Ex. No.: I **Date:** 21/9/24

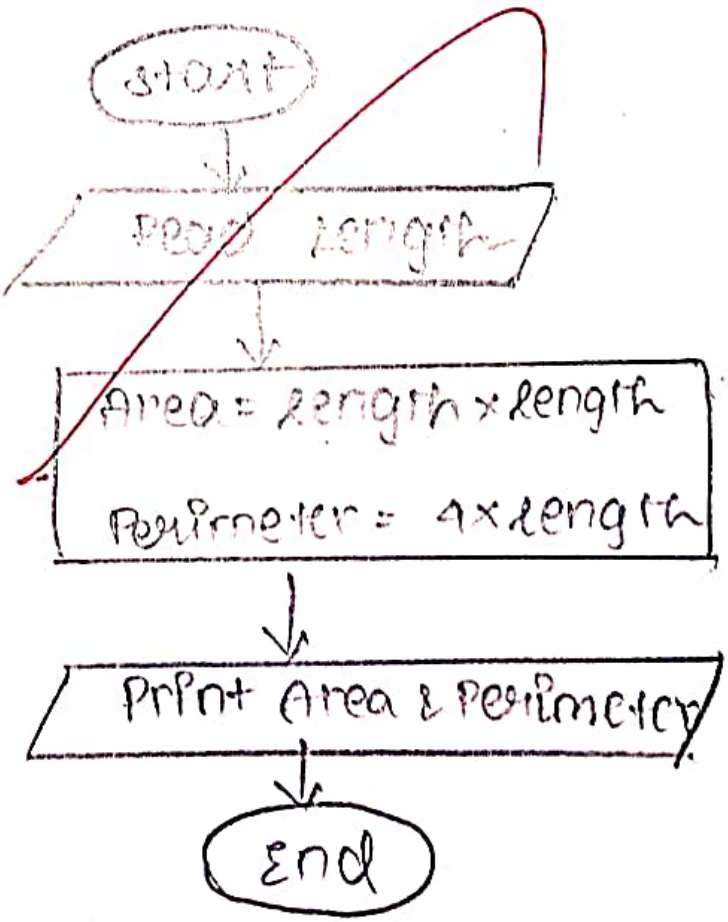
Calculate Area and Perimeter

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

Algorithm:

step 1: start
step 2: Get the length of one side of square as x
step 3: Area = x*x
step 4: perimeter = 4*x
step 5: print area & perimeter
step 6: stop

Flowchart:



Ex. No.: 11 **Date:** 21/9/24

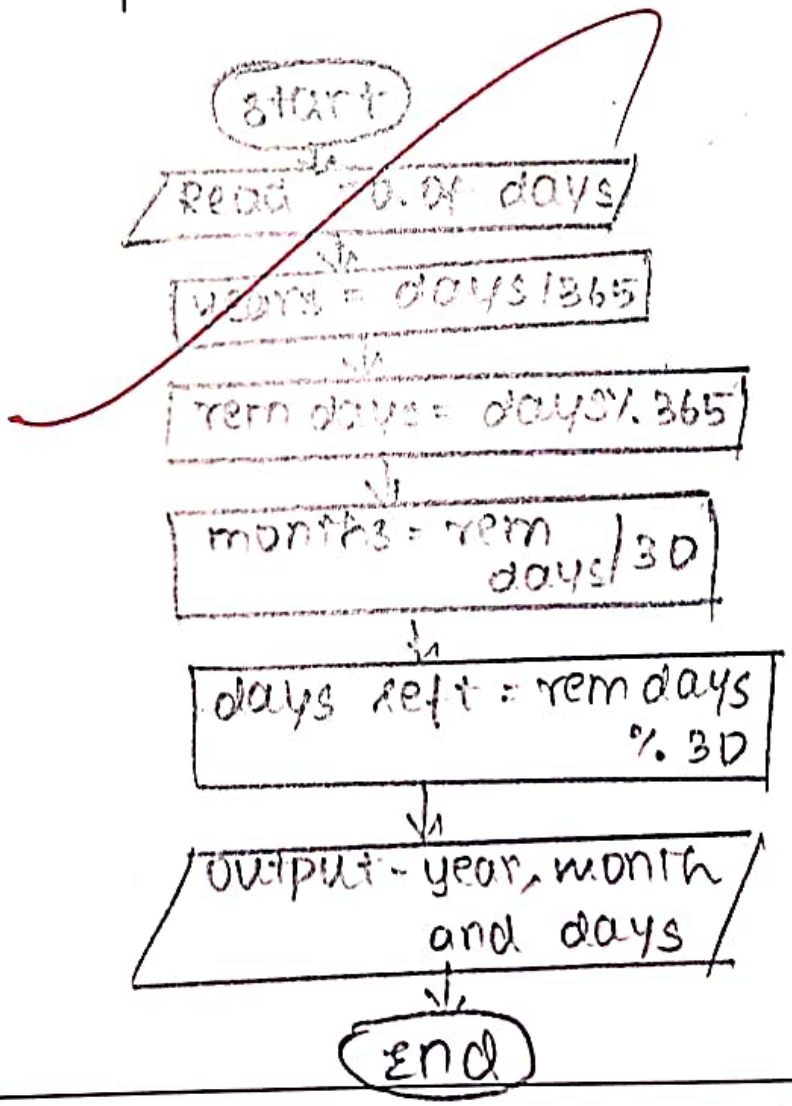
Days to Year Conversion

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

Algorithm:

step 1: start
step 2: Get total days
step 3: compute years = Total days / 365
step 4: compute Remaining days = Total days % 365
step 5: compute Months = Remaining days / 30
step 6: compute days = Remaining days % 30
step 7: print years, Months, days
step 8: stop.

Flowchart:



Ex. No.: 11

Date: 21/9/24

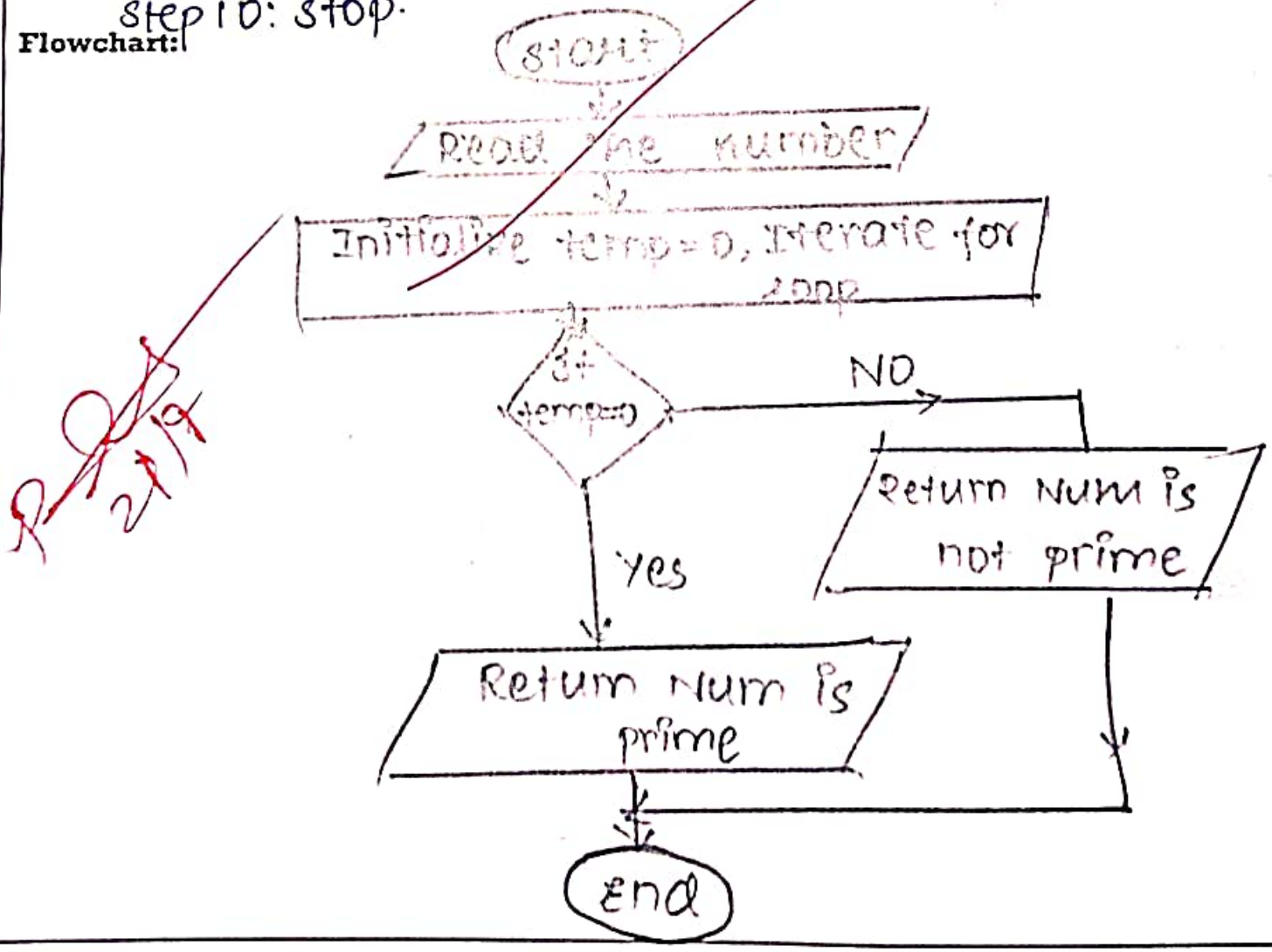
Prime Number

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

Algorithm:

step 1: start
step 2: Get number x
step 3: set count = 0, i = 0
step 4: i = i+1
step 5: If i <= n, otherwise go to 8
step 6: If n % i = 0
step 7: Increment count by 1, goto 4
step 8: If count = 2, print prime, goto 10
step 9: print n is not prime
step 10: stop.

Flowchart:



Ex. No.: IV **Date:** 25/9/24

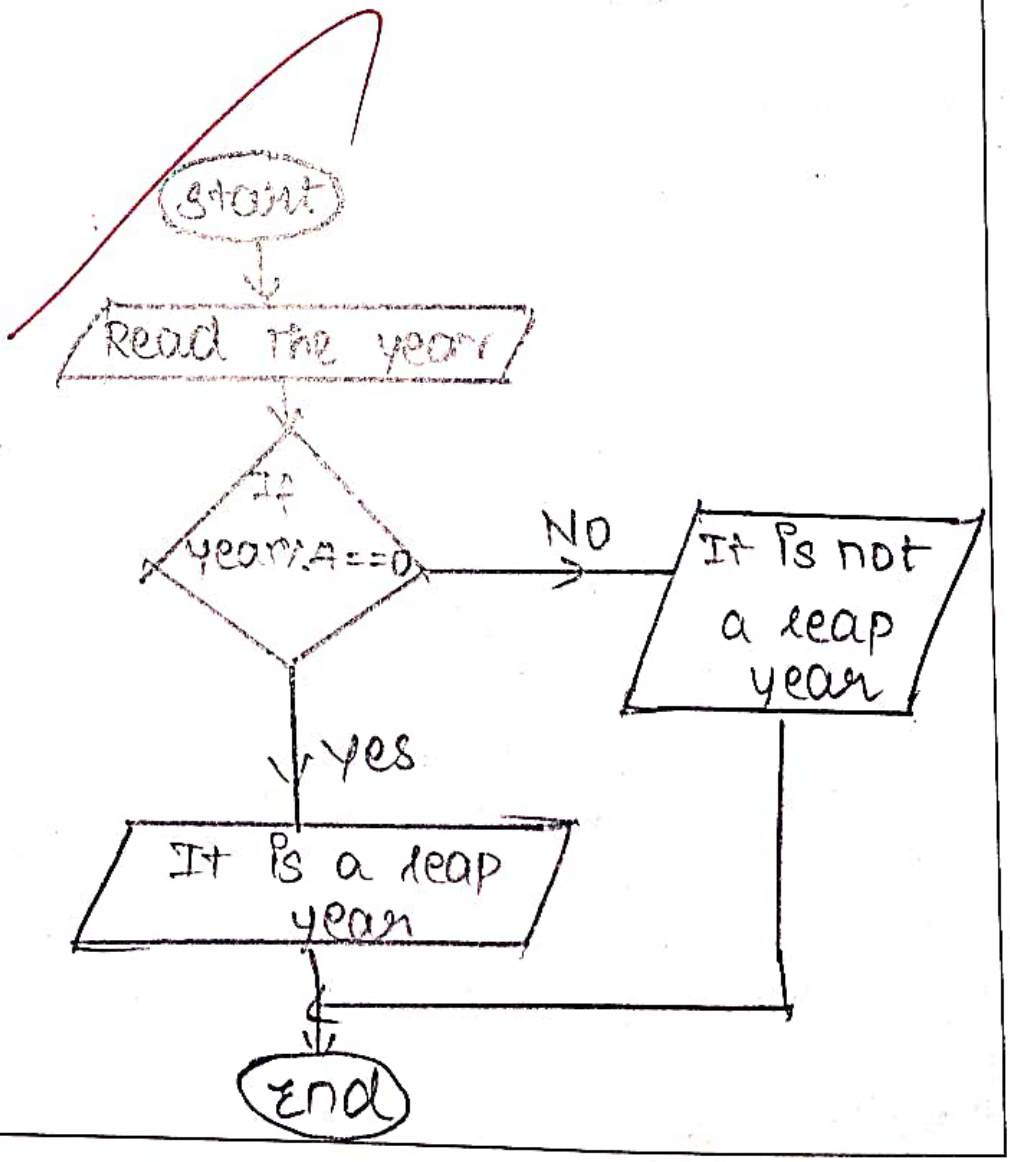
Leap Year

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

Algorithm:

step 1: start
step 2: Get year
step 3: compute rem = year % 4
step 4: If rem = 0, print leap year, otherwise
step 5: print not leap year
step 6: stop.

Flowchart:



Ex. No.: V

Date: 25/9/24

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 process

step 2: Read the number n

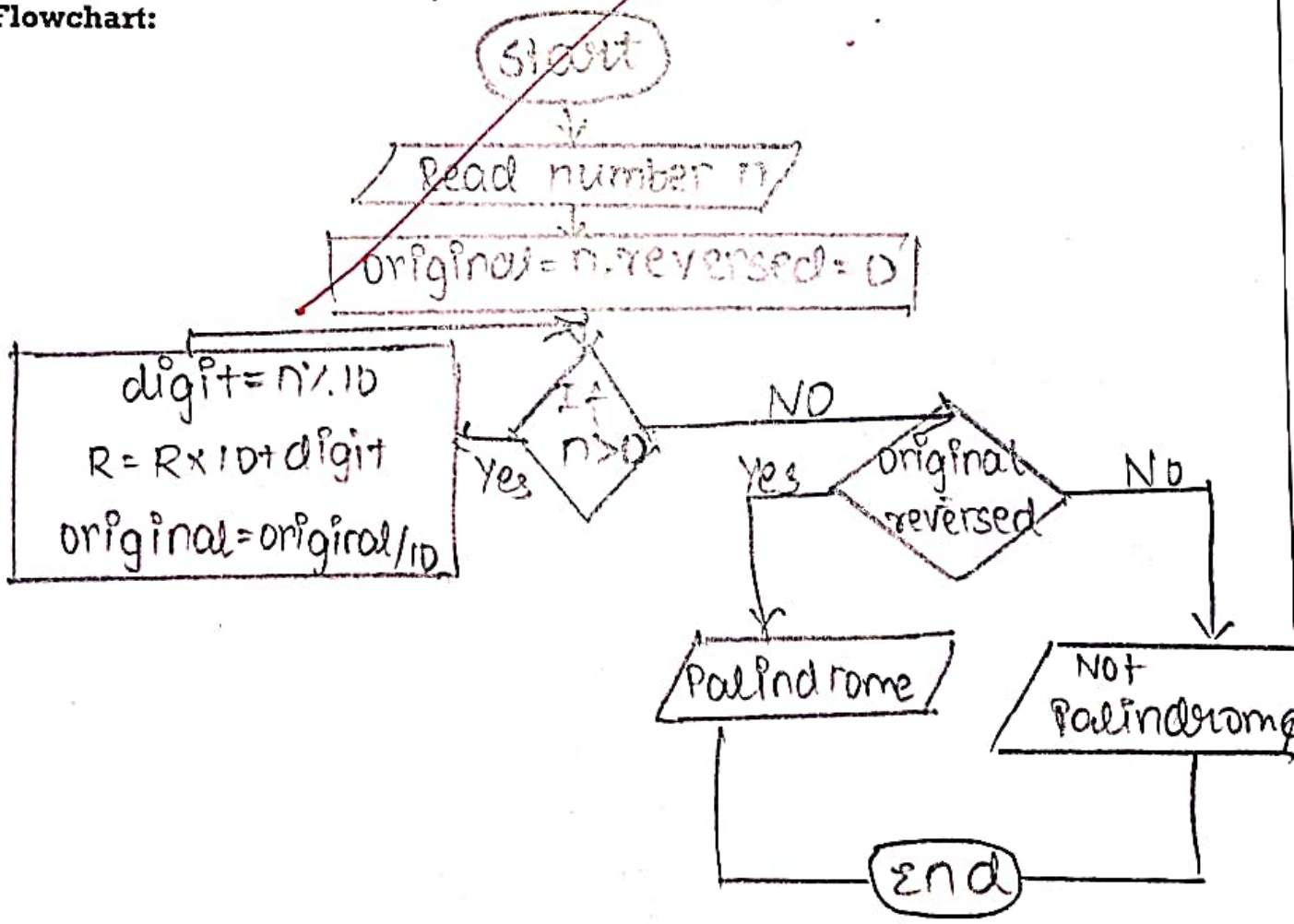
step 3: Initialize original = n and reversed = 0

step 4: while n>0, set digit = n mod 10, update reversed = reversed x 10 + digit, update n = n ÷ 10

step 5: If original = reversed, print "Palindrome" else print "Not palindrome"

step 6: End the process.

Flowchart:



Ex. No.: VI

Date: 25/9/24

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 num

step 3: sum = 0

step 4: If num > 0, otherwise print sum

step 5: rem = num % 10

sum = sum + rem

num = num / 10

step 6: stop.

Flowchart: