

Ex. No.: 1

Date: 18.10.2024

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: Get the length of side 'a'

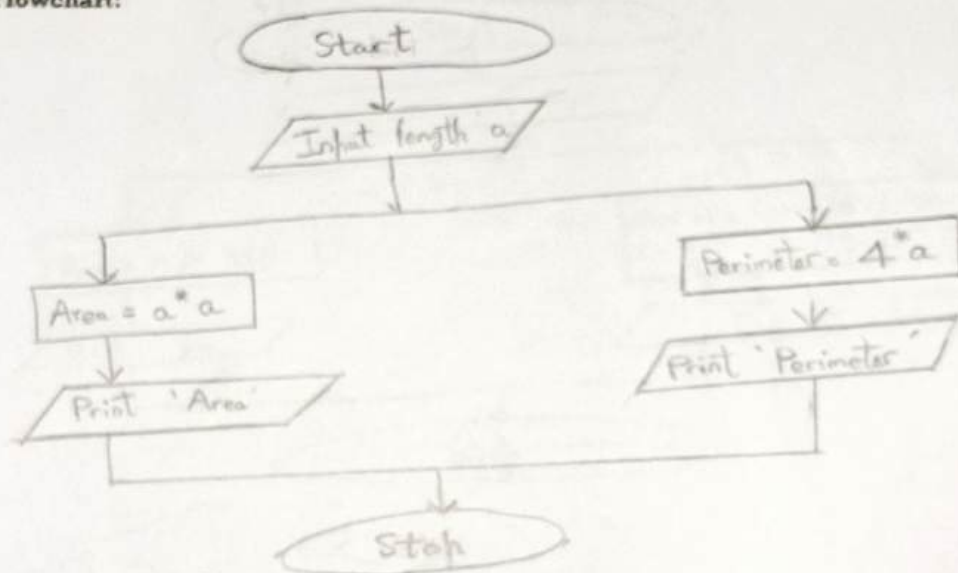
Step 3: $A = a * a$

Step 4: Print A as 'Area of Square'

Step 5: $P = 4 * a$

Step 6: Print P as 'Perimeter of Square'

Step 7: Stop

Flowchart:

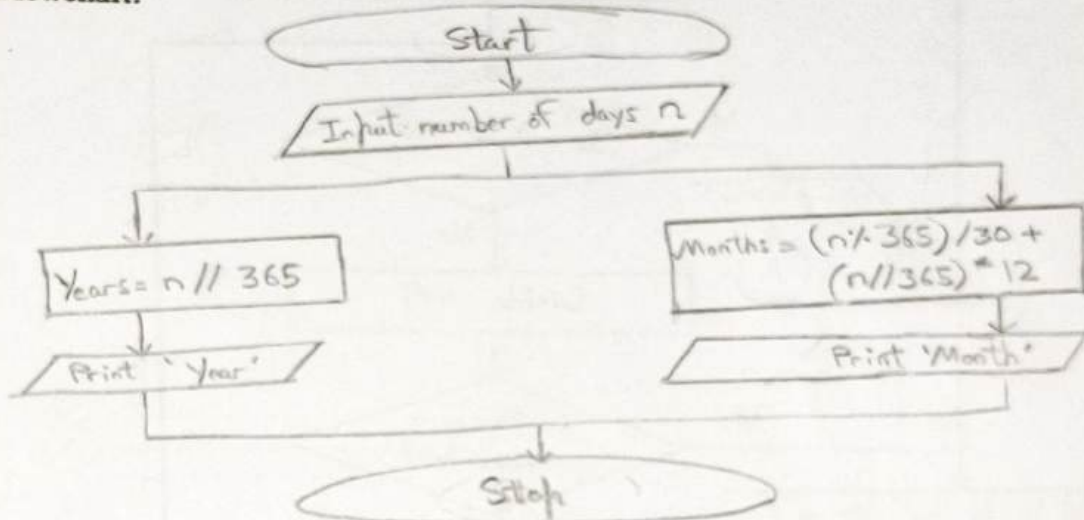
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22/10/24

Ex. No.: 11Date: 18.10.2024**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 the given number of days 'n'
 Step 3 : $Y = n // 365$
 Step 4 : Print Y as 'Number of years'
 Step 5 : $M = (n \% 365) / 30 + (n // 365) * 12$
 Step 6 : Print M as 'Number of months'
 Step 7 : Stop

Flowchart:

Done
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Ex. No.:

III

Date: 18.10.2024

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 given number n
- Step 3: If n is not an integer, then print " n is not a prime" and go to step 7 else go to step 4
- Step 4: If n is less than or equal to 1, then print " n is not a prime number" and go to step 7 else go to step 5
- Step 5: Set $i = 2$ to $n-1$
- Step 6: If $n \% i = 0$ for all values of i , then print " n is not a prime number" or else print " n is a prime number"
- Step 7: Stop

Flowchart:

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Ex. No.:

IV

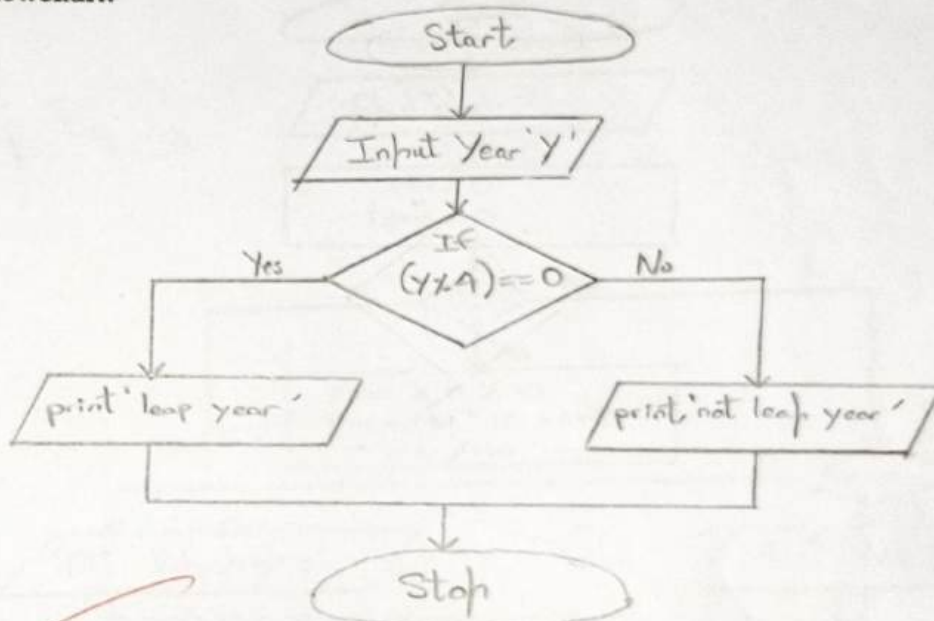
Date: 18.10.2024

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 year Y
Step 3: Set $r = Y \% 4$
Step 4: If $r == 0$, then print 'Y is a leap year' else print 'Y is not a leap year'
Step 5: Stop

Flowchart:

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Ex. No.:

V

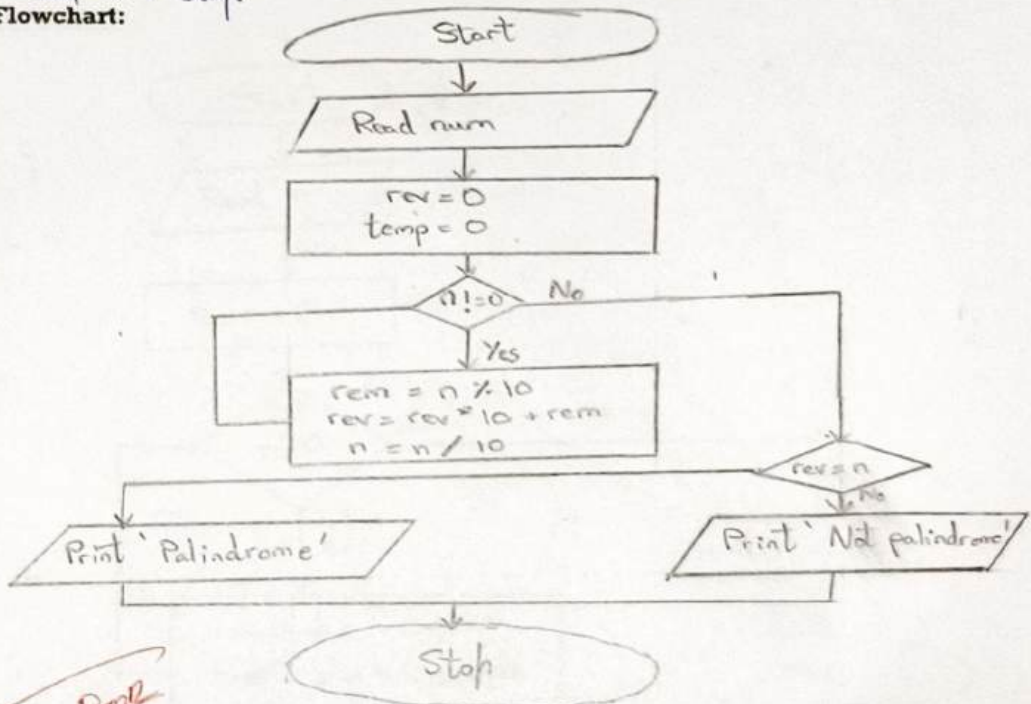
Date: 18.10.2024

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 : Read n
 Step 3 : Declare $temp = n, rev = 0$
 Step 4 : $rem = n \% 10$
 Step 5 : $rev = rev * 10 + rem$
 Step 6 : $n = n / 10$
 Step 7 : If $n > 0$ then go to steps 4 to 6 else go to step 8
 Step 8 : If $temp == rev$ then print 'n is a palindrome number'
 Step 9 : else print 'n is not a palindrome number'
 Step 9 : Stop

Flowchart:

Ppr
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Ex. No.:

VI

Date: 18-10-2024

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 number n
 Step 3: Declare $sum = 0$
 Step 4: $remainder = n \% 10$
 $sum = sum + remainder$
 $n = n / 10$
 Step 5: If $n > 0$ then go to step 4 else go to next step
 Step 6: Print 'Sum'
 Step 7: Stop

Flowchart: