Ex. No.: 1

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

Step 2: Read value for a

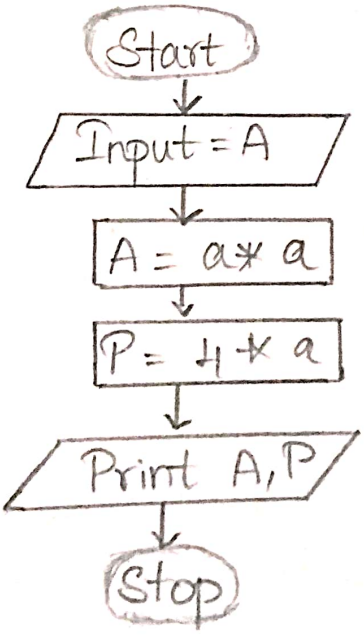
Step 3: area = a * a

Step 4: perimeter = 4 * a

Step 5: display area, perimeter.

Step 6: end

Flowchart:



Ex. No.: 11

Date: 18/10/2024

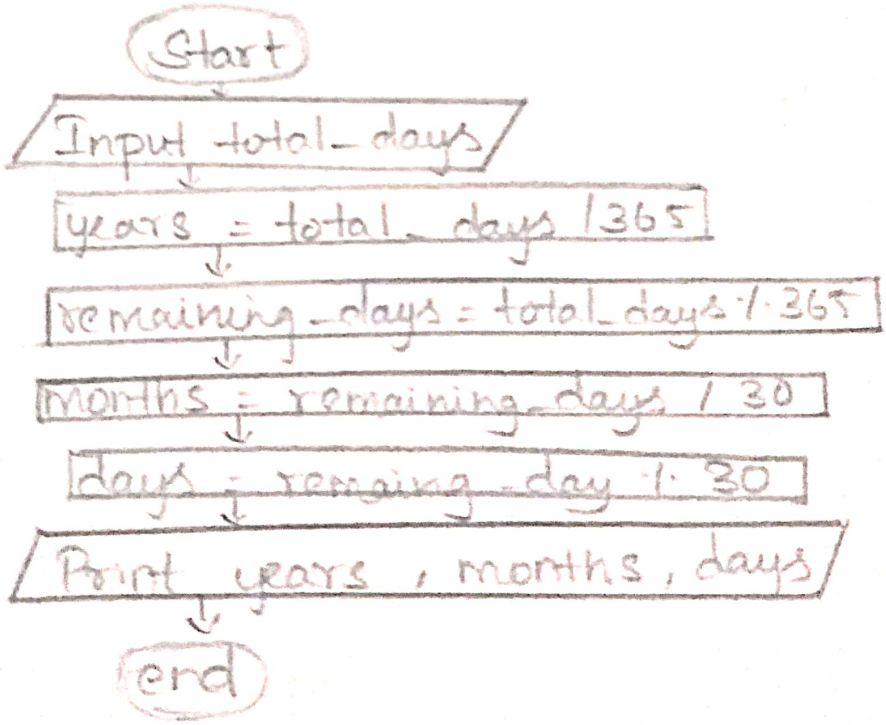
Days to Year Conversion

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

Algorithm:

Step 1 : Start
Step 2 : Read value for total_days
Step 3 : years = total_days / 365
Step 4 : remaining_days = total_days % 365
Step 5 : months = remaining_days / 30
Step 6 : days = remaining_days % 30
Step 7 : display years, months, days
Step 8 : end

Flowchart:



PPL

Ex. No.: 11

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 value for n

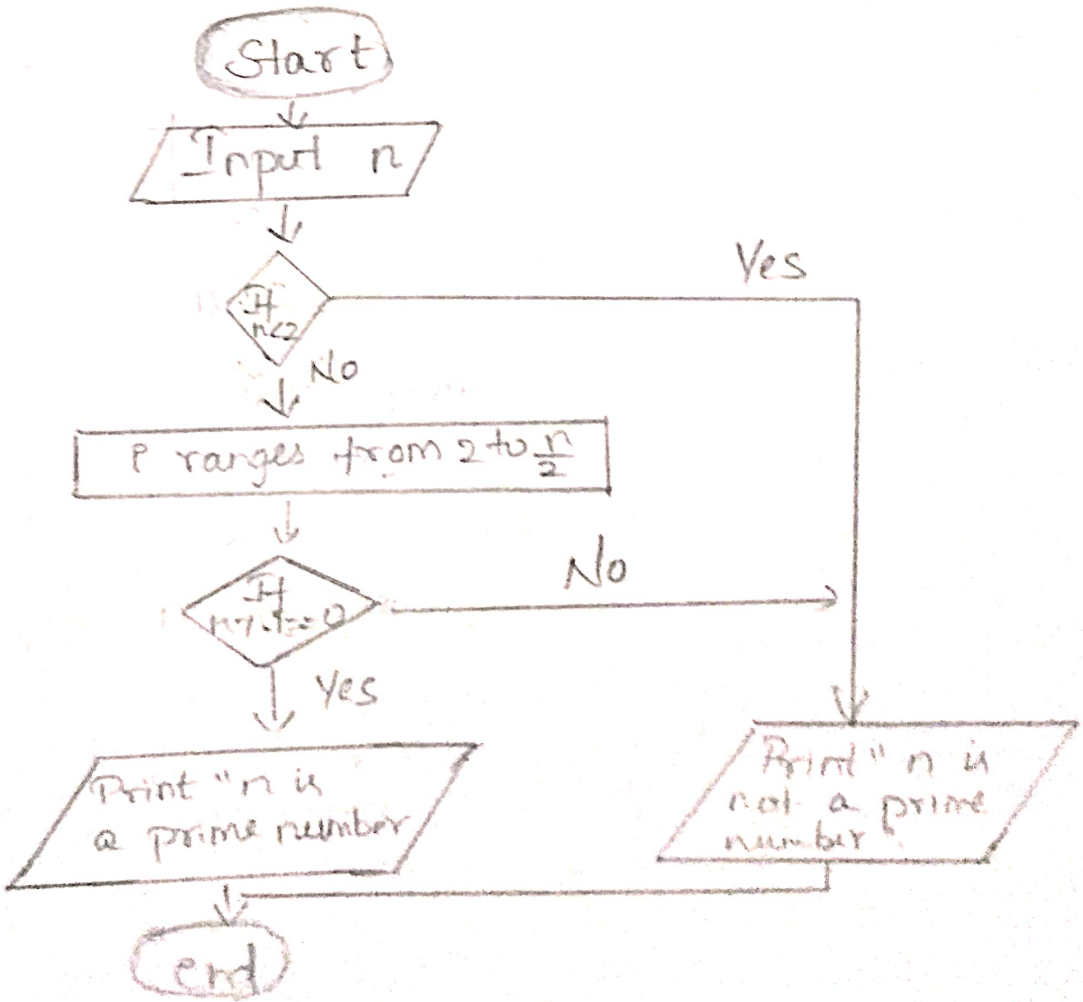
Step 3 : Make variable i ranging from 2 to n/2

Step 4 : If n is less than 2 print n is not a prime number

Step 5 : If n % i = 0 then print n is a prime number else print n is not a prime number

Step 6 : end

Flowchart:



PTR

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:

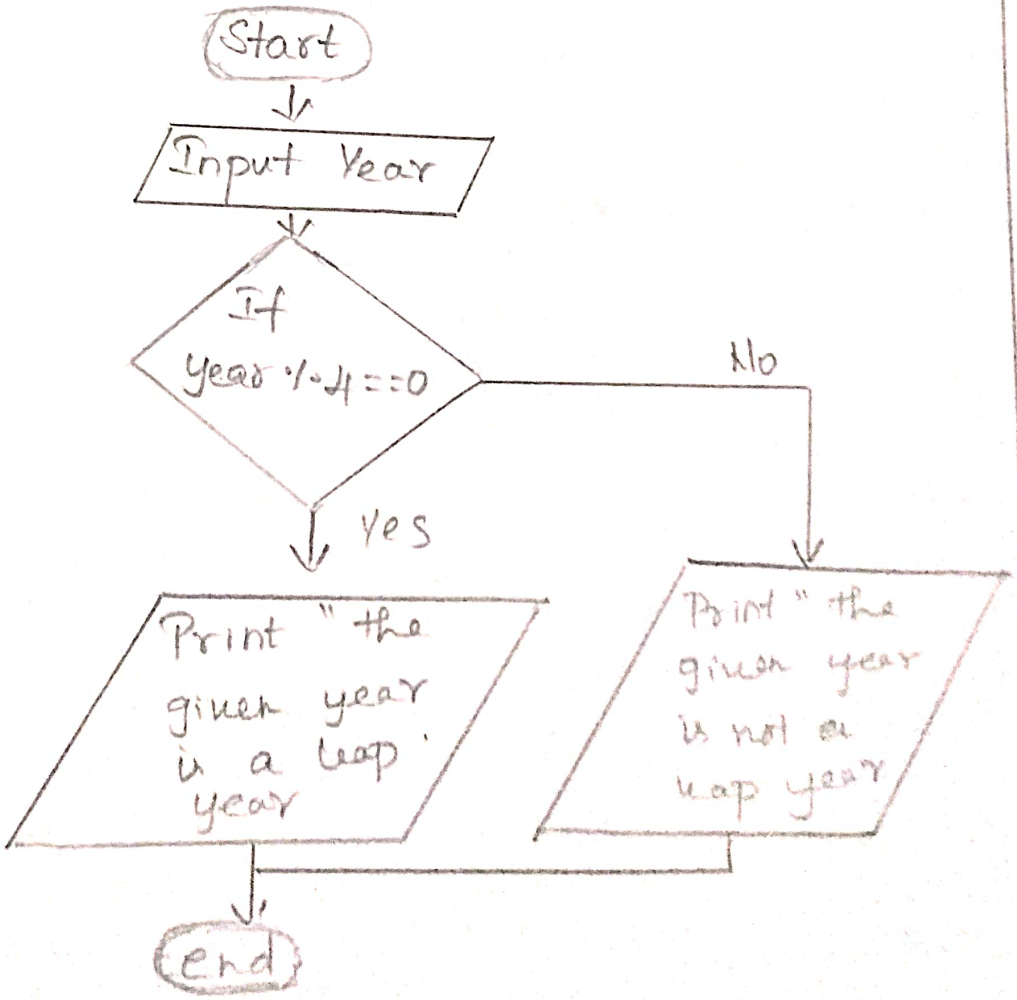
Step 1 : Start

Step 2 : Read value for year.

Step 3 : If year %4 = 0 then print "the given year is a leap year". Else print "the given year is not a leap year".

Step 4 : End.

Flowchart:



Ex. No.: 5

Date: 18/10/2024

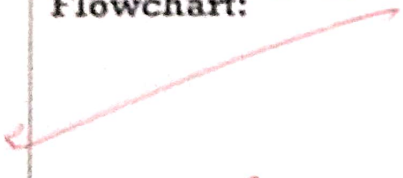
Palindrome Number

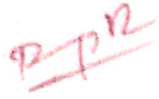
Write an Algorithm and draw a Flowchart to check whether the given number is palindrome number or not.

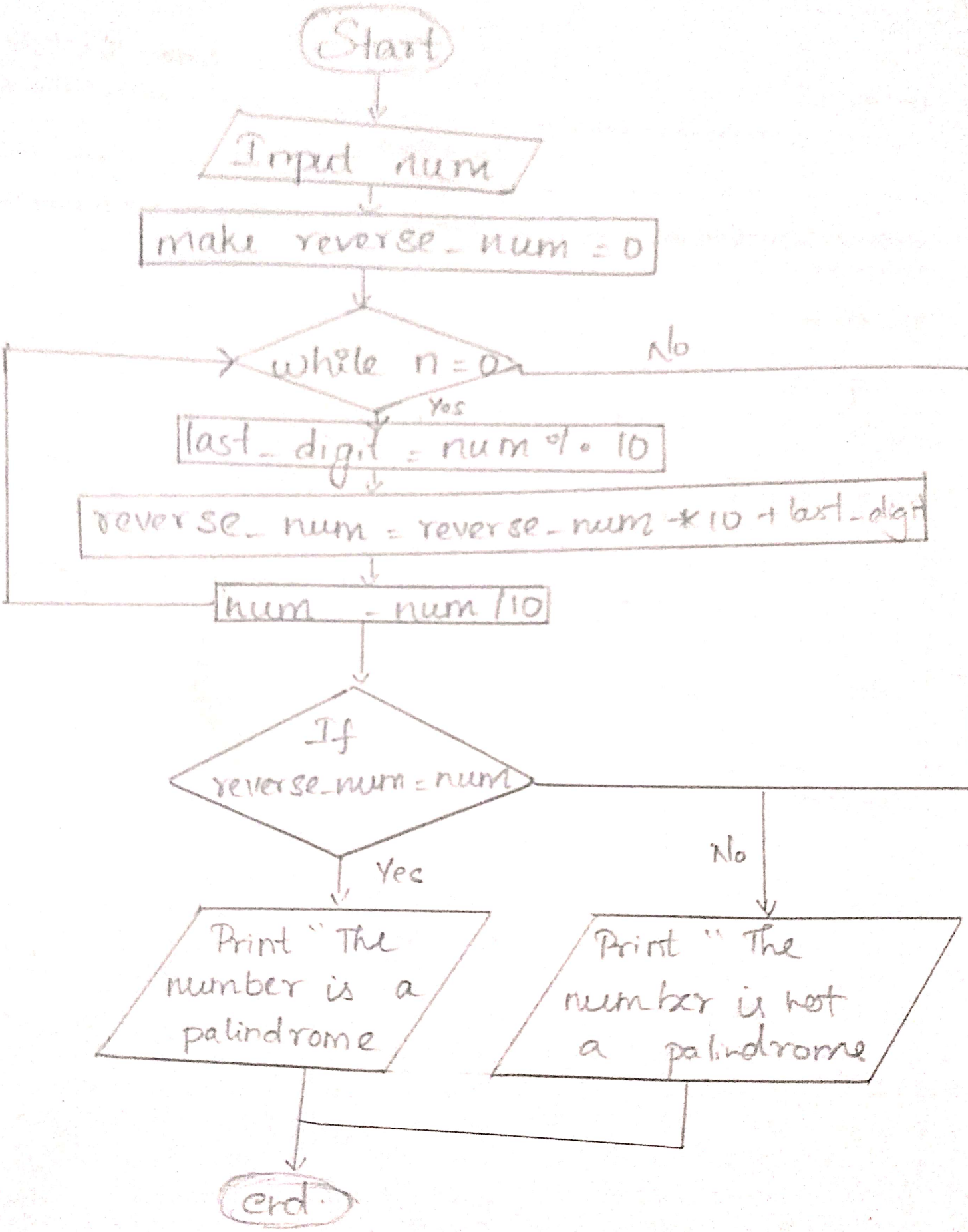
Algorithm:

Step 1 : Start
step 2 : Read value for num and store in temporary variable (num)
Step 3 : Make variable reverse_num
step 4 : while num > 0
last_digit = num % 10
reverse_num = reverse_num * 10 + last_digit
num = num / 10
Step 5 : If reverse_num = num then print "The number is a palindrome" .else print "The number is not palindrom"
step6 : end

Flowchart:






Start
Input num
make reverse_num = 0
while n = 0
No
Yes
last_digit = num % 10
reverse_num = reverse_num * 10 + last_digit
num = num / 10
If reverse_num = num
Yes
No
Print "The number is a palindrome
Print "The number is not a palindrome
end

Ex. No.: VI

Date: 18/10/2024

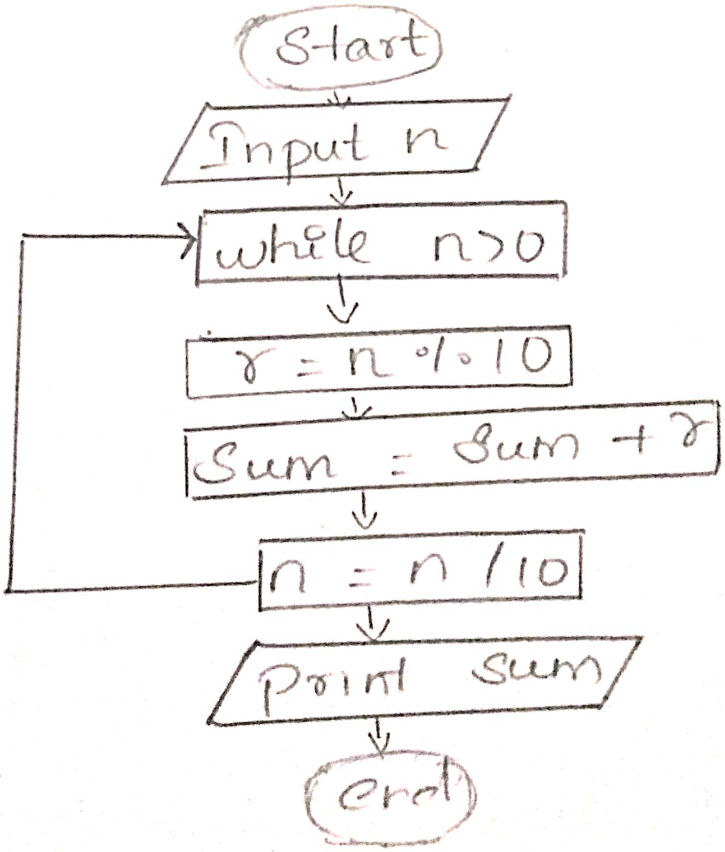
Sum of Digits

Write an Algorithm and draw a Flowchart to calculate the sum of digits in the given number.

Algorithm:

Step 1 : Start
Step 2 : Read value for n
Step 3 : Make a variable sum
Step 4 : while n>0
    r = n%10
    sum = sum + r
    n = n/10
Step 5 : print sum
Step 6 : end

Flowchart:



RZP