

Ex. No.: I

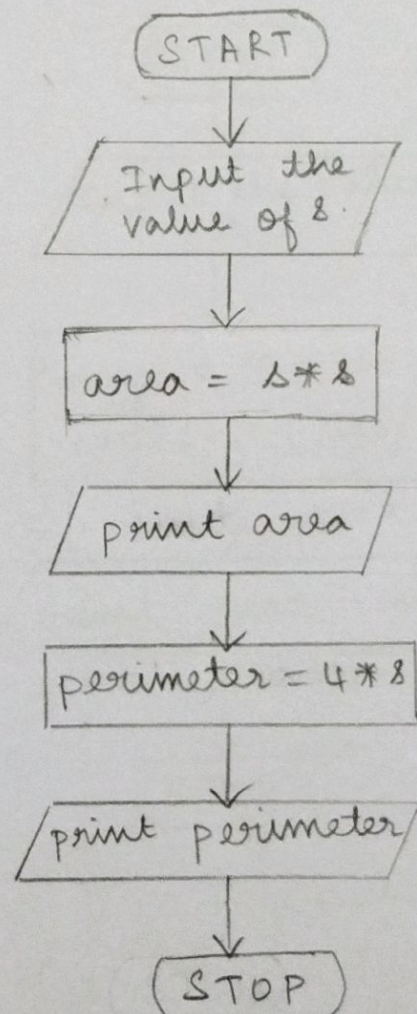
Date: 18/10/24

**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 : Get the value (s) for side of square  
STEP 3 : Print area after  $s * s$ .  
STEP 4 : Print perimeter after  $4 * s$ .  
STEP 5 : Stop the program.

**Flowchart:**



Ex. No.: II

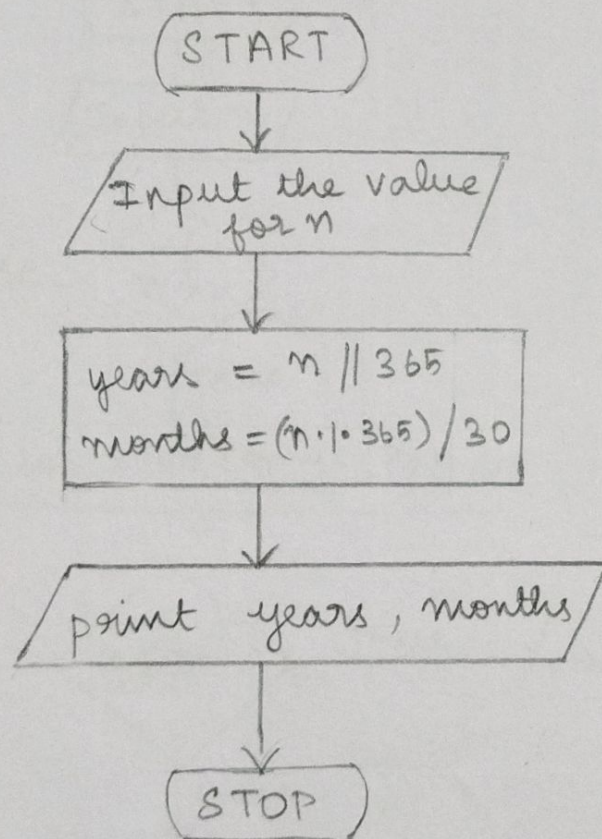
Date: 18/10/24

**Days to Year Conversion**

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

**Algorithm:**

- STEP 1: Start the program  
STEP 2: Get the value ( $n$ ) for no. of days.  
STEP 3: Print years after dividing  $n$  by 365 to get quotient  
STEP 4: Print months after dividing  $(n \% 365) / 30$   
STEP 5: Stop the program

**Flowchart:**



Ex. No.: 11Date: 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 the program.

STEP 2: Input  $n$ .

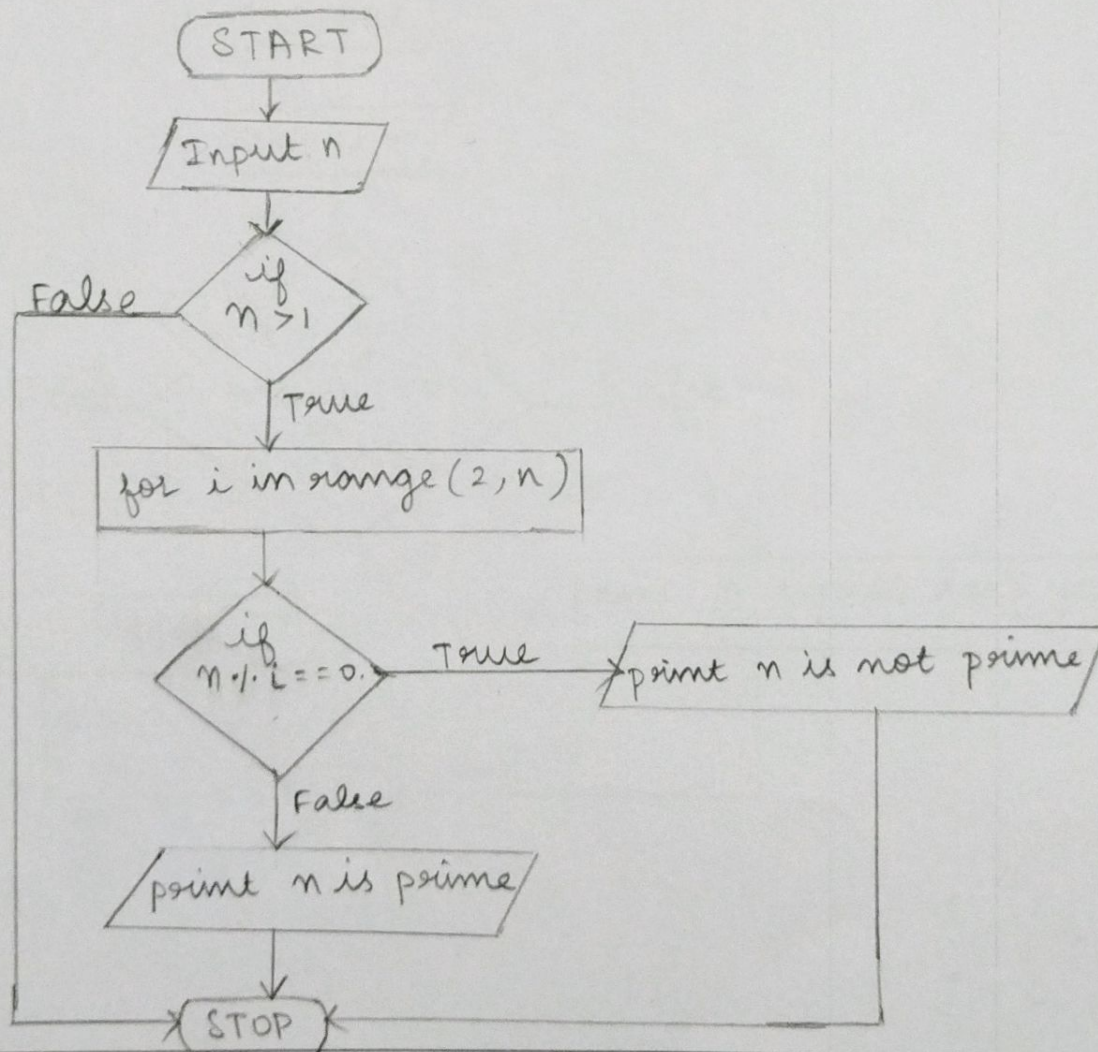
STEP 3: check if  $n > 1$  and iterate loop( $i$ ) from 2 to  $n$ .

STEP 4: check if  $(n \% i == 0)$ ; if true print  $n$  is ~~prime~~  
not prime

STEP 5: if  $n \% i \neq 0$ ; then  $n$  is prime.

STEP 6: Stop the program.

**Flowchart:**





Ex. No.: IV

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 the program.

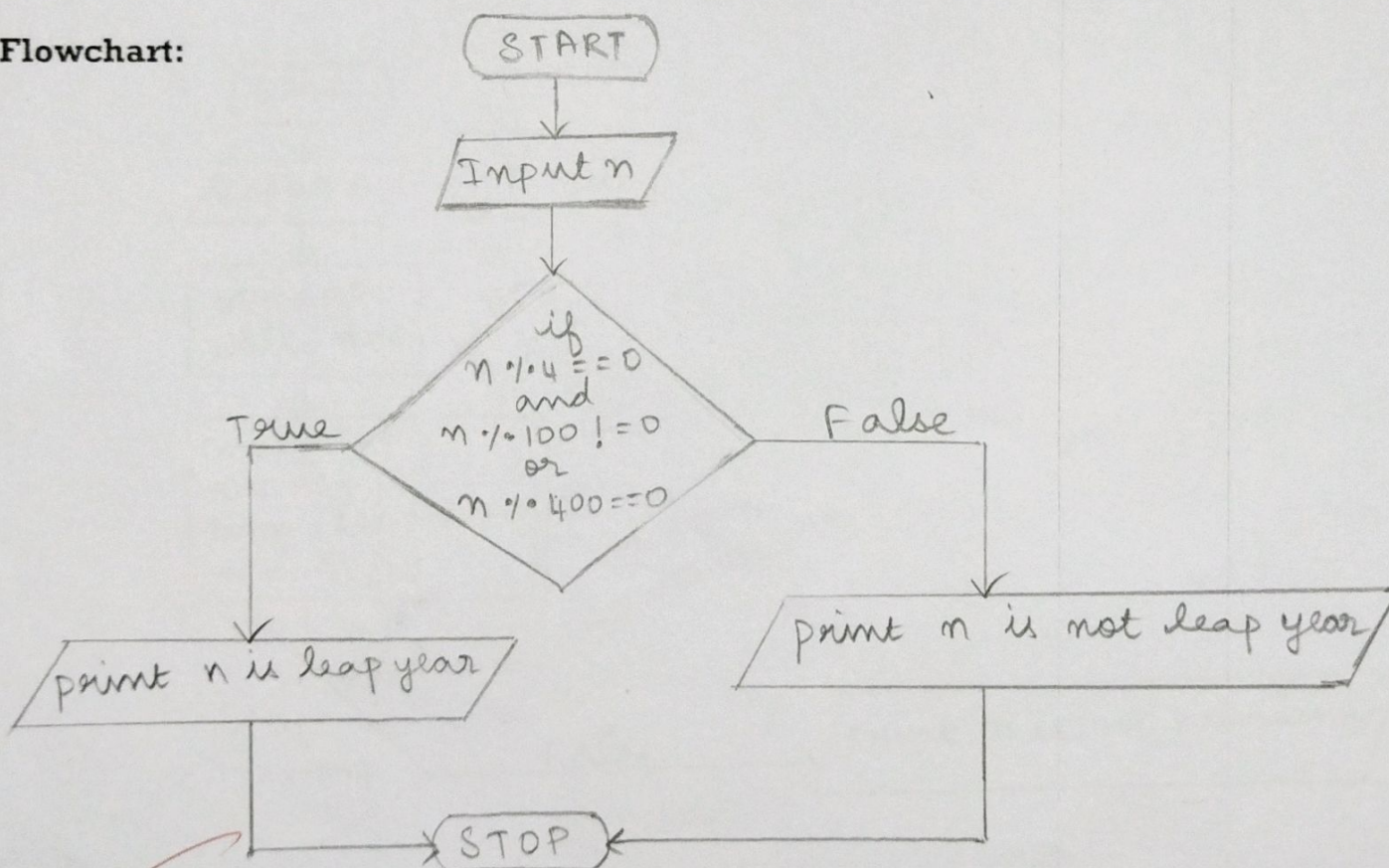
STEP 2: Input  $n$ .

STEP 3: Check if  $n \% 4 == 0$  and  $n \% 100 != 0$  or  $n \% 400 == 0$

STEP 4: If true,  $n$  is leap year; else,  $n$  is not leap year

STEP 5: Stop the program.

**Flowchart:**



RPR

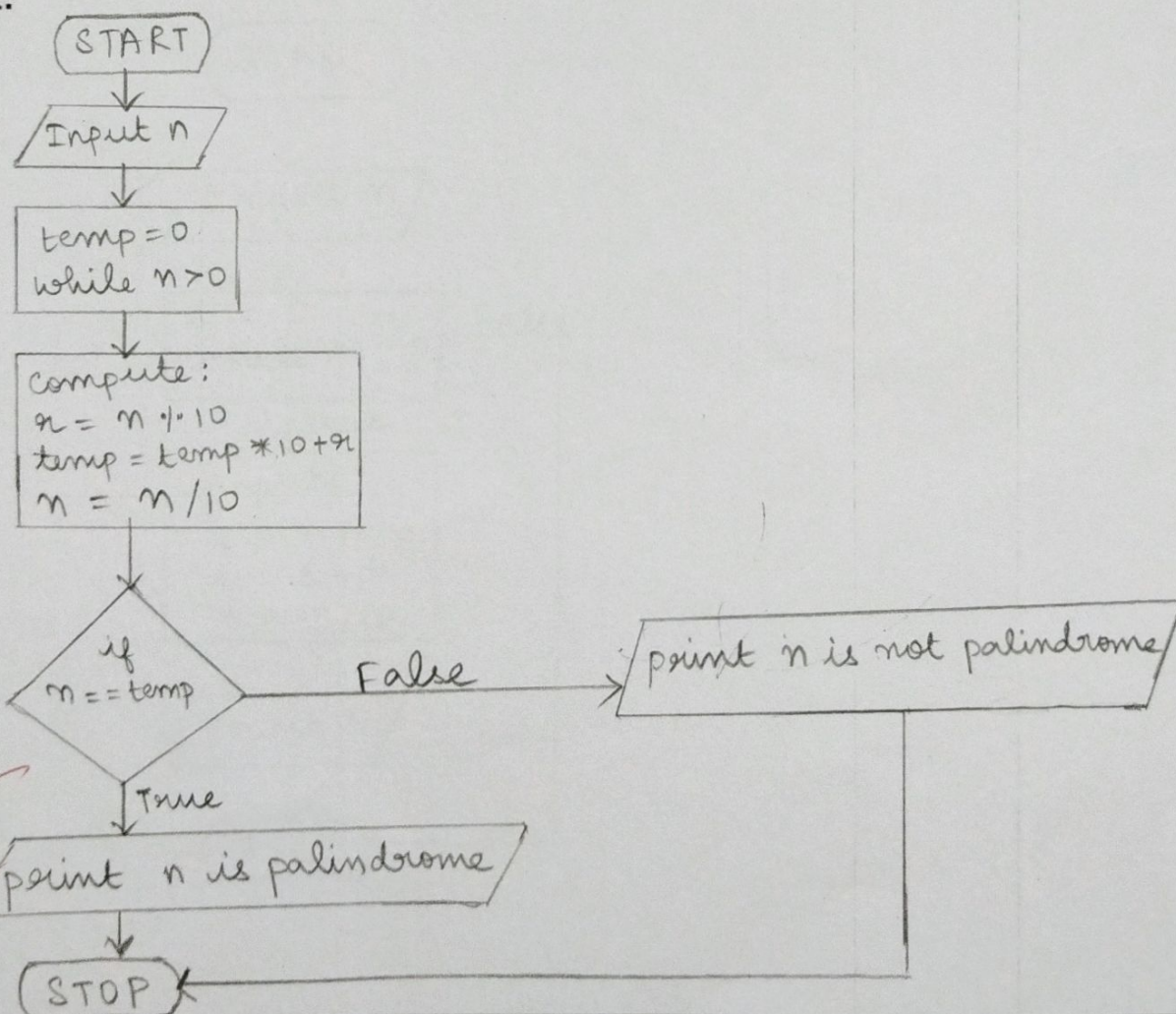


Ex. No.: VDate: 18/10/24**Palindrome Number**

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

**Algorithm:**

- STEP 1: Start the program.  
 STEP 2: Input  $n$ .  
 STEP 3: Initialise  $temp = 0$   
 STEP 4: In a loop, compute  $rl = n \% 10$ .  
 STEP 5: compute  $temp = temp * 10 + rl$   
 STEP 6: compute  $n = n / 10$ .  
 STEP 7: If  $n == temp$ ; print  $n$  is palindrome.  
 STEP 8: Else print  $n$  is not palindrome  
 STEP 9: Stop the program.

**Flowchart:**



Ex. No.: VI

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: Input  $n$   
 STEP 3: Initialise  $s = 0$ .  
 STEP 4: Iterate and check if  $n > 0$ .  
 STEP 5: Compute  $q = n \% 10$   
 STEP 6: Compute  $s = s + q$   
 STEP 7: Compute  $n = n / 10$ .  
 STEP 8: Print  $s$ .  
 STEP 9: Stop the program.

## Flowchart:

