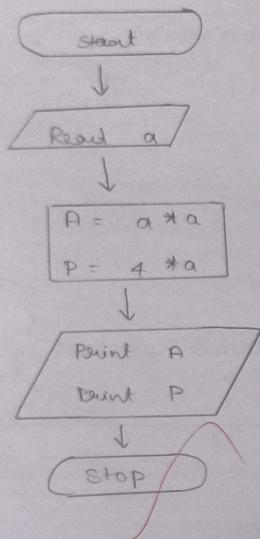


Flowchart



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 a

Step 3 : $A = a * a$

Step 4 : $P = 4 * a$

Step 5 : print A, P

Flowchart:

Step 6 : Stop

Ex. No.: 2

Date: 26/9/24

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 : Input no. of days.

Step 3 : calculate the no. of years.

$$\text{years} = \text{days} / 365$$

Step 4 : calculate the remaining days
after calculating years.

$$\text{remaining days} = \text{days} \% 365$$

Flowchart:

Step 5 : calculate the no. of months.

$$\text{months} = \text{remaining days} / 30$$

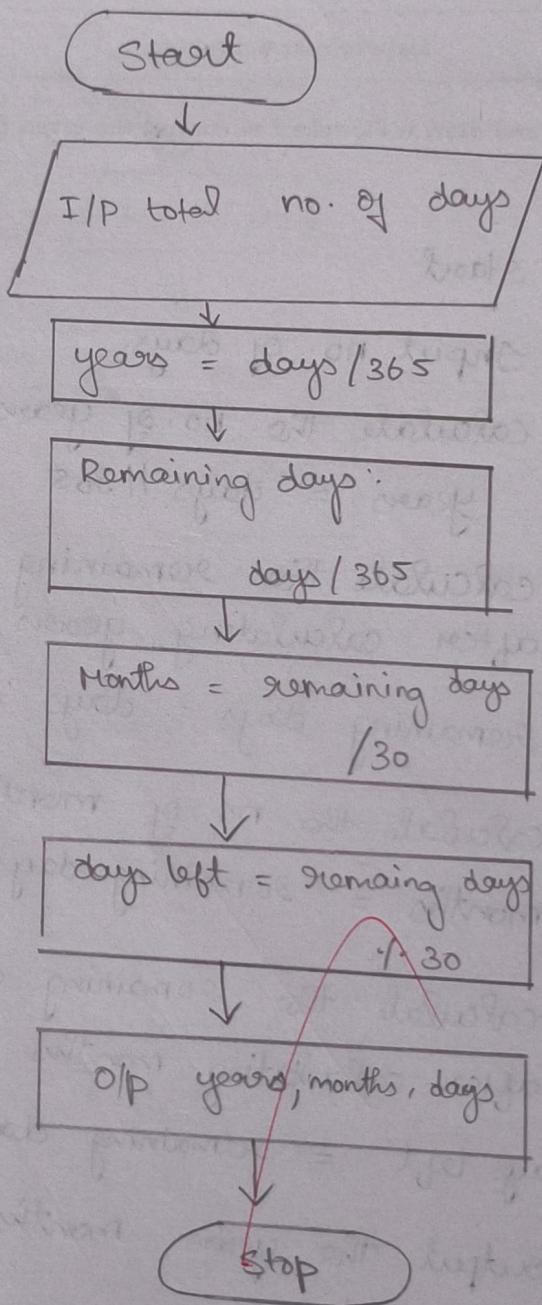
Step 6 : calculate the remaining days
after calculating months.

$$\text{days left} = \text{remaining days} \% 30$$

Step 7 : output the years, months and
days left.

Step 8 : end.

Flowchart:



Ex. No.: 3

Date: 26/9/24

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 : Take number as input.

Step 3 : Initialize a variable temp to 0.

Step 4 : Create a "for" loop from 2 to n-1.

Flowchart:
Step 5 : If number is divisible by loop iterate, then increment temp.

Step 6 : If the temp is equal to 0,

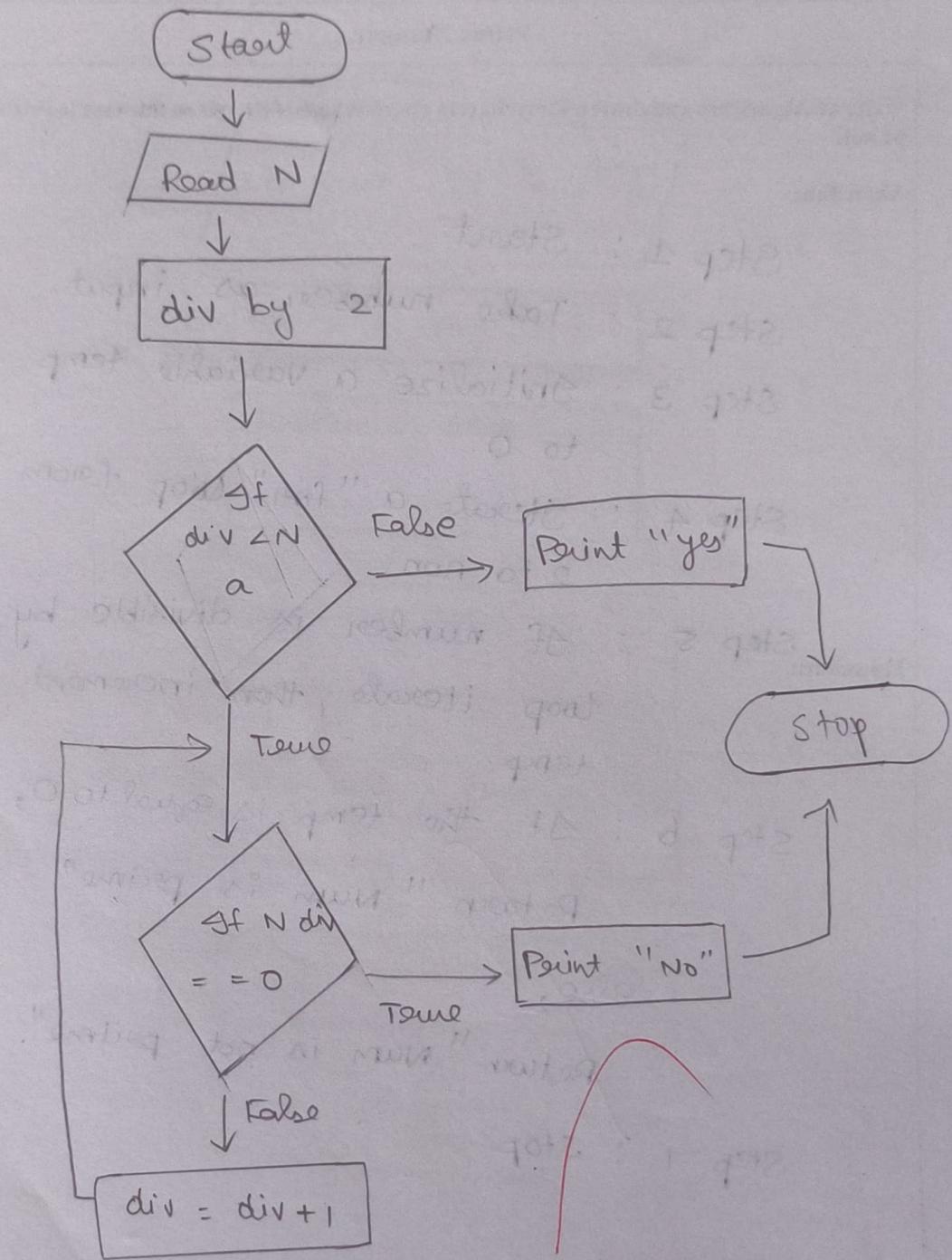
Return "Num is prime"

else,

Return "Num is not prime".

Step 7 : Stop.

Flowchart:



Ex. No.: 4

Date: 28/9/24

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 : Read year

Step 3 : Remainder = year % 4

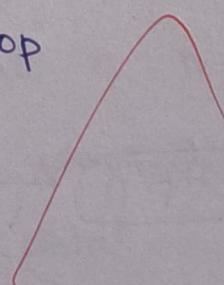
Step 4 : if (rem == 0) then

 Print "leap year"

else

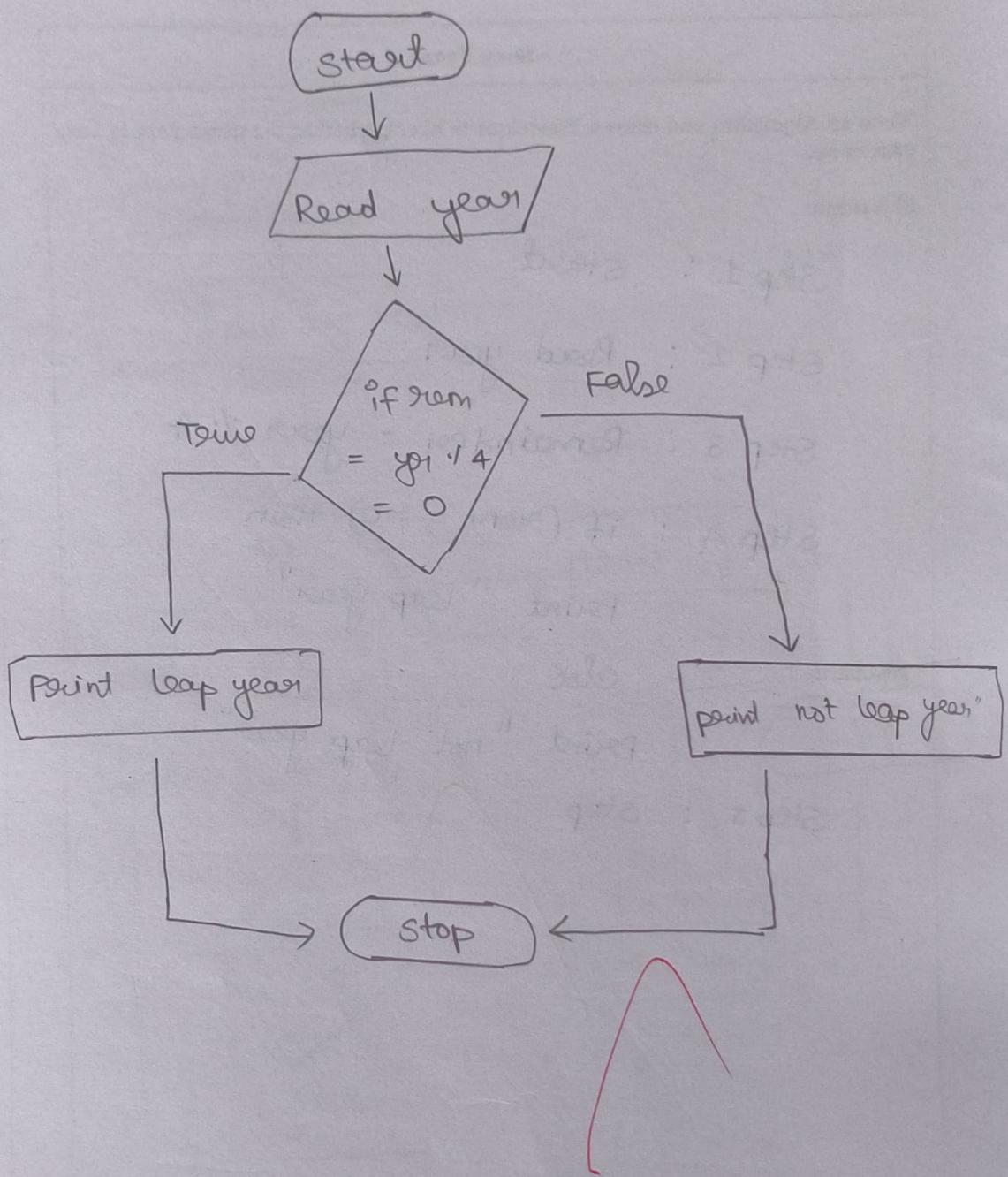
 Print "not leap year"

Step 5 : stop



Flowchart:

Flowchart :



Ex. No.: 5

Date: 28/9/24

Palindrome Number

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

Algorithm:

Step 1 : Start

Step 2 : Read the number

Step 3 : Initialize

set original = n and reversed = 0

Step 4 : while $n > 0$;

- set digit = $n \bmod 10$

- update reversed = reversed \times 10 + digit

update $n = n \div 10$

Step 5 : if original = reversed

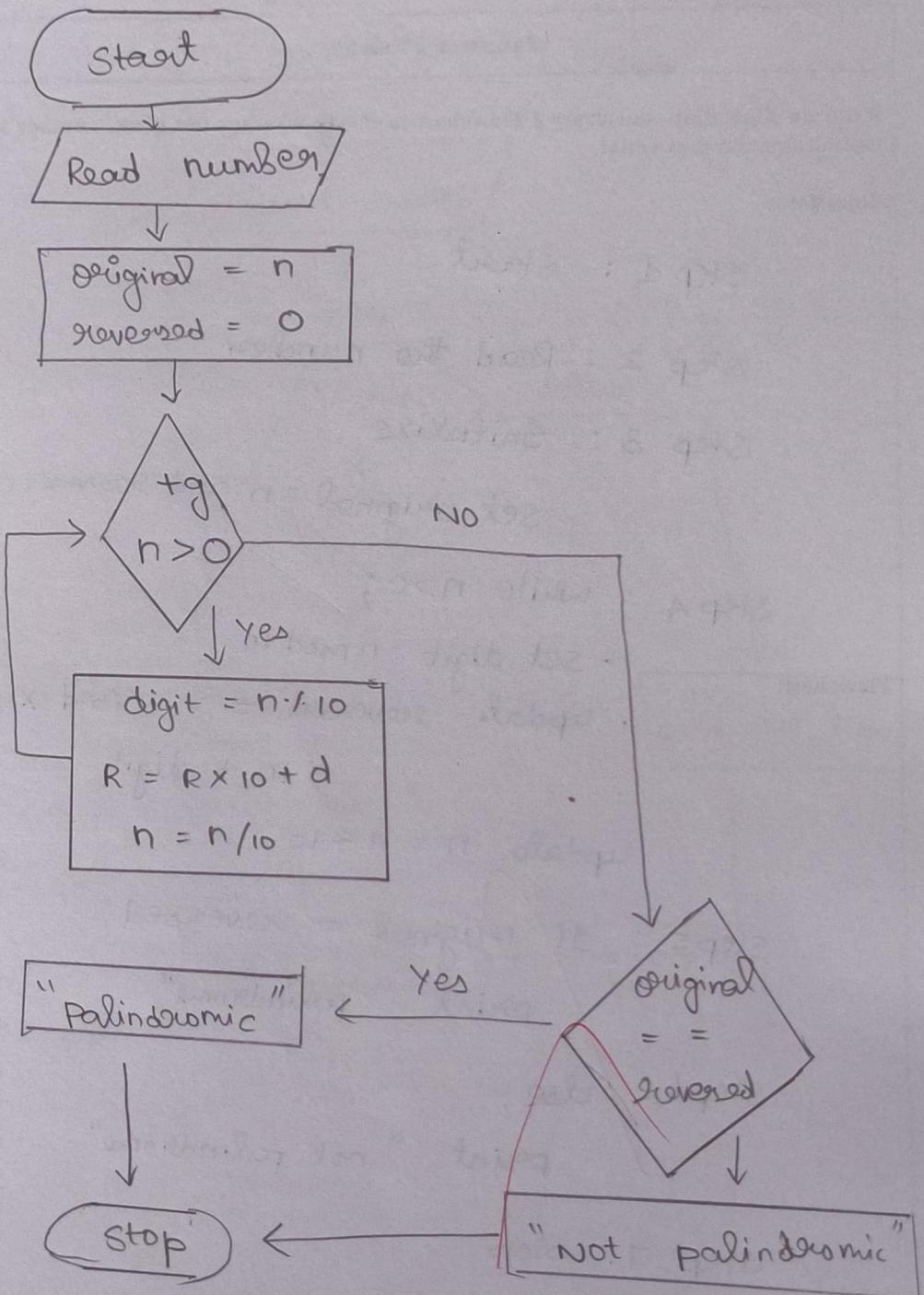
print "palindrome"

Step 6 : else,

print "not palindrome"

Step 7 : Stop.

Flowchart :



Ex. No.: 6

Date: 23/9/24

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 : Input the number (n)

Step 3 : Initialize

$$\text{Sum} = 0$$

Step 4 : Repeat the following steps while
n is greater than 0, $n > 0$

Flowchart:

- Extract the last digit of n

$$\text{digit} = n \% 10$$

- Add the digits to sum

$$\text{sum} = \text{sum} + \text{digit}$$

- Remove the last digit from n.

Step 5 : output the sum.

Step 6 : Stop.

Flowchart :

