

Ex. No.: 1

Date: 22/10/24

Calculate Area and Perimeter

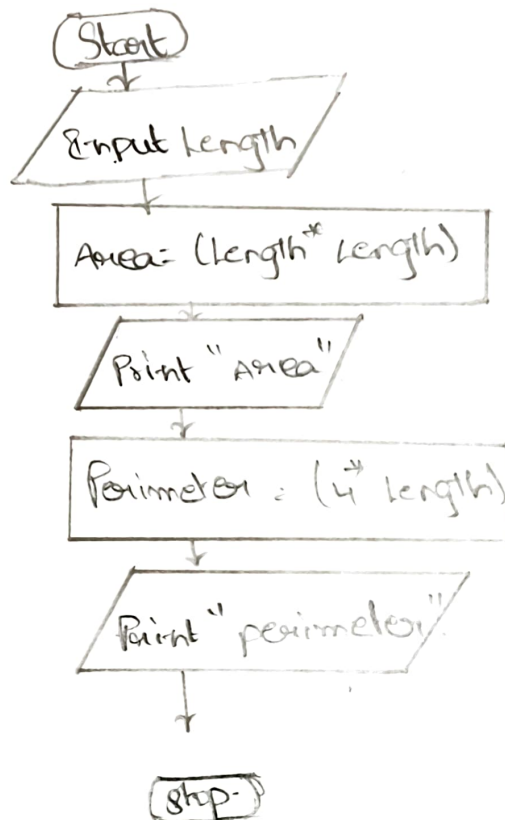
Write an Algorithm and draw a Flowchart to Calculate the area and perimeter of a square.

Algorithm:

Step 1: Start

Step 2: Read the value a as side of square.Step 3: $A = a * a$.Step 4: print A as Area of squareStep 5: $P = 4 * a$ Step 6: print P as perimeter of square

Step 7: Stop.

Flowchart:Rpr

Ex. No.: 2

Date: 22/10/24

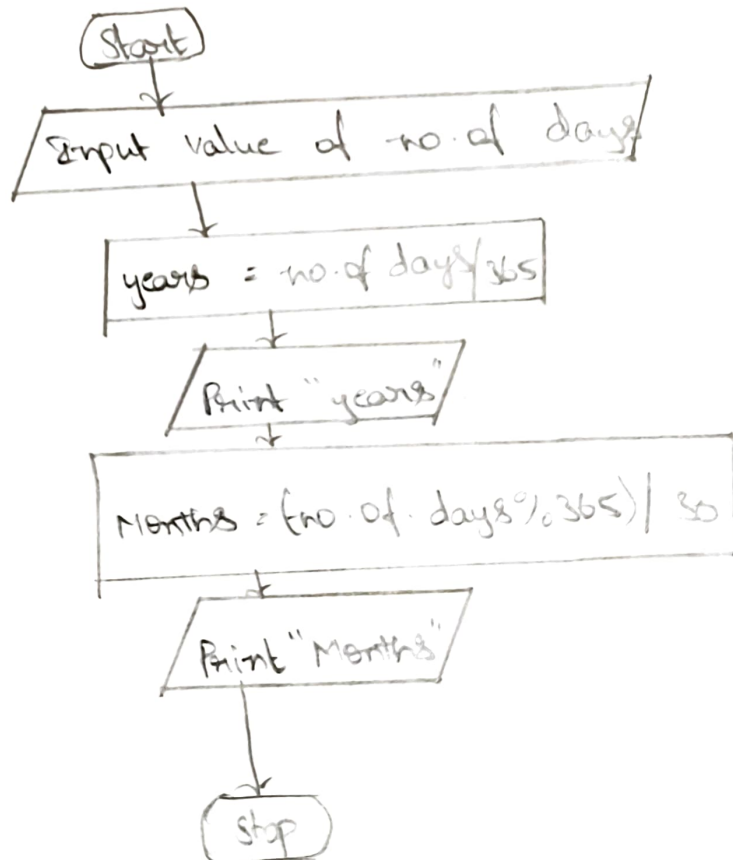
Days to Year Conversion

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

Algorithm:

- Step 1: Start
 Step 2: Read the value a as no. of days.
 Step 3: $y = a / 365$
 Step 4: Print y as no. of years
 Step 5: $M = (a \% 365) / 30$
 Step 6: Print M as no. of months.
 Step 7: Stop.

Flowchart:



12/12

Ex. No.: 3

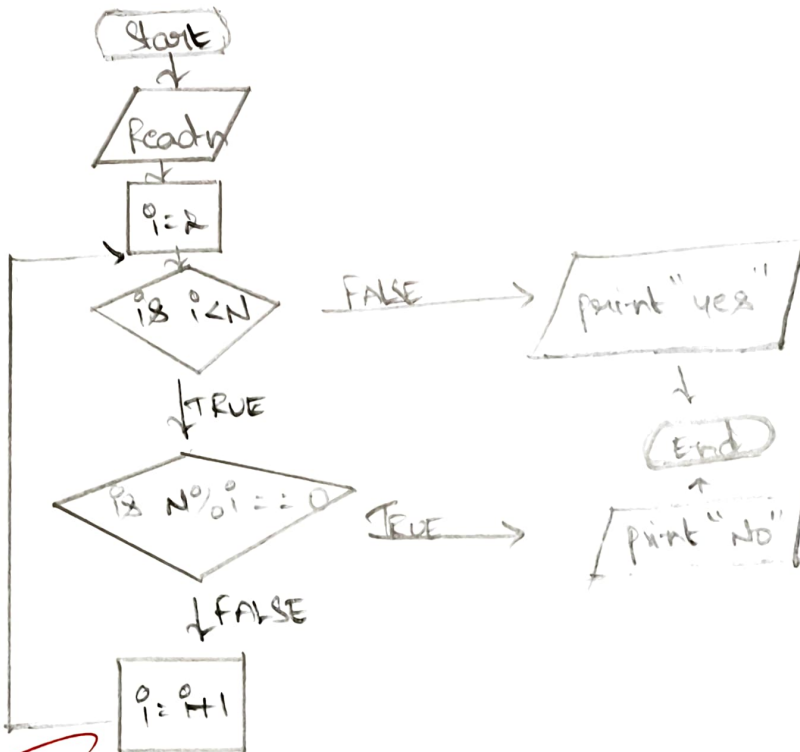
Date: 22/10/24

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 an value & assign it to variable N.
- Step 3: If $N \leq 0$ (or) 1, print Not- prime number.
- Step 4: elif if N is only divisible by itself, where $N \% i = 0$
- Step 5: print N is prime number.
- Step 6: Stop.

Flowchart:

12/11/24

Ex. No.: 4

Date: 22/10/24

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:: Read the value, year.

Step 3:: If $(\text{year} \% 4 = 0 \text{ and } \text{year} \% 100 \neq 0) \text{ or } \text{year} \% 400 = 0$, then

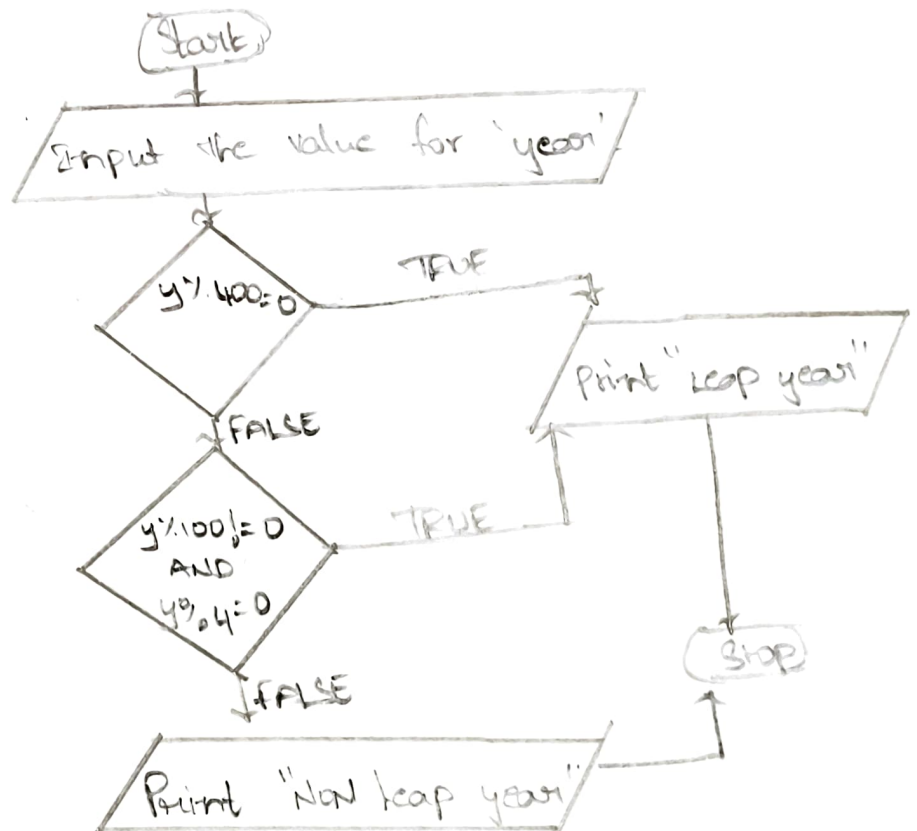
Step 4:: print "Leap year".

Step 5:: else:

Step 6:: print "Non Leap year"

Step 7:: Stop

Flowchart:



Ppr

Ex. No.: 5

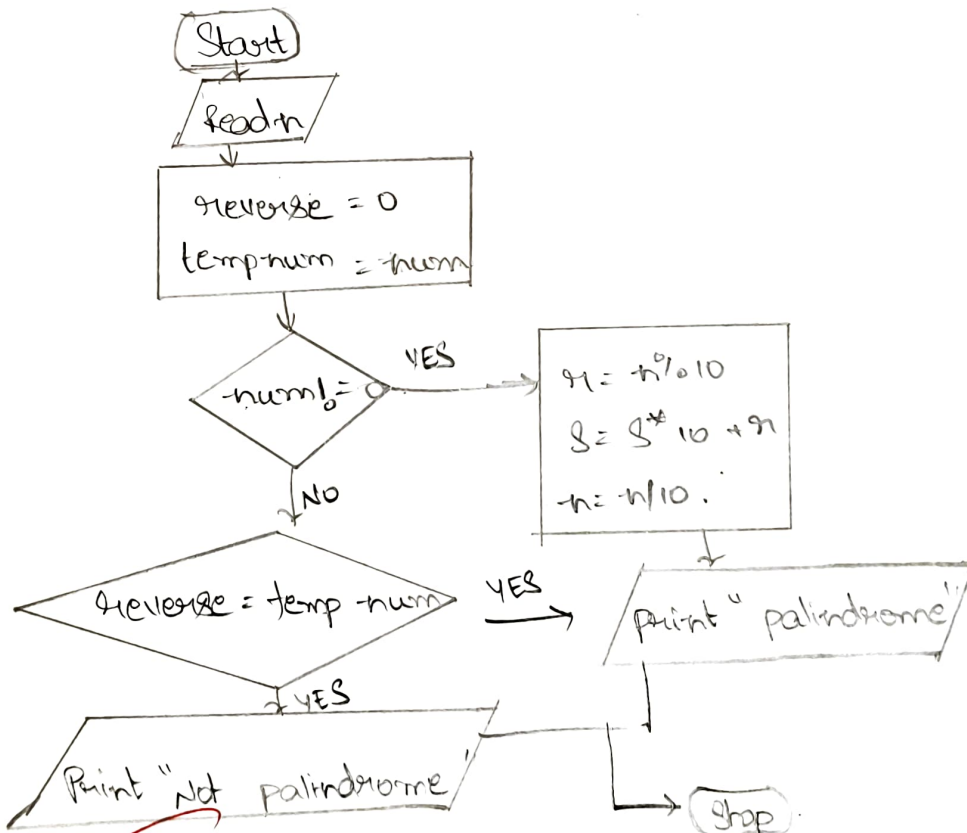
Date: 22/10/24

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: Read the value, n .
 Step 3: Create empty Variable $reverse = 0$, $S = 0$.
 Step 4: Start the while loop after checking whether $(n \neq 0)$. If $n = 0$ exit the loop.
 Step 5: Loop with following operations
 $reverse = reverse * 10 + n \% 10$
 $S = S * 10 + n$
 $n = n / 10$.
 Step 6: If $S = n$ print the number is palindrome, else
 Step 7: display not a palindrome number.
 Step 8: Stop.

Flowchart:

Rpl

Ex. No.: 6

Date: 22/10/24

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: Read a value, N .

Step 3: Create a variable $Sum = 0$;

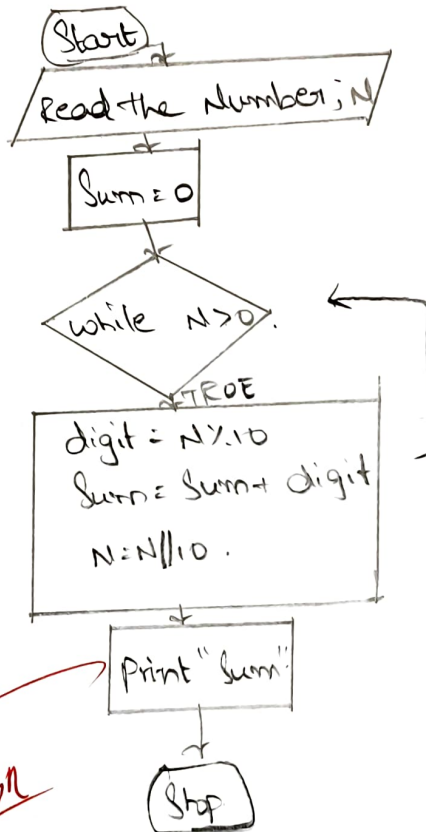
Step 4: While $N > 0$, create a loop (or) enter the loop.

Step 5: If $N > 0$, $Sum = Sum + digit$, $digit = N \% 10$ & extract the last digit by $N = N // 10$.

Step 6: Print Sum of digits in N .

Step 7: Stop.

Flowchart:



CONTINUE LOOP TILL
 $N < 0$;

Prn