

Ex. No.: I

Date: 24/10/24

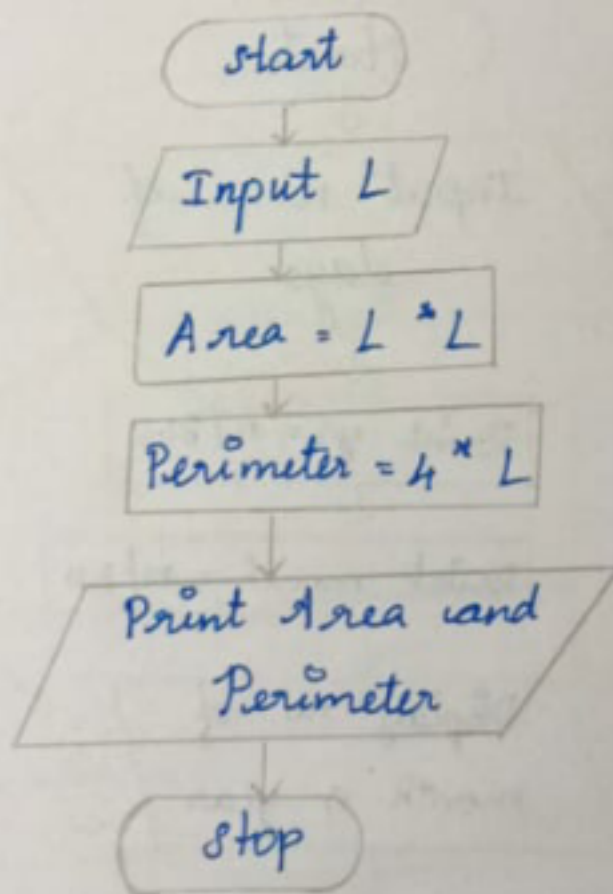
## Calculate Area and Perimeter

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

Algorithm:

- step 1 - start
- step 2 - Input length ( $L$ )
- step 3 - Area  $A = L * L$
- step 4 - Calculate perimeter  $P = 4 * L$
- step 5 - Print Area and Perimeter
- step 6 - stop

Flowchart:



Ex. No.: IDate: 24/10/2024

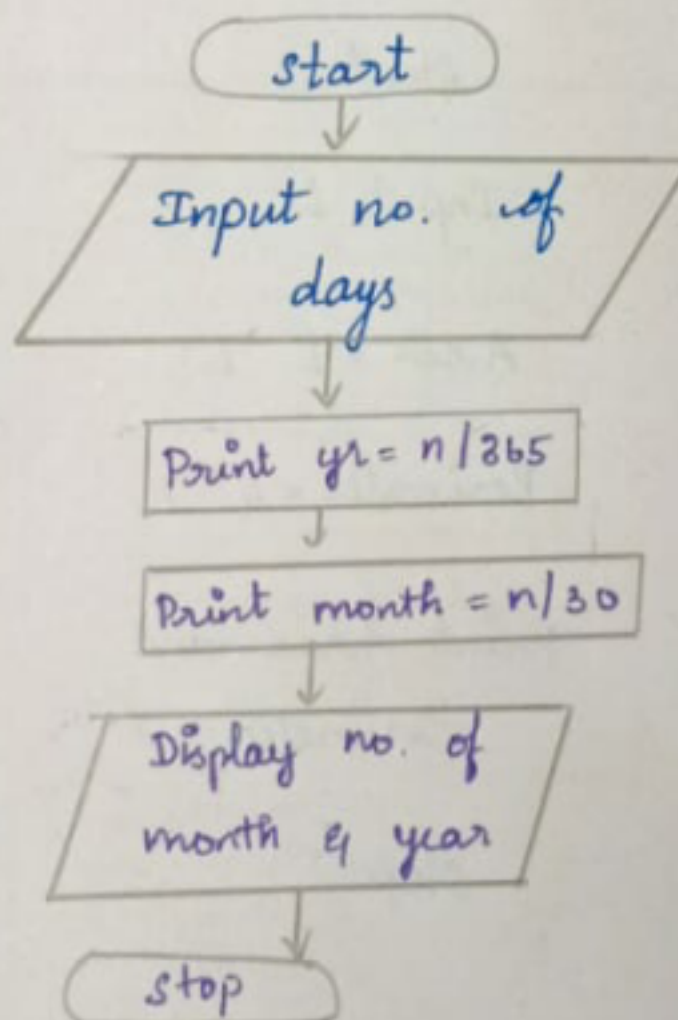
## Days to Year Conversion

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

Algorithm:

- Step 1 → start
- Step 2 - get number of days
- Step 3 - print years =  $n/365$
- Step 4 - print months =  $n/30$
- Step 5 - print number of months and years
- Step 6 - stop

Flowchart:



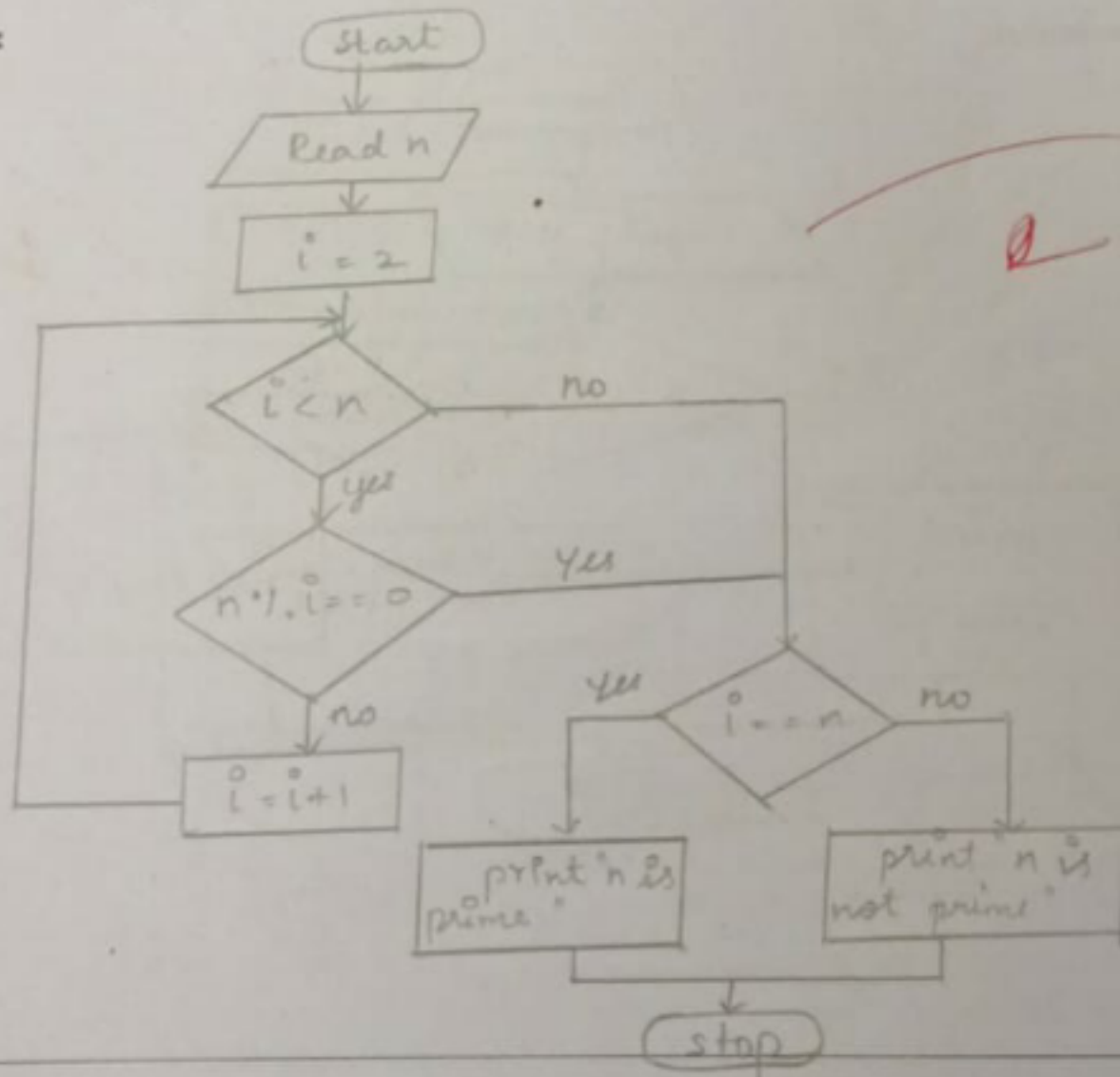
Ex. No.: 41Date: 24/10/2024**Prime Number**

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

Algorithm:

- Step 1 : start  
 Step 2 : Read n  
 Step 3 : set f = 1  
 Step 4 : if  $n == 1$ , print "n is not prime number" <sup>got to step 8</sup>  
 Step 5 : For  $i = 2$  to  $n - 1$   
 Step 6 : if  $n \% i == 0$ , set  $f = 0$  else go to step 5  
 Step 7 : if  $f == 1$ , print "n is not prime number" else print "n is prime number"  
 Step 8 : stop

Flowchart:





Ex. No.: IV

Date: 24/10/24

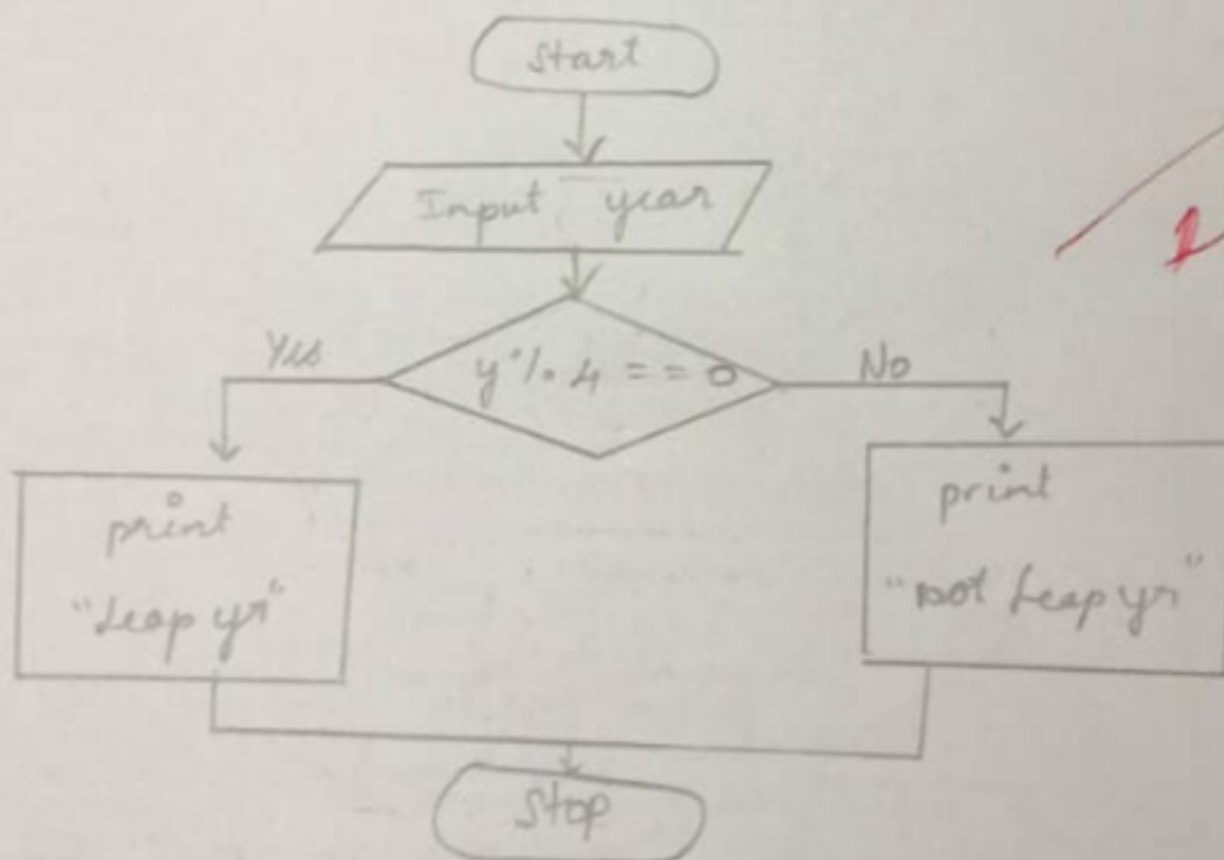
## Leap Year

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

Algorithm:

- Step 1 : start  
Step 2 : Input year  
Step 3 :  $rem = year \% 4$   
Step 4 : if  $(rem == 0)$ , print "Leap Year" otherwise print "not leap year"  
Step 5 : stop

Flowchart:



Ex. No.: 5Date: 24/10/2024

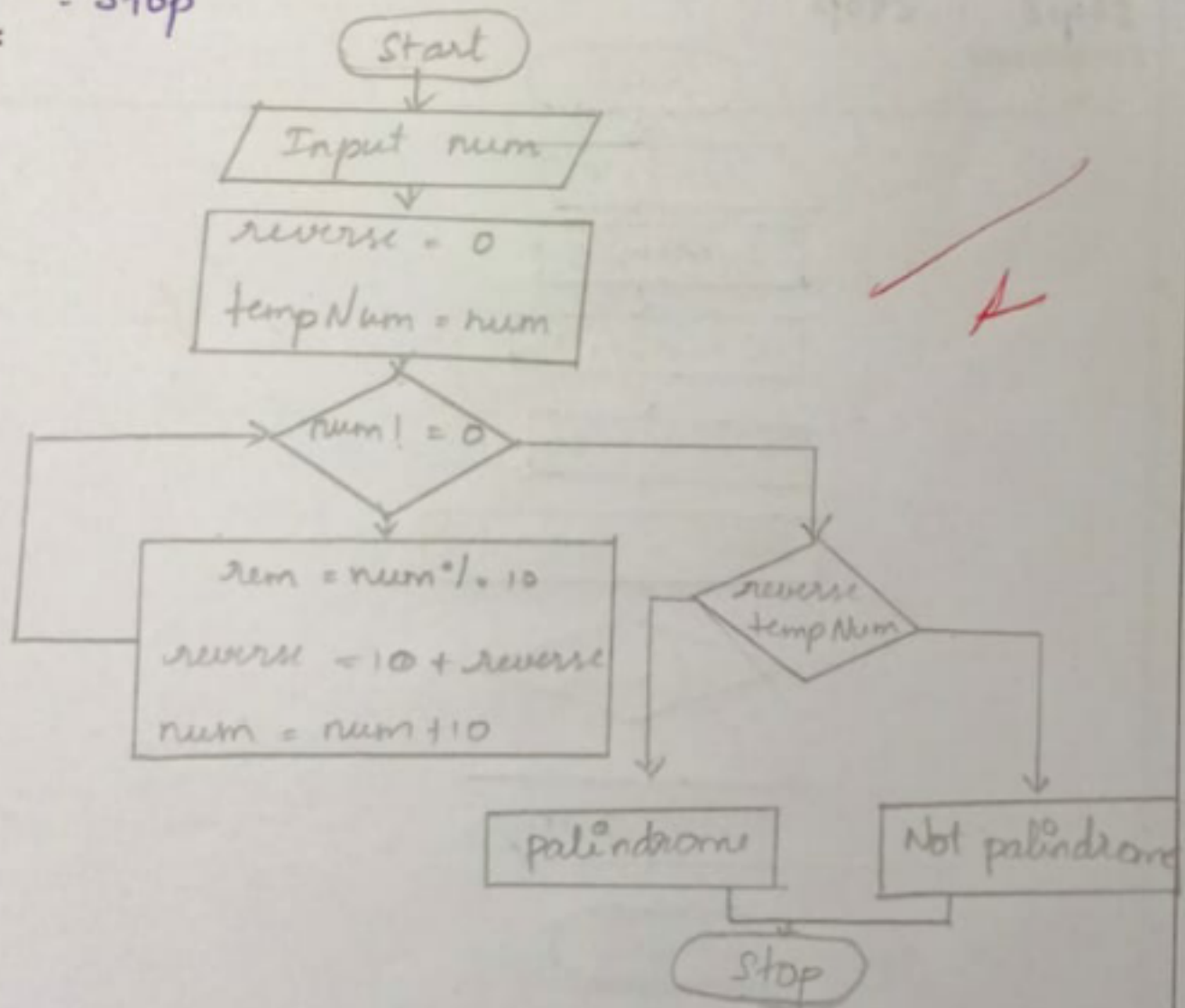
### Palindrome Number

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 number  
 step 3 : declare the variable, reverse & assign input to a temp variable & temp num = num  
 step 4 : start the while loop until num != 0 become false  
 step 5 : check if reverse = temp num  
 step 6 : If it is true then its' palindrome else its' not palindrome  
 step 7 : stop

Flowchart:



Ex. No.: VIDate: 24/10/2024**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 : Read input as  $x$   
Step 3 : Declare & initialize the variable sum, assign input as 0  
Step 4 : using formula:  $R = x \% 10$ ,  $x = x / 10$   
Step 5 : Add both variable with  $R$  variable  
Step 6 : using the if loop assign  $x$  as 0  
Step 7 : print the sum  
Step 8 : stop

Flowchart:

