Roll no: 241801326 Name: Yogeetha. A

GE23131 - Programming Using C

Ex. No.: I **Date:** 21/09/2024

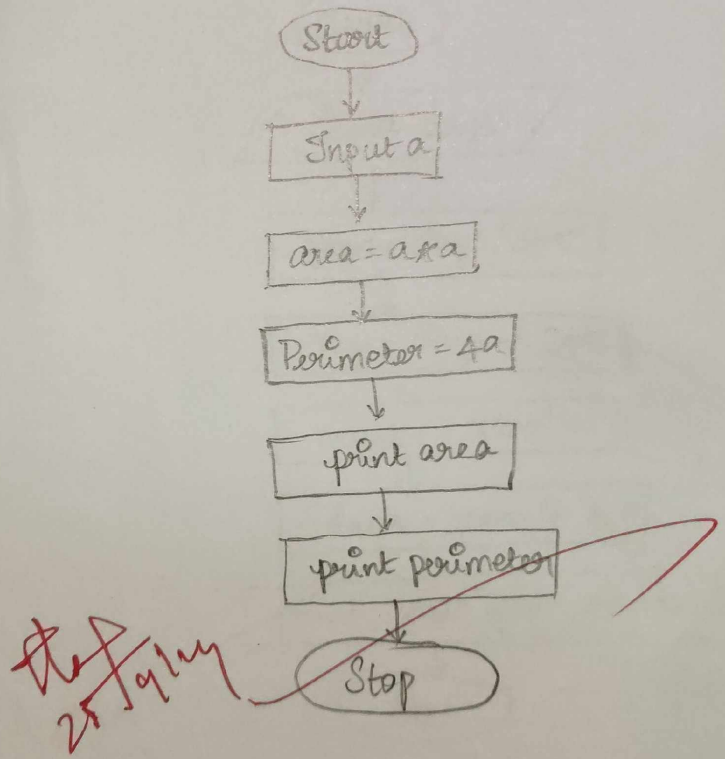
Calculate Area and Perimeter

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

Algorithm:

Step 1 : Start
Step 2 : Declare a, area, perimeter
Step 3 : Input a
Step 4 : area = a * a
Step 5 : perimeter = 4a
Step 6 : printf area
Step 7 : printf perimeter
Step 8 : End.

Flowchart:



Ex. No.: II Date: 21/09/2024

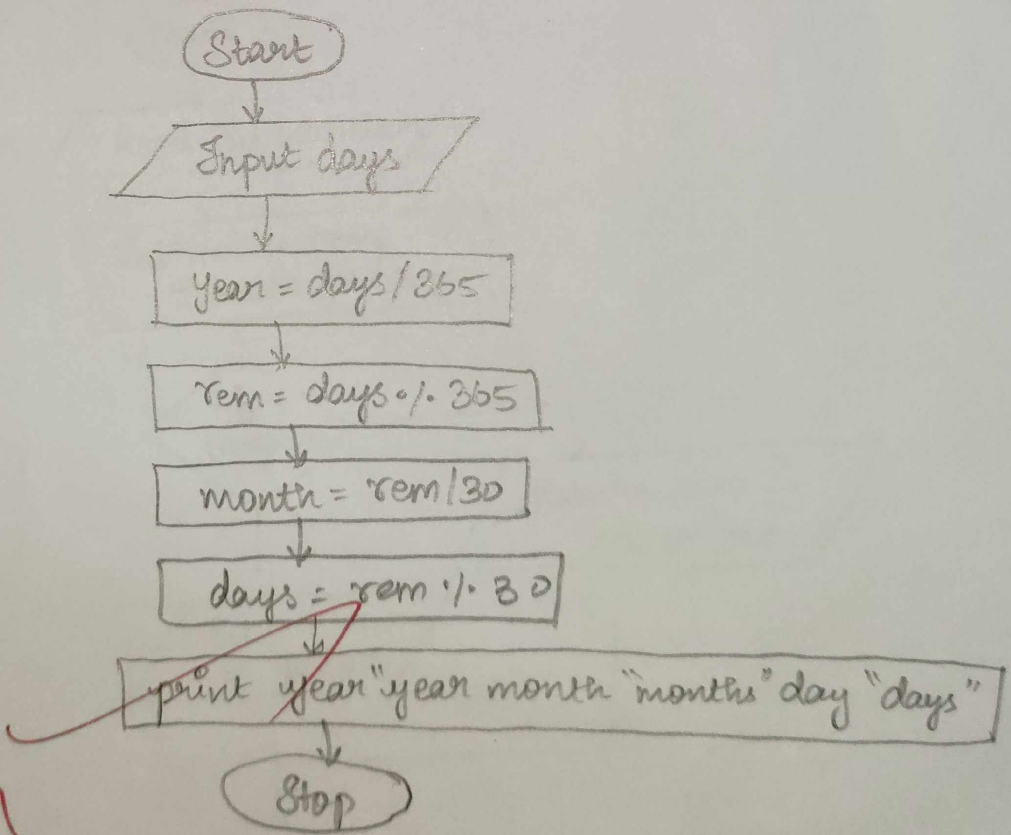
Days to Year Conversion

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

Algorithm:

Step 1: Start
Step 2: Declare days, month, year, rem
Step 3: Input days
Step 4: year = days / 365
Step 5: rem = day %. 365
Step 6: month = rem / 30
Step 7: days = rem %. 30
Step 8: print year "year month "months" days"days"
Step 9: End

Flowchart:



21/9/24

Ex. No.: 11 Date: 21/09/2024

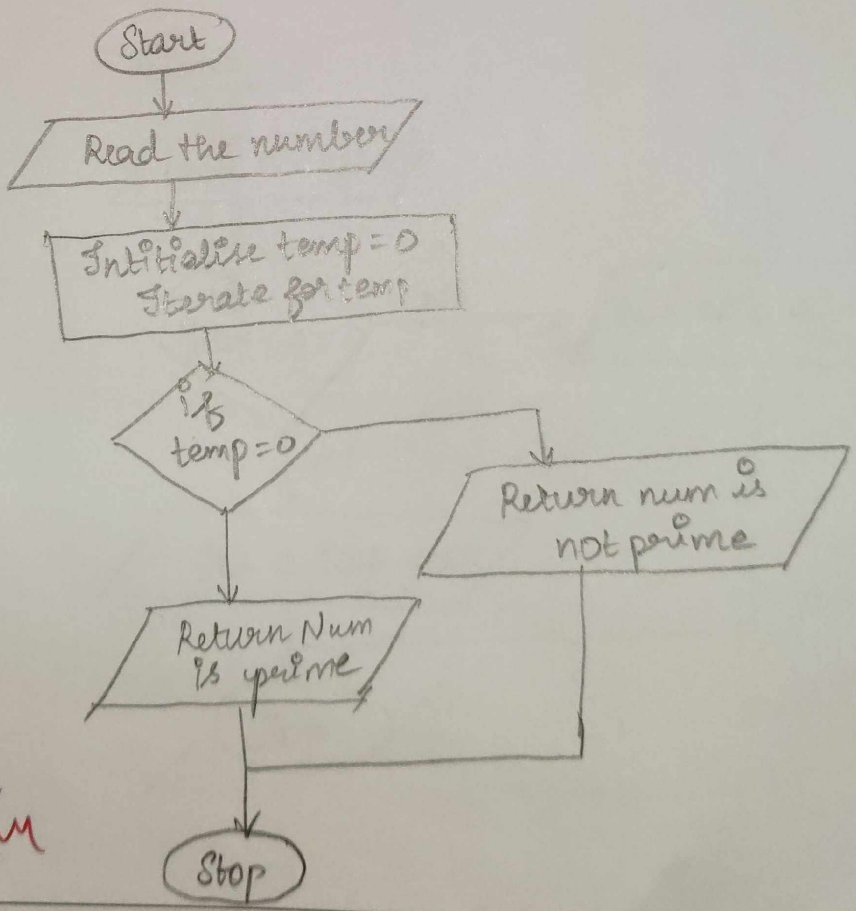
Prime Number

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

Algorithm:

Step 1: Start
Step 2: Declare i, n
Step 3: Input n
Step 4: i = 2
while i<n, otherwise go to step 5
r = n % i
Check if r % 0, then go to step 6
i++
repeat
Step 5: print "prime number"
Step 6: print "Not a prime number"
Step 7: end.

Flowchart:



Roll no: 241801326 Name: Yogeetha. A

GE23131 - Programming Using C

Ex. No.: 1V Date: 25/09/2024

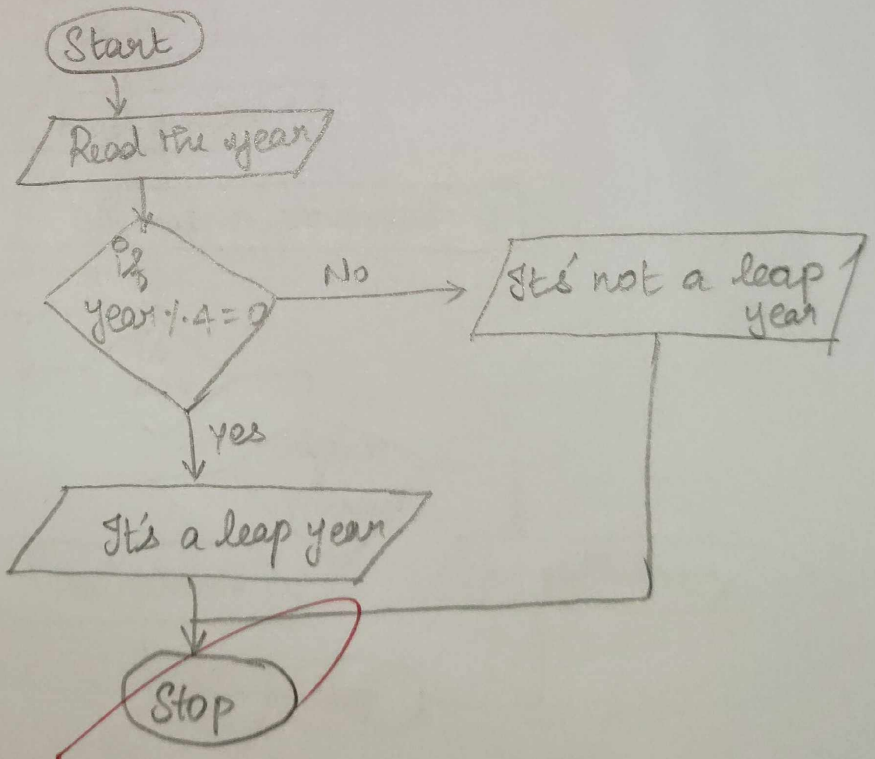
Leap Year

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

Algorithm:

Step 1: Start
Step 2: Declare a
Step 3: Check if a % 4 == 0, Otherwise goto step 6
Step 5: print "Leap year", go to Step 7
Step 6: print "Not a leap year"
Step 7: END

Flowchart:



Ex. No.: V **Date:** 25/09/2024

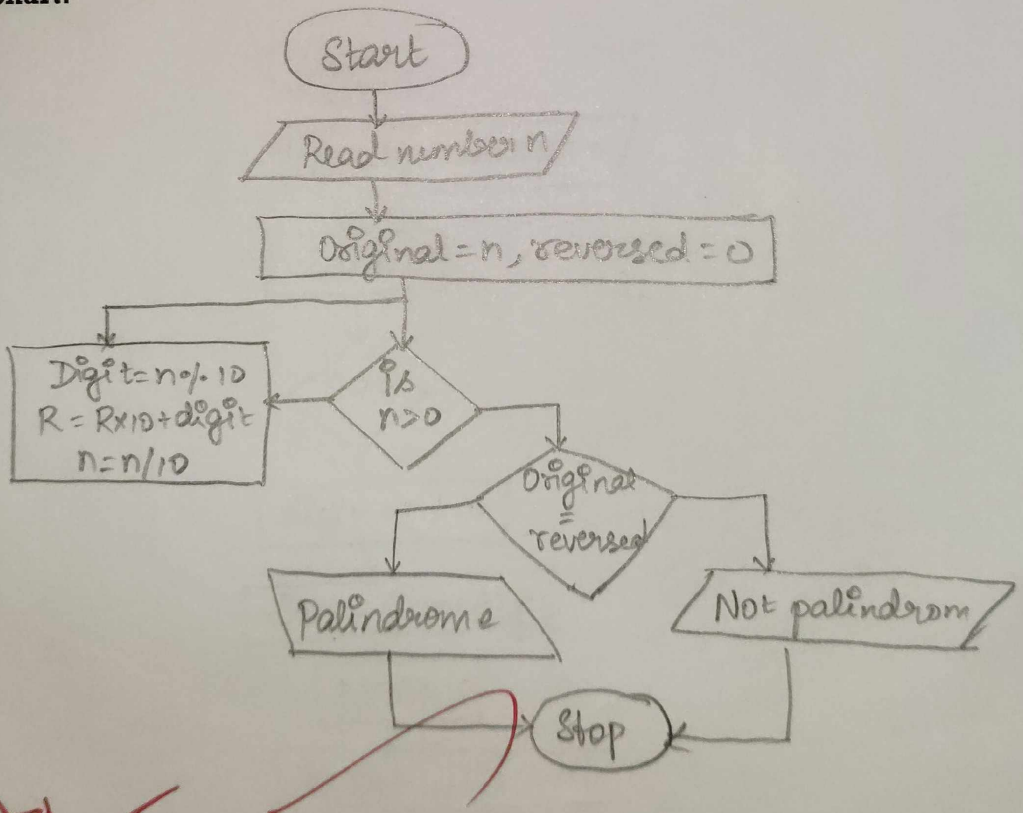
Palindrome Number

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

Algorithm:

Step 1: Start
Step 2: Declare n, last, rev = 0
Step 3: Input n
x = n
Step 4: while n > 0
4a last = n % 10
4b rev = rev * 10 + last
4c n = n / 10
4d repeat
Step 5: Check if x = rev, otherwise goto step 7
Step 6: Print 'Palindrome', goto step 8
Step 7: print 'Not a palindrome'
Step 8: End.

Flowchart:



25/9/24

Ex. No.: VI Date: 25/09/2024

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: Declare num, sum = 0, last
Step 3: Input num
Step 4: while num
4a last = num % 10
4b sum = sum + last
4c num = num/10
4d repeat
Step 5: print sum
step 6: End.

Flowchart: