

Ex. No.: I

Date:

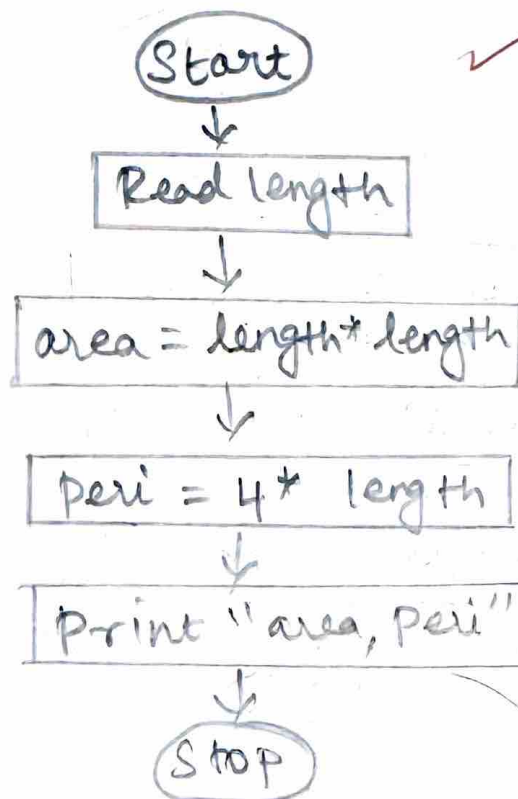
Calculate Area and Perimeter

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

Algorithm:

- Step 1: Start
Step 2: Read length
Step 3: Calculate
 $\text{area} = \text{length} * \text{length}$
Step 4: Calculate
 $\text{peri} = 4 * \text{length}$
Step 5: print "area, peri"
Step 6: Stop.

Flowchart:



Ex. No.: II

Date:

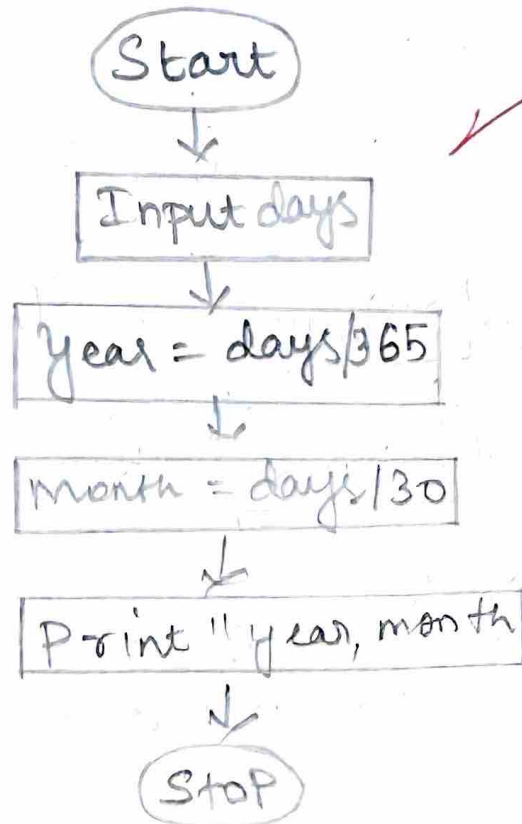
Days to Year Conversion

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

Algorithm:

- Step 1: Start
 Step 2: Get days
 Step 3: calculate $\text{year} = \text{days} / 365$
 Step 4: calculate $\text{month} = \text{days} / 30$
 Step 5: print "year, month".
 Step 6: Stop

Flowchart:



✓
Aradhya
 29/11/24

Ex. No.: 111

Date:

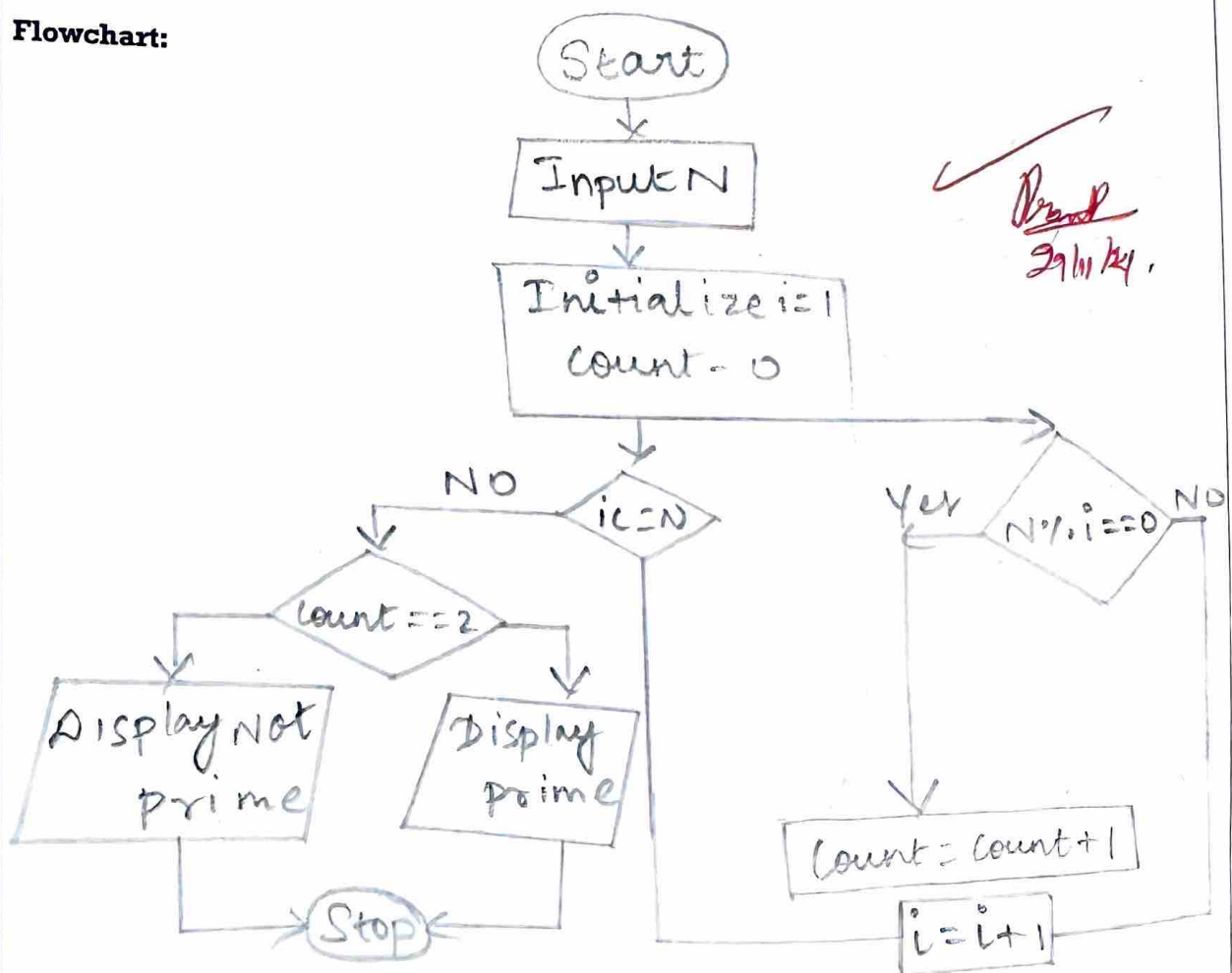
Prime Number

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

Algorithm:

- Step 1: Start
 Step 2: Input any natural No. "N"
 Step 3: Initialize $i = 1$, $\text{count} = 0$
 Step 4: If $i \leq N$ then go to step 5 else go to step 8
 Step 5: If $N \% i = 0$, then go to step 6 else go to step 7
 Step 6: $\text{count} = \text{count} + 1$
 Step 7: $i = i + 1$ and go to step 4.
 Step 8: If $\text{count} == 2$, then display "prime", else display "Not prime"
 Step 9: Stop.

Flowchart:



Ex. No.: 17

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

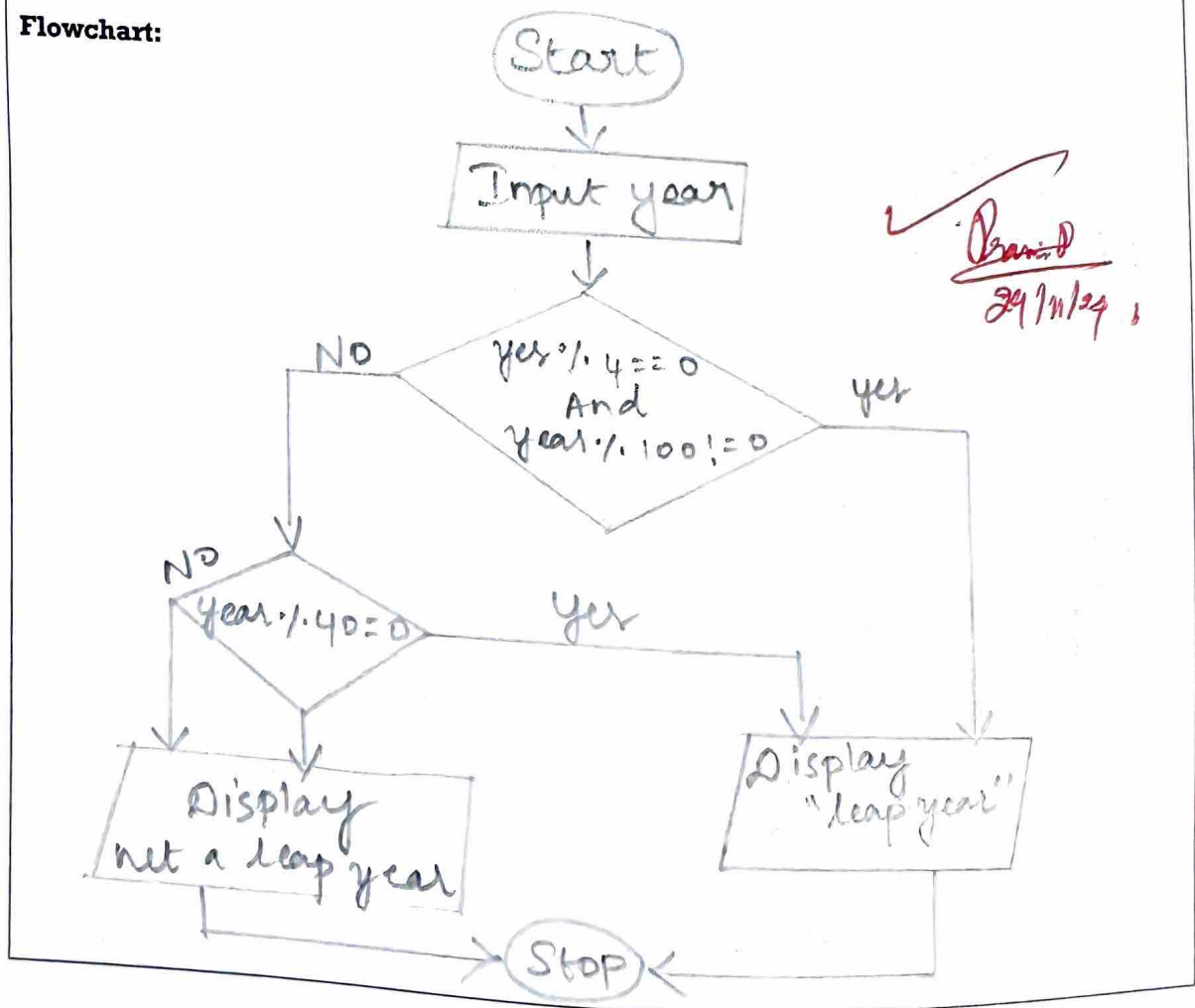
Step 3: If $(\text{year} \% 4 == 0 \text{ AND } \text{year} \% 100 != 0)$ or $(\text{year} \% 400 == 0)$ then go to step 4 else go to step 5.

Step 4: Display "Leap year"

Step 5: Display "Not a leap year"

Step 6: Stop.

Flowchart:



Ex. No.: V

Date:

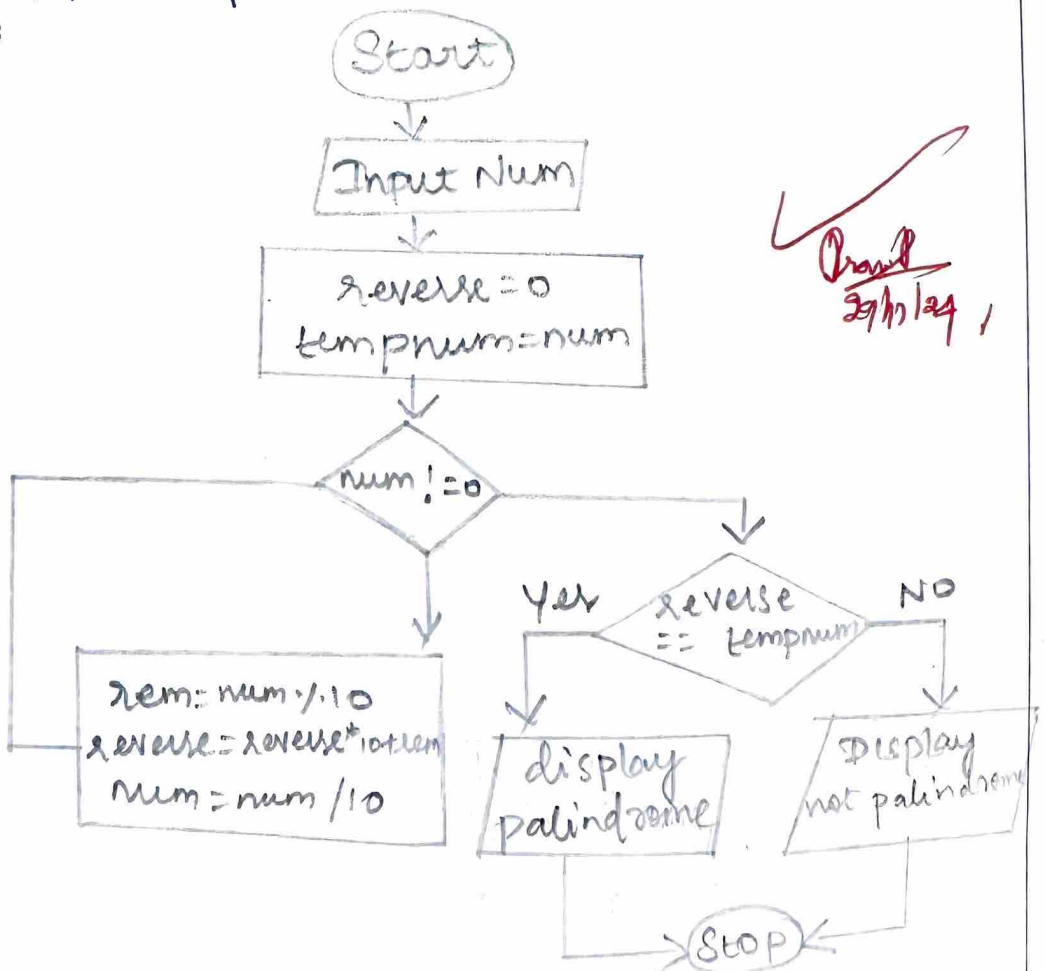
Palindrome Number

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

Algorithm:

- Step 1: Start
 Step 2: Input num
 Step 3: Declare and initialize the variable reverse and assign input to a temp variable tempNum=num
 Step 4: Start the while loop until num!=0 becomes false
 * rem = num % 10
 * reverse = reverse * 10 + rem
 * num = num / 10
 Step 5: Check if reverse == tempNum
 Step 6: If it is true then display "palindrome"
 else display "Not a palindrome".
 Step 7: Stop.

Flowchart:



Ex. No.: √1

Date:

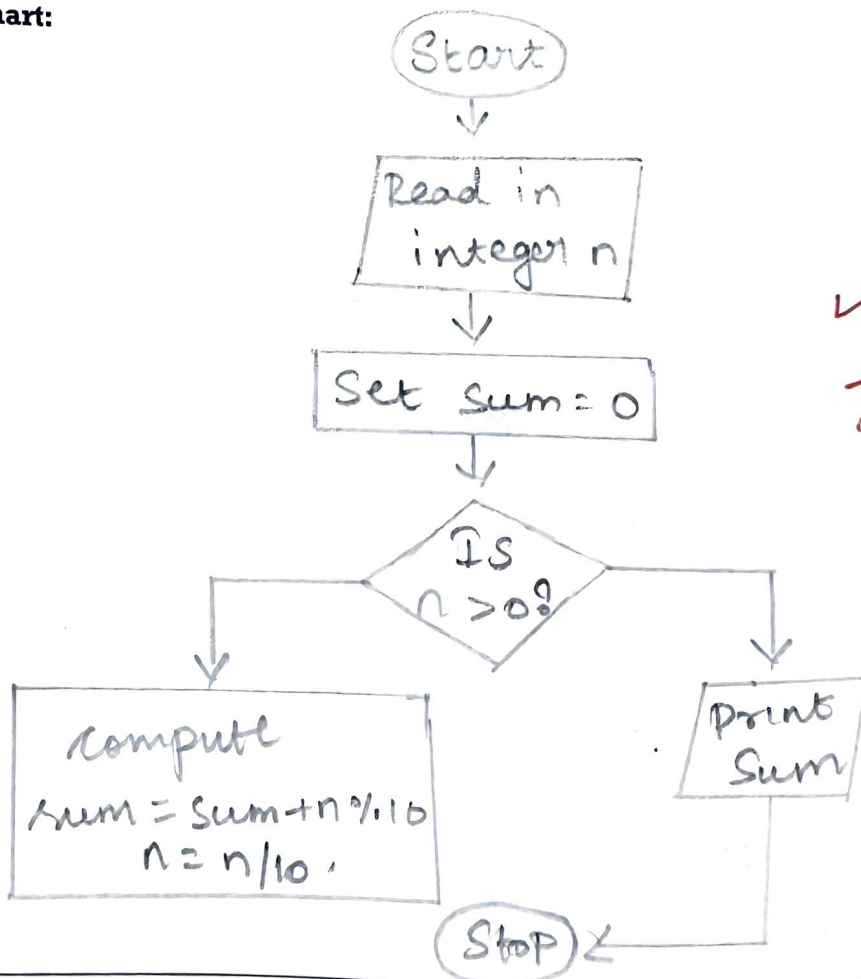
Sum of Digits

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

Algorithm:

- Step 1: Get the Number
- Step 2: Construct a variable to hold the total and initialize it to 0
- Step 3: Repeat step 2 & 3 until the result is not 0
- Step 4: Divide the number by 10 to obtain the right most digit using the remaining "percent" operator then add to be total.
- Step 5: Use the '/' operator to divide the integer by 10 to eliminate the last digit on the right
- Step 6: Display the sum (total)
- Step 7: Stop.

Flowchart:



Red signature
29/11/24/