

Ex. No.: 1

Date: 18/10/24

Calculate Area and Perimeter

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

Algorithm:

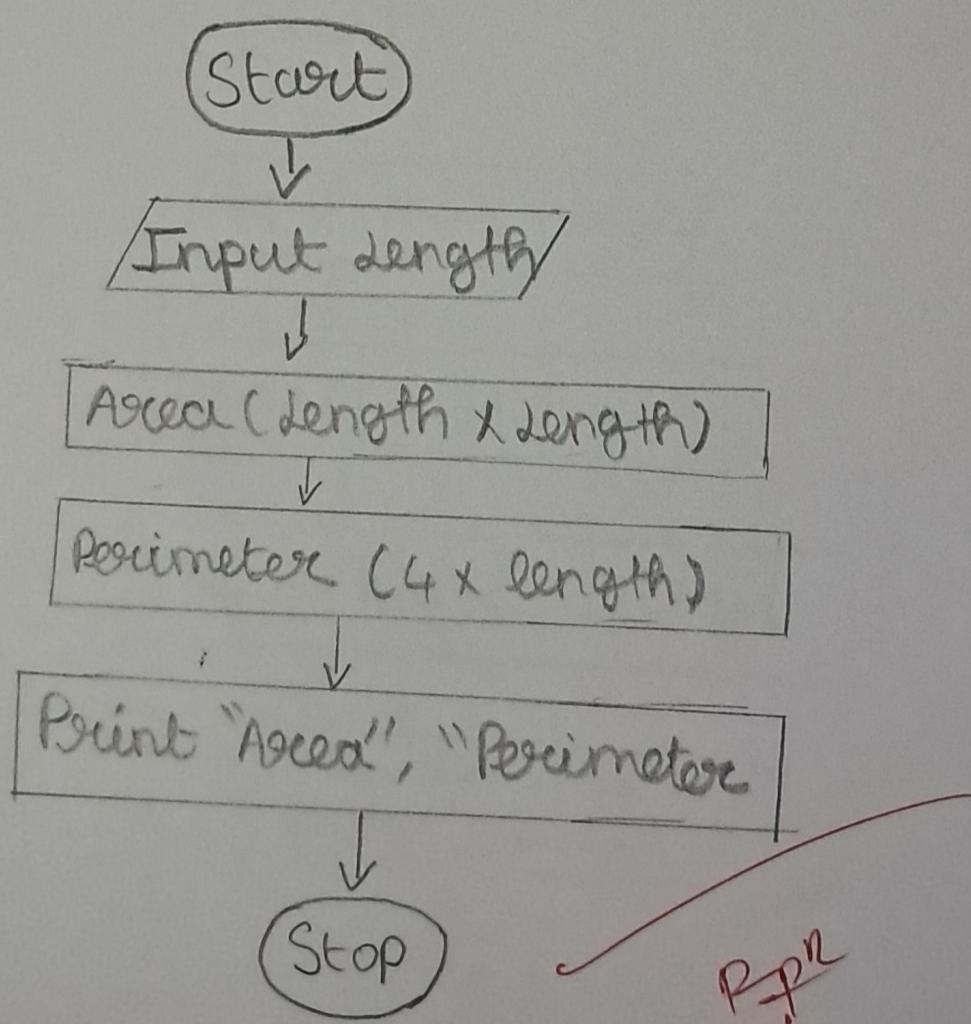
Step 1: Start the program

Step 2: Read the value of a (a is one side)

Step 3: Perimeter = $4 \times a$

Step 4: Area = $a \times a$

Step 5: Perimeter ~~&~~ Print "Area, Perimeter"

Flowchart:

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Ex. No.: 2

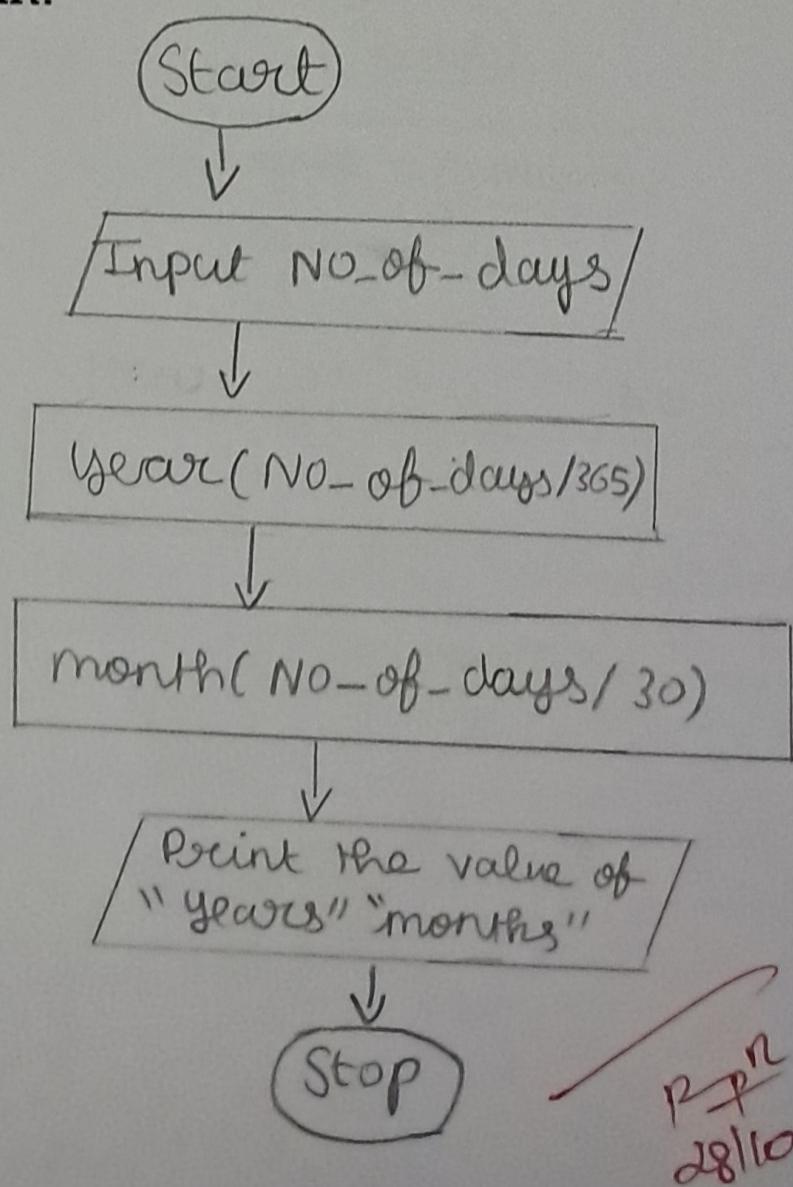
Date: 18.7.24

Days to Year Conversion

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

Algorithm:

- Step1: Start the program
- Step2: Read the No-of-days entered
- Step3: $\text{year} = \text{No-of-days} / 365$
- Step4: $\text{months} = \text{No-of-days} / 30$
- Step5: Print "year", "months"

Flowchart:

Ex. No.: 3

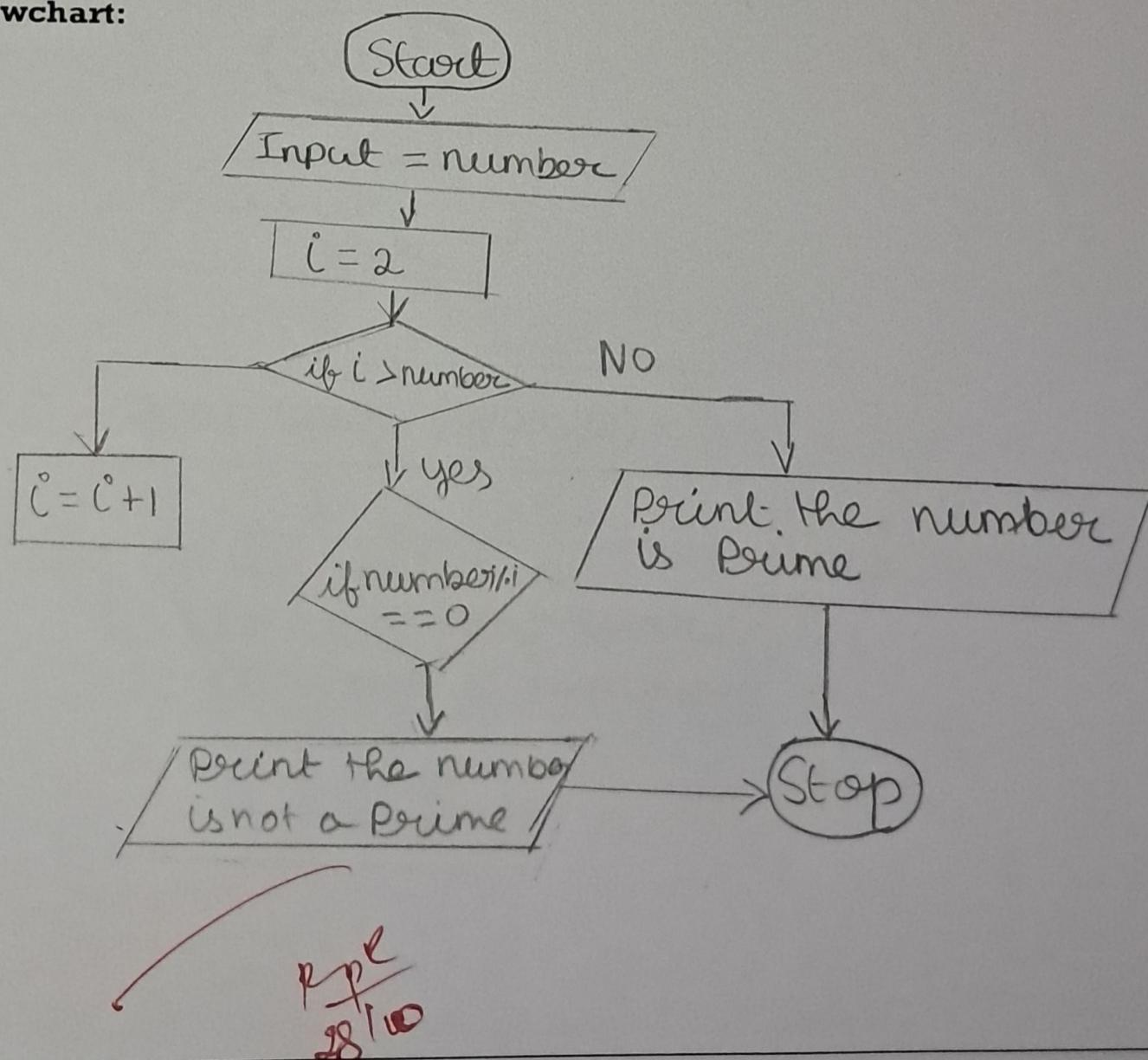
Date: 18.10.24

Prime Number

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

Algorithm:

- Step1: Start the program
- Step2: Read the value of num
- Step3: Divide the value of num by numbers 2 to num-1 by iterating for loop
- Step4: If num is divisible by loop, then increment i. If $x \neq 0$, print number is a Prime number
- Step5: Else, print number is not a Prime number

Flowchart:

Ex. No.: 4

Date: 18-10-26

Leap Year

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

Algorithm:

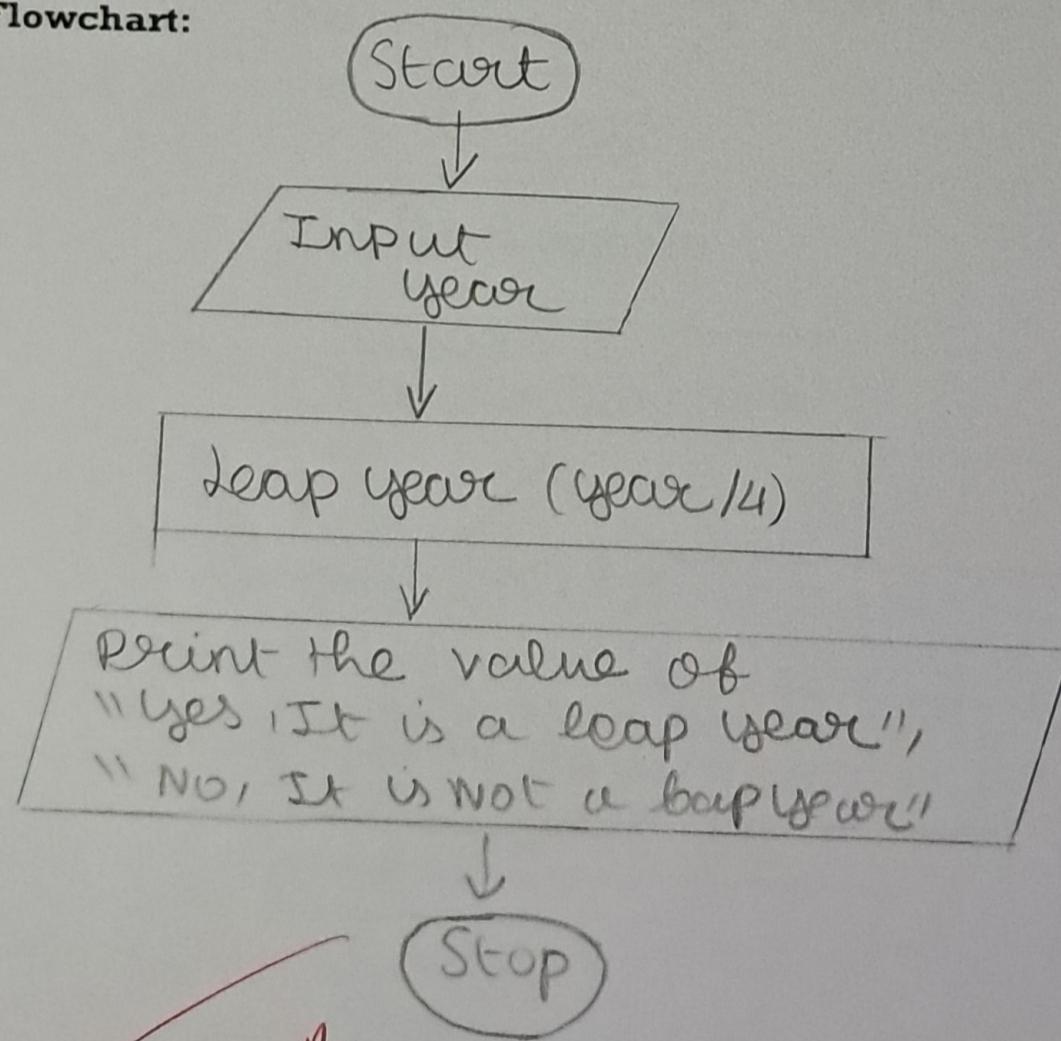
Step 1: Start the Program

Step 2: Enter the year to check whether the year is leap year or not

Step 3: leap year = year/4

Step 4: Print year is a prime if the year is not divisible by 4, Print it is not a leap year

Flowchart:



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Ex. No.: 5

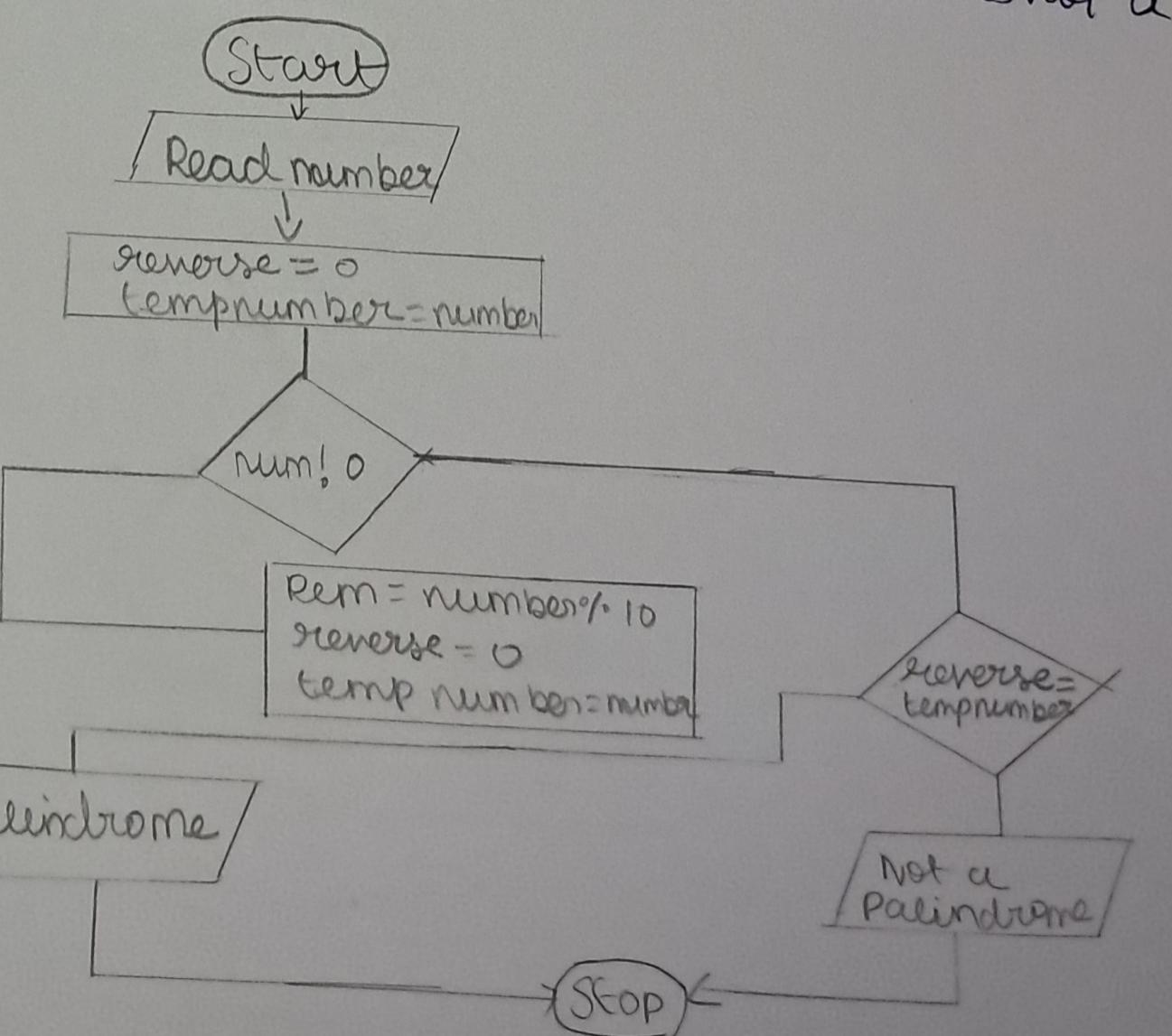
Date: 18.10.24

Palindrome Number

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

Algorithm:

- Step1: Start the Program
- Step2: Declare and Initialise the variable reverse and assign input to a temp variable temp
tempnumber = number
- Step3: Start the while loop until $number \neq 0$
becomes false
- Step4: Check if reverse == temp number
- Step5: If its true, then the number is a Palindrome. If not the number is not a Palindrome.

Flowchart:

Ex. No.: 6

Date: 18.10.24

Sum of Digits

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

Algorithm:

- Step 1: Start the Program
- Step 2: Enter the number
- Step 3: Enter the modulus/remainder of the number
- Step 4: Sum the remainder of the number
- Step 5: Divide the number by 10
- Step 6: Reapte the step 3 while the number is greater than 0
- Step 7: Display the output

Flowchart: