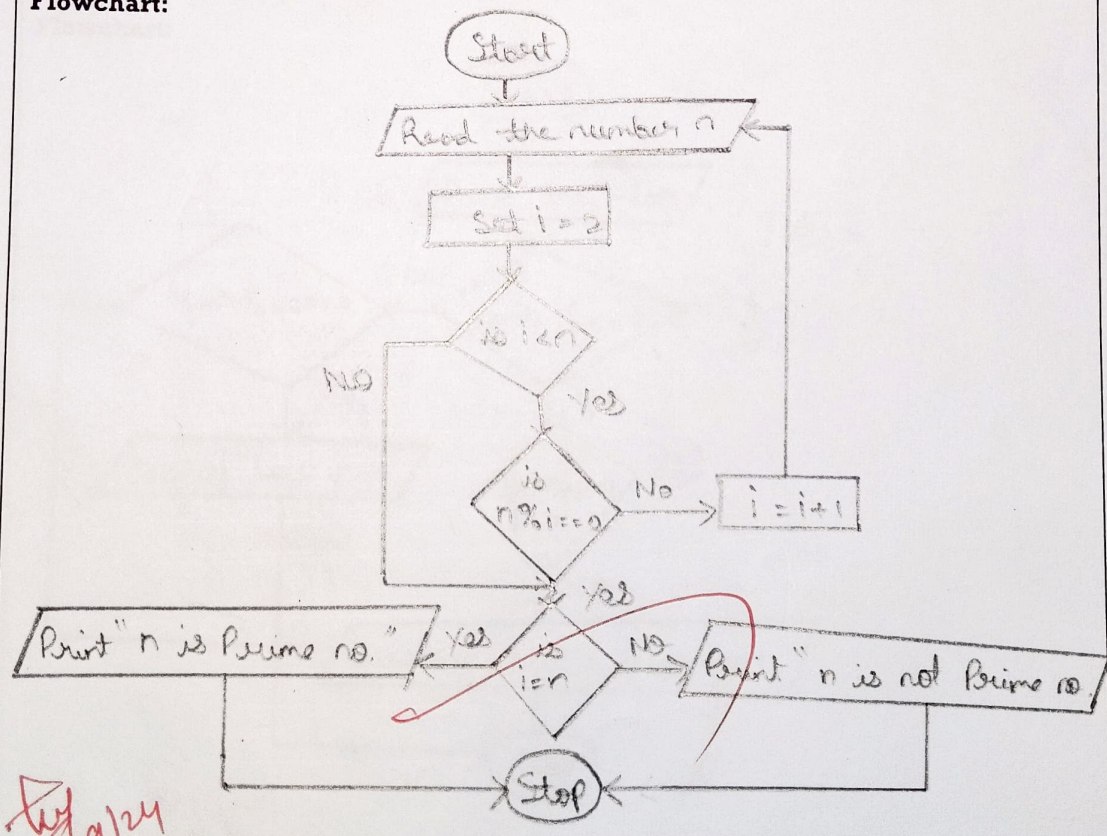
Prime Number

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

Algorithm:

- Step 1: Start
 Step 2: Read Number N
 Step 3: initialize $i=2$
 Step 4: if $i < n$ then go to step 5 else go to step 6
 Step 5: if $n \% i == 0$ then go to step 6 else $i = i + 1$ and go to step 4
 Step 6: if $i == n$ then print "n is prime number" else print "n is not prime number"
 Step 7: Stop

Flowchart:



21/9/24

Ex. No.: IV

Date: 25/09/24

Leap Year

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

Algorithm:

Step 1: start

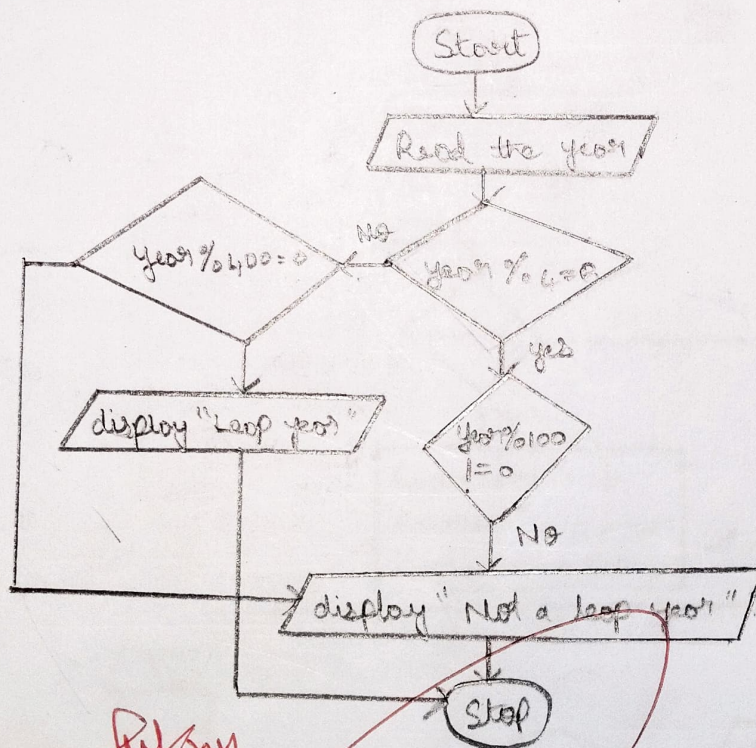
Step 2: Read the value of the year

Step 3: if $(year \% 4 == 0 \text{ and } year \% 100 != 0) \text{ or } (year \% 400 == 0)$ then display "Leap year"

Step 4: else, display "Not leap year"

Step 5: stop

Flowchart:



by 25/9/24

Ex. No.: 5

Date: 25/09/24

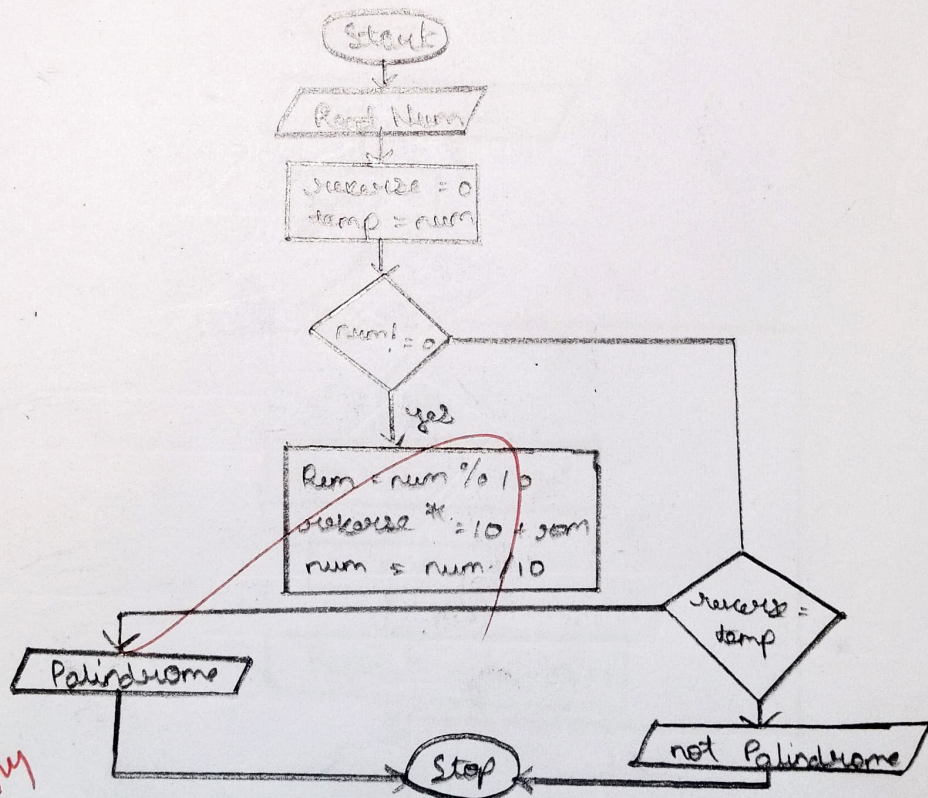
Palindrome Number

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

Algorithm:

- Step 1: Start
- Step 2: Read the input number
- Step 3: Declare and initialize the variable reverse and assign input to a temp variable temp = num
- Step 4: Start the while loop until num != 0 becomes false
 $Rem = num \% 10$
 $Reverse * = 10 + rem$
 $Num = num / 10$
- Step 5: check if reverse == temp
- Step 6: if True, Print "Palindrome"
- Step 7: else, Print "Not Palindrome"
- Step 8: Stop

Flowchart:



Ex. No.: VI

Date: 25/09/24

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: Input the number n

Step 3: Initialize $sum = 0$

Step 4: Repeat the following steps while $n > 0$

- Extract the last digit of n
 $digit = n \% 10$

- add the digits to sum:
 $sum = sum + digit$

- Remove the last digit from n :

Step 5: Print the sum
 $n = n // 10$

Step 6: Stop

Flowchart:

