Ex. No.: 01

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:

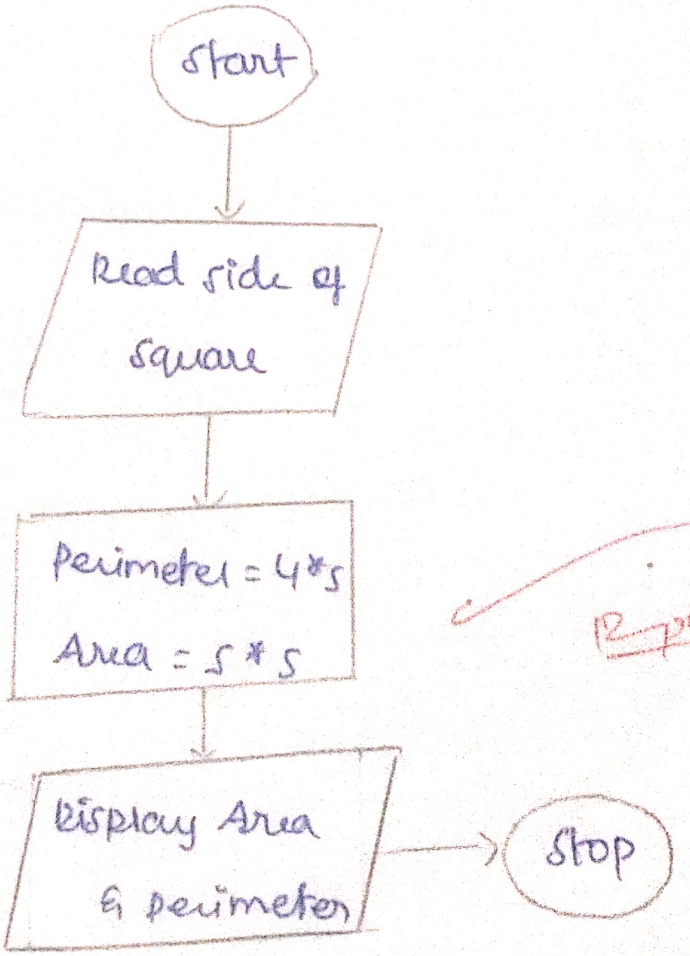
Step 1: Input side of square.

Step 2: Multiply side by 4 to get the perimeter.

Step 3: Multiply side by side to get the area.

Step 4: Output area & perimeter of the square.

Flowchart:



Ex. No.: 02 Date: 19/10/24

Days to Year Conversion

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

Algorithm: Start:

Step 1: Input the total number of days.

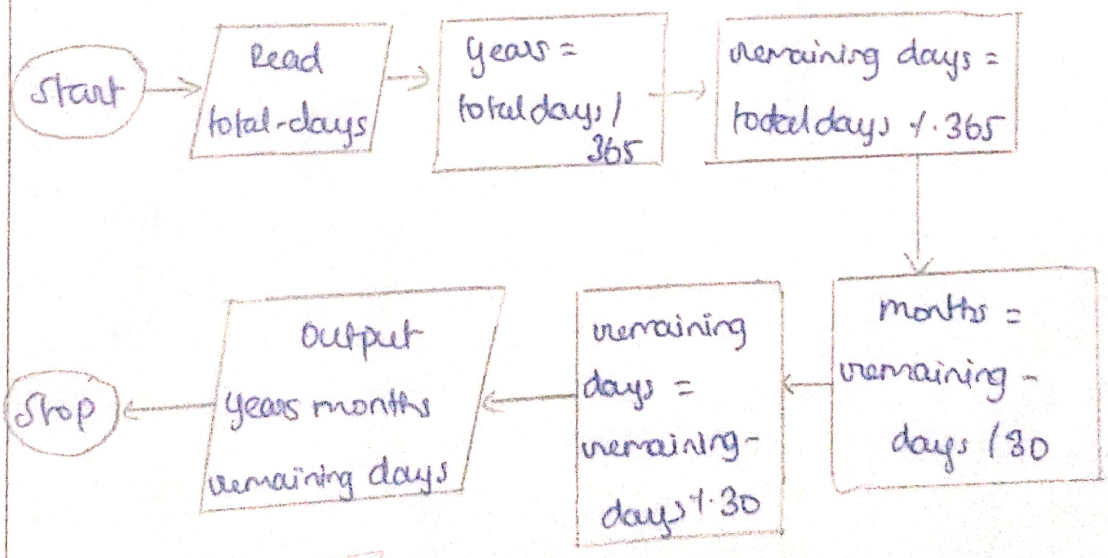
Step 2: Define some constants such as days in a year to 365 and days in month to 30.

Step 3: calculate years by dividing input by 365 and remaining days by using modulus function.

Step 4: calculate months by adding input by 30 and remaining days by using modulus function.

Step 5: output years & months. Stop.

Flowchart:



Ex. No.: 03 Date: 18/10/24

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 the integer as input from user.

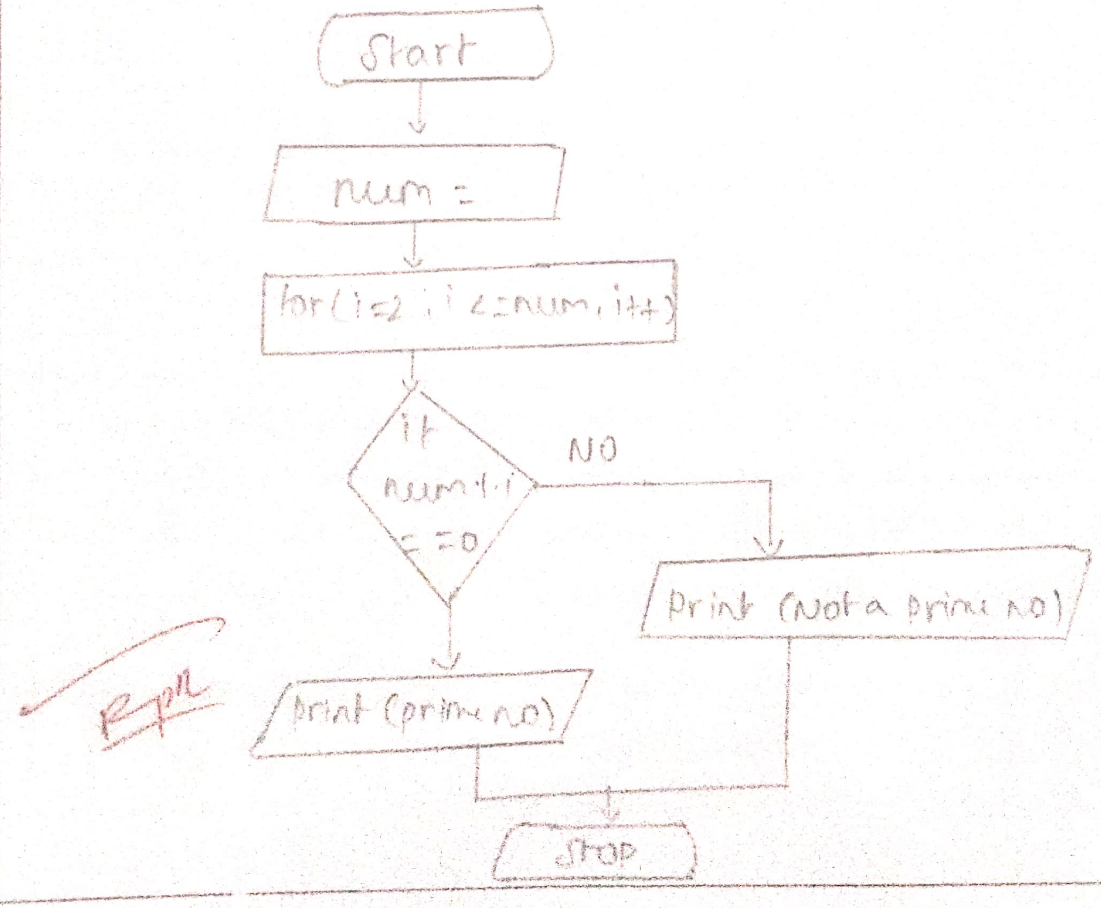
step 3: use for loop iteration from 2 to num/2.

step 4: If integer is divisible by for loop. increment the input as itt.

step 5: If input is equal to 0. print Num is prime or else print num is not prime

step 6: stop

Flowchart:



Ex. No.: 04 Date: 18/10/24

Leap Year

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

Algorithm:

step 1: Start

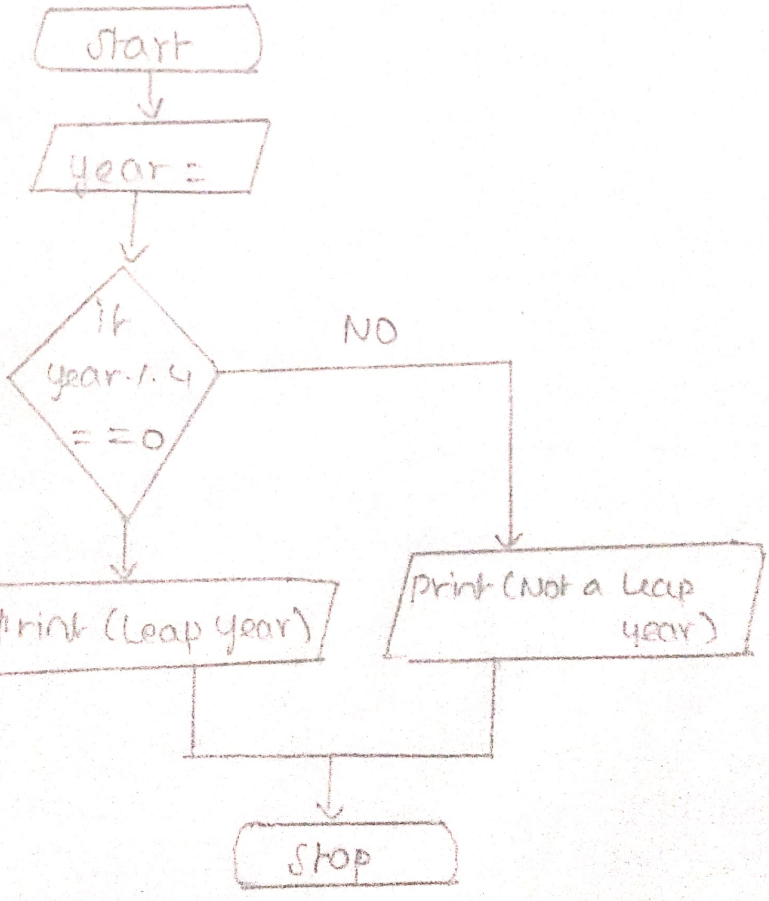
step 2: Enter the input.

step 3: To find it is leap year, use condition as year %.4=0

step 4: If year %. 4==0, print leap year, else print not leap year.

step 5: Stop.

Flowchart:



Result

Ex. No.: 05 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:

Step 1: Start

Step 2: Test the input from the user.

Step 3: Initialize reversed = 0.

Step 4: Remainder = n % 10

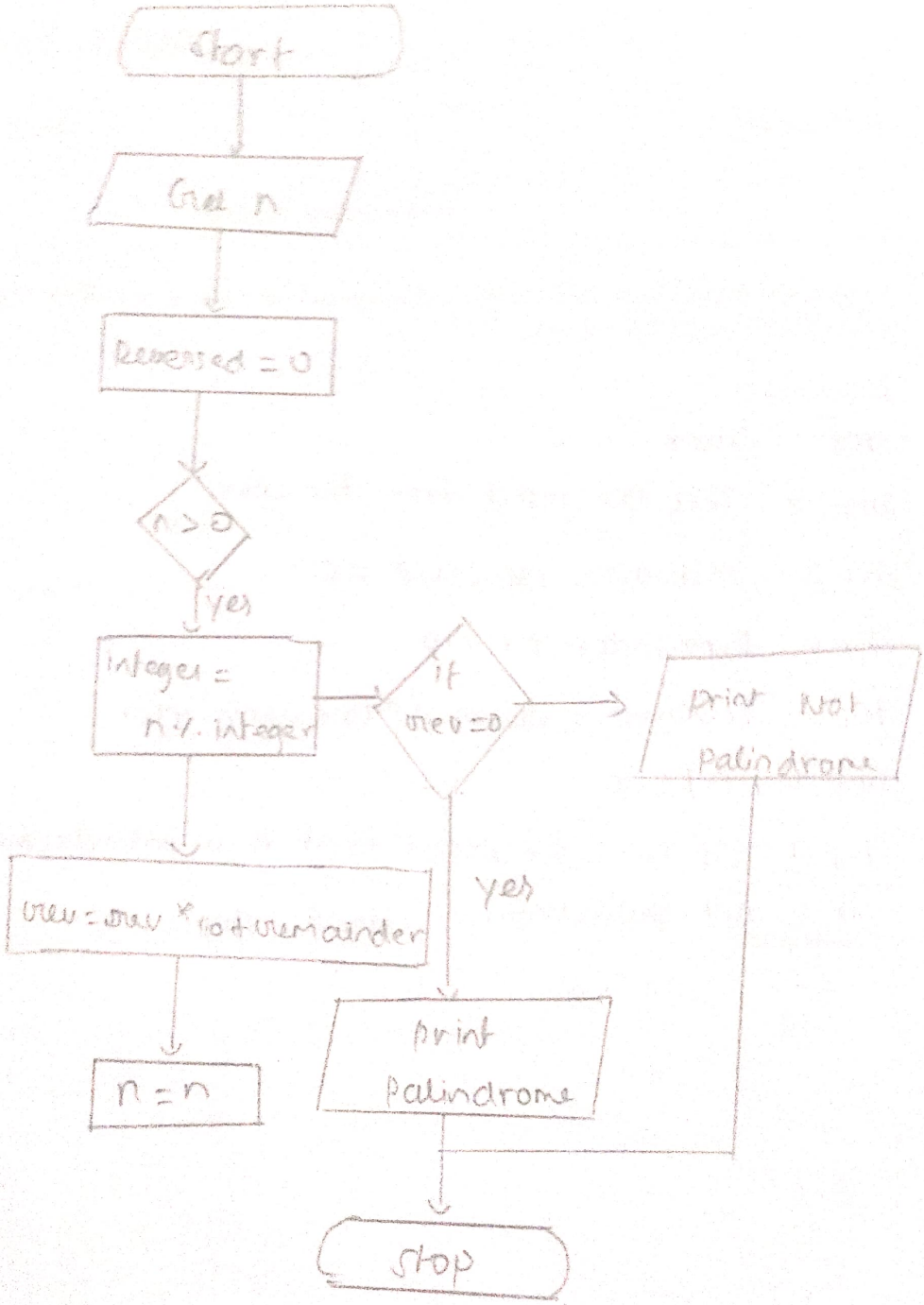
Step 5: Reversed = reversed * 10 + remainder

Step 6: n /= 10

Step 7: If n == Reversed print it is palindrome or else print it is not palindrome. Step 8: Stop.

Flowchart:

FLOW CHART :


start
Get n
reversed = 0
n > 0
yes
integer = n % integer
if rev = 0
Print Not Palindrome
rev = rev * 10 + remainder
yes
n = n
Print Palindrome
stop

Ex. No.: 06 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.

Step 2: Declare variable.

Step 3: Get the number input from user.

Step 4: Initialize sum = 0.

Step 5: while loop with condition Num > 0.

Step 6: sum = sum + num % 10

Step 7: num = num / 10

Step 8: Print sum step 9: stop.

Flowchart: