

Ex. No.: I

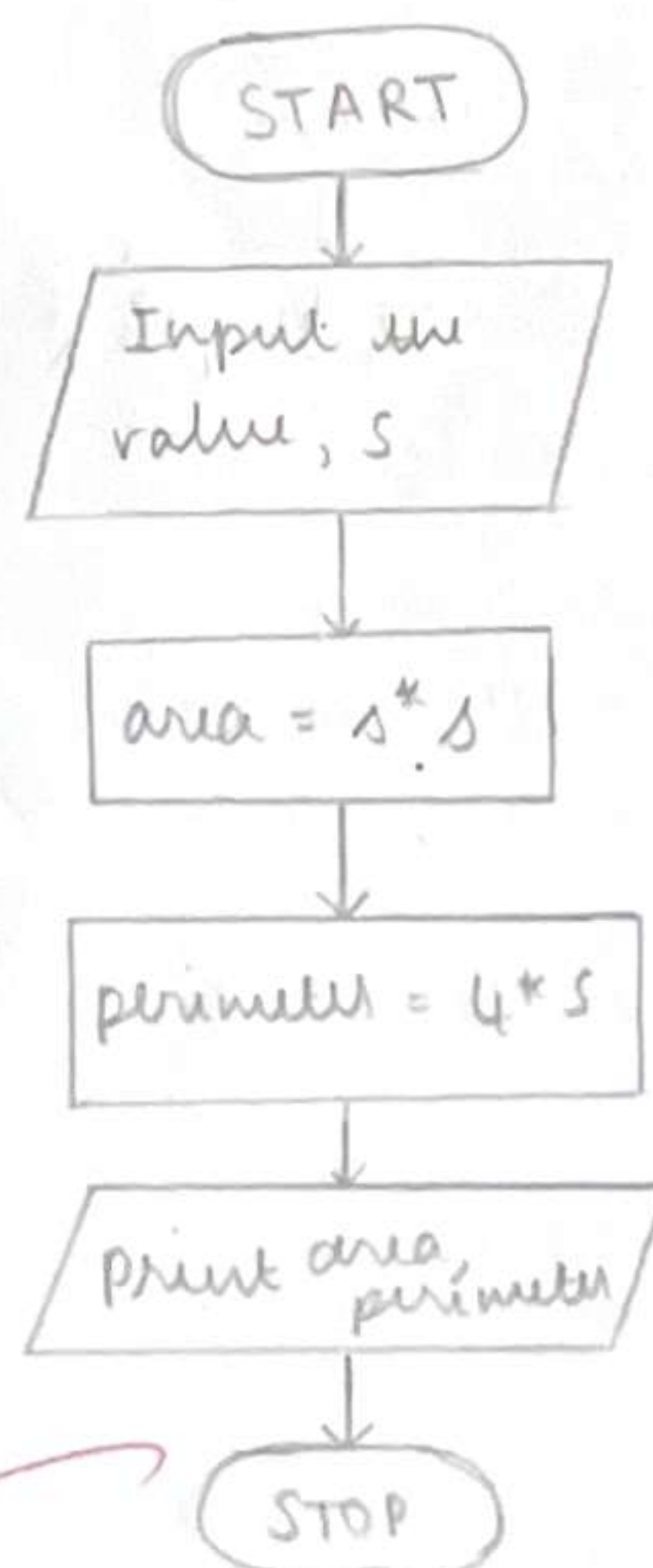
Date: 18/10/2024

Calculate Area and Perimeter

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

Algorithm:

- STEP 1: Start the program
STEP 2: Get the value (S) for side of square
STEP 3: Print area, $\text{area} = S * S$
STEP 4: Print perimeter, $\text{perimeter} = 4 * S$
STEP 5: Stop the program

Flowchart:*RPR*

Ex. No.: IIDate: 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

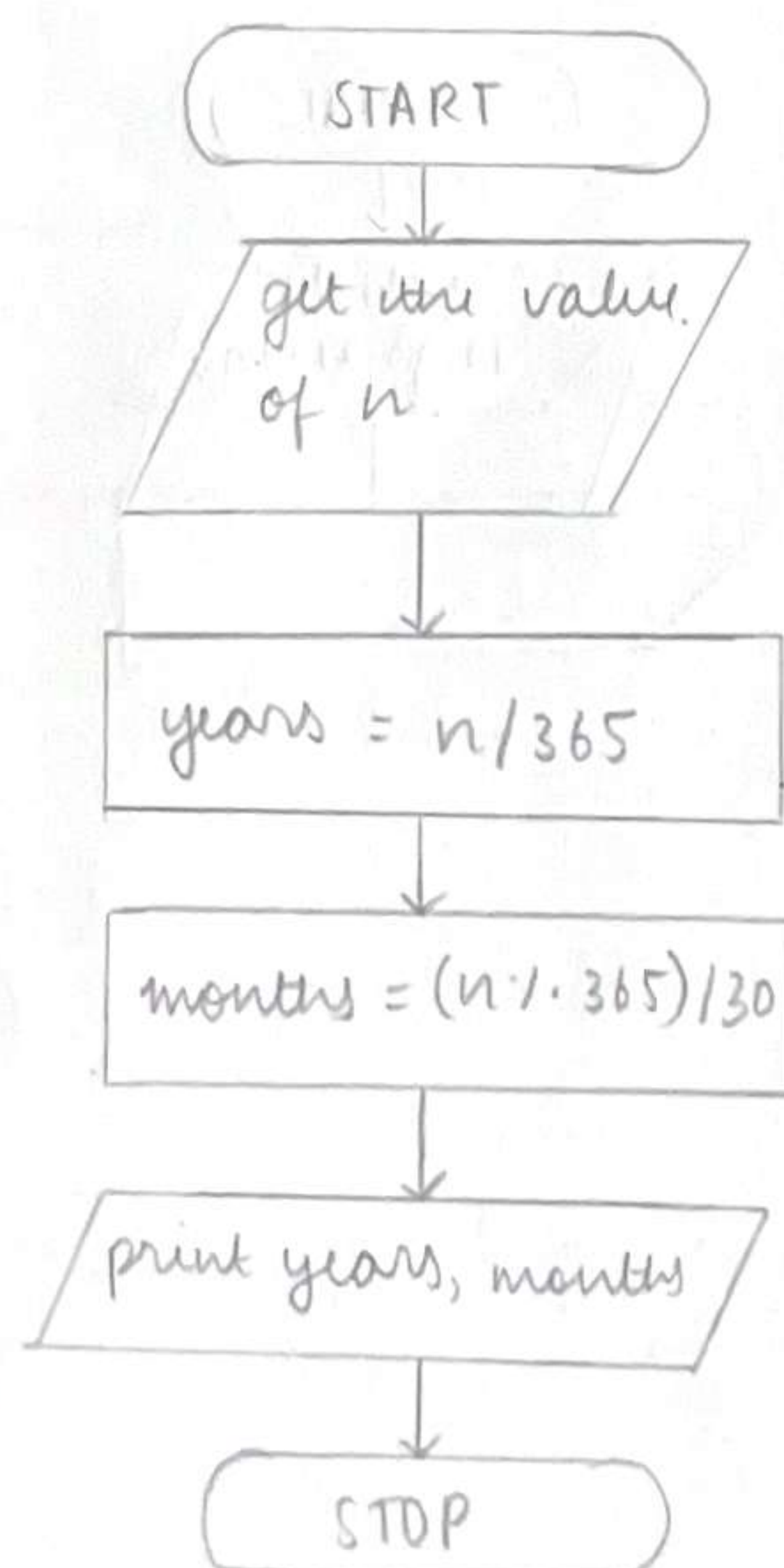
STEP 2 : Get the value n , for no. of days

STEP 3 : Print years as $n/365$

STEP 4 : Print months as $(n \div 365)/30$

STEP 5 : Stop

Flowchart:



RPR
28/10

Ex. No.: III

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 : Input n

STEP 3 : Initialise $i = 2$

STEP 4 : If $(n \% i == 0)$, print 'n is not prime', go to step

STEP 5 : Else, $i = i + 1$

if $i \leq n - 1$

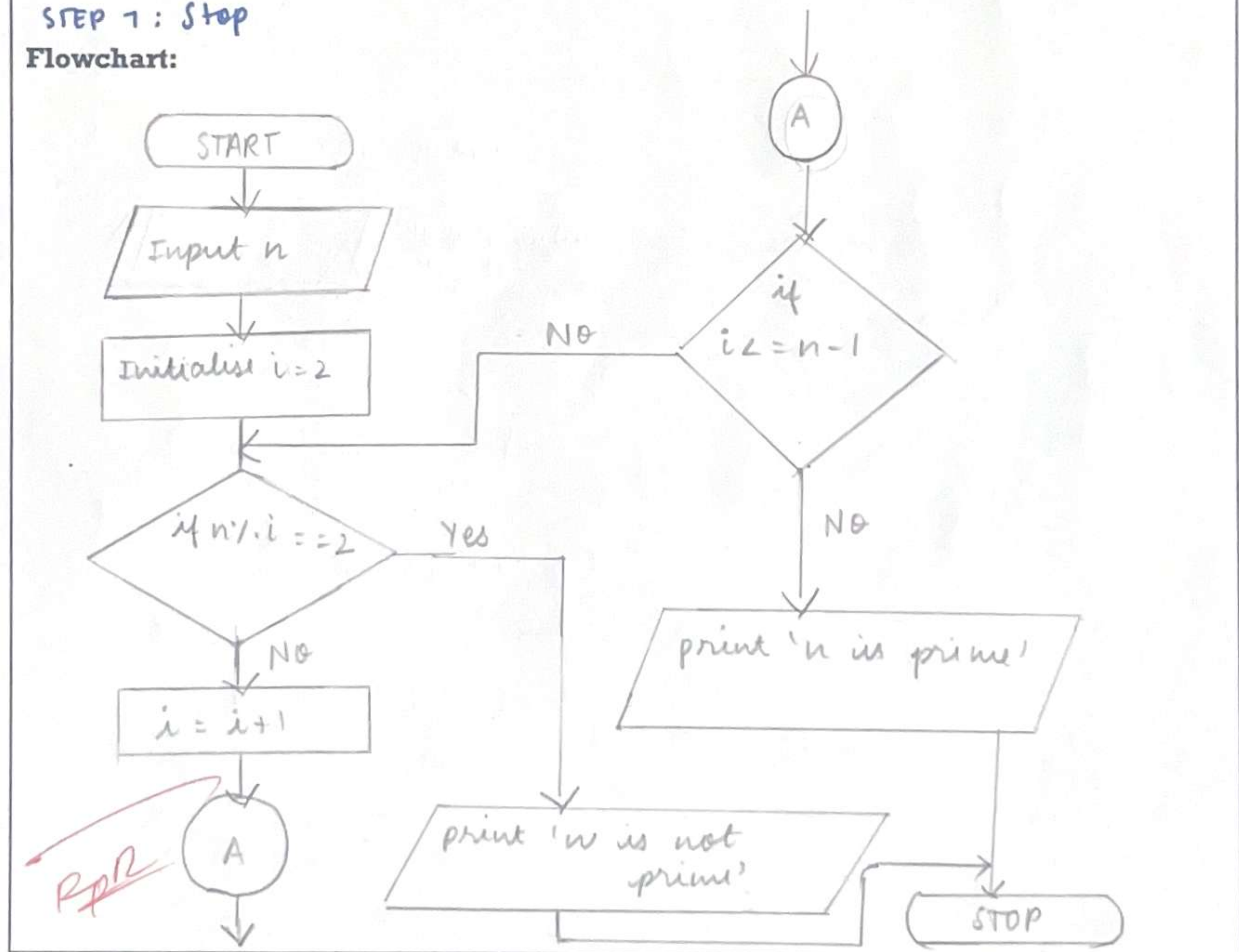
go to step 4

else
go to step 6

STEP 6 : Print 'n is prime'

STEP 7 : Stop

Flowchart:



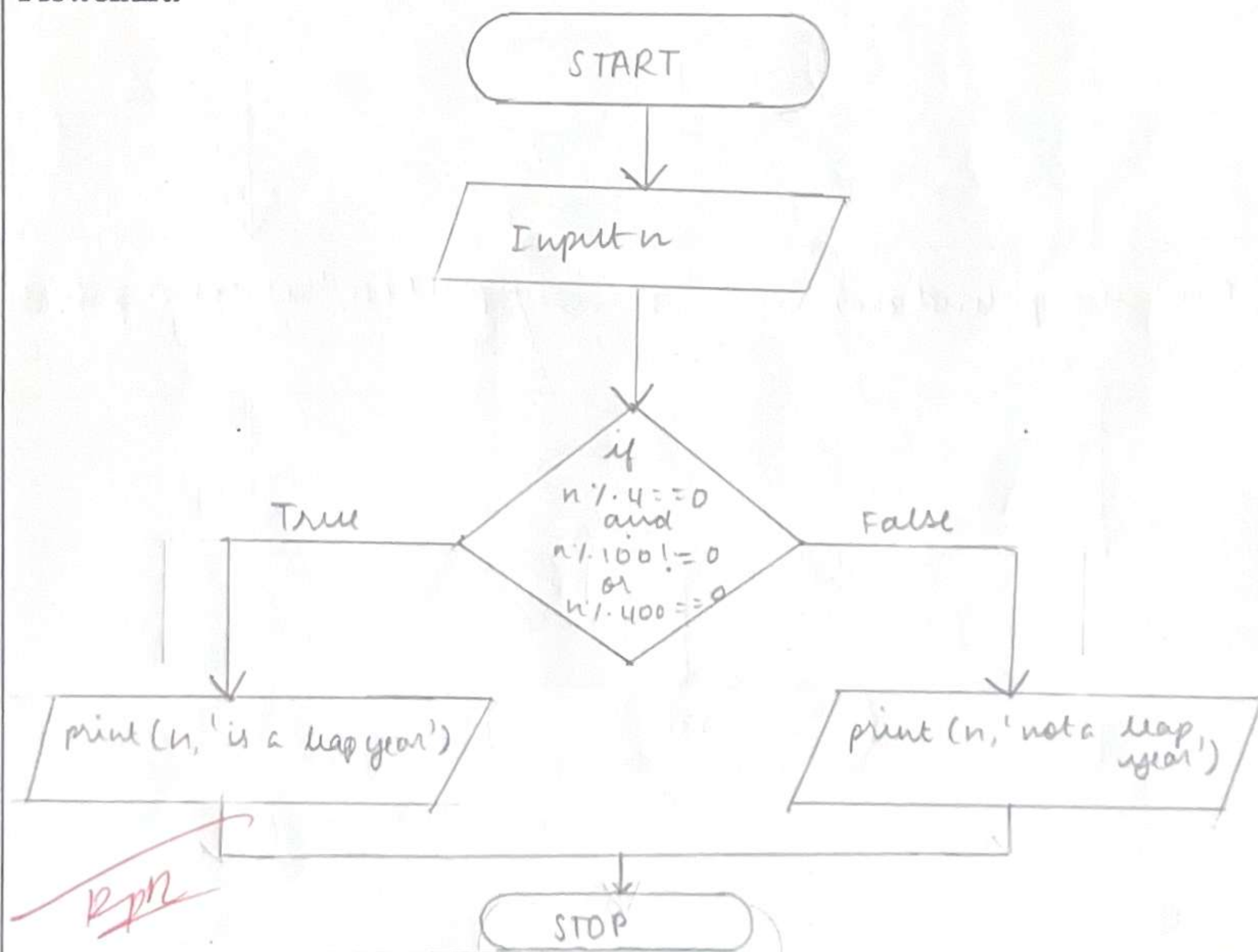
Ex. No.: IVDate: 18/10/2024**Leap Year**

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

Algorithm:

- STEP 1 : Start
 STEP 2 : Input year (n)
 STEP 3 : Check if $n \% 4 == 0$ and $n \% 100 != 0$ or $n \% 400 == 0$
 STEP 4 : If true, n is a leap year. Else, n is not a leap year
 STEP 5 : Stop

Flowchart:



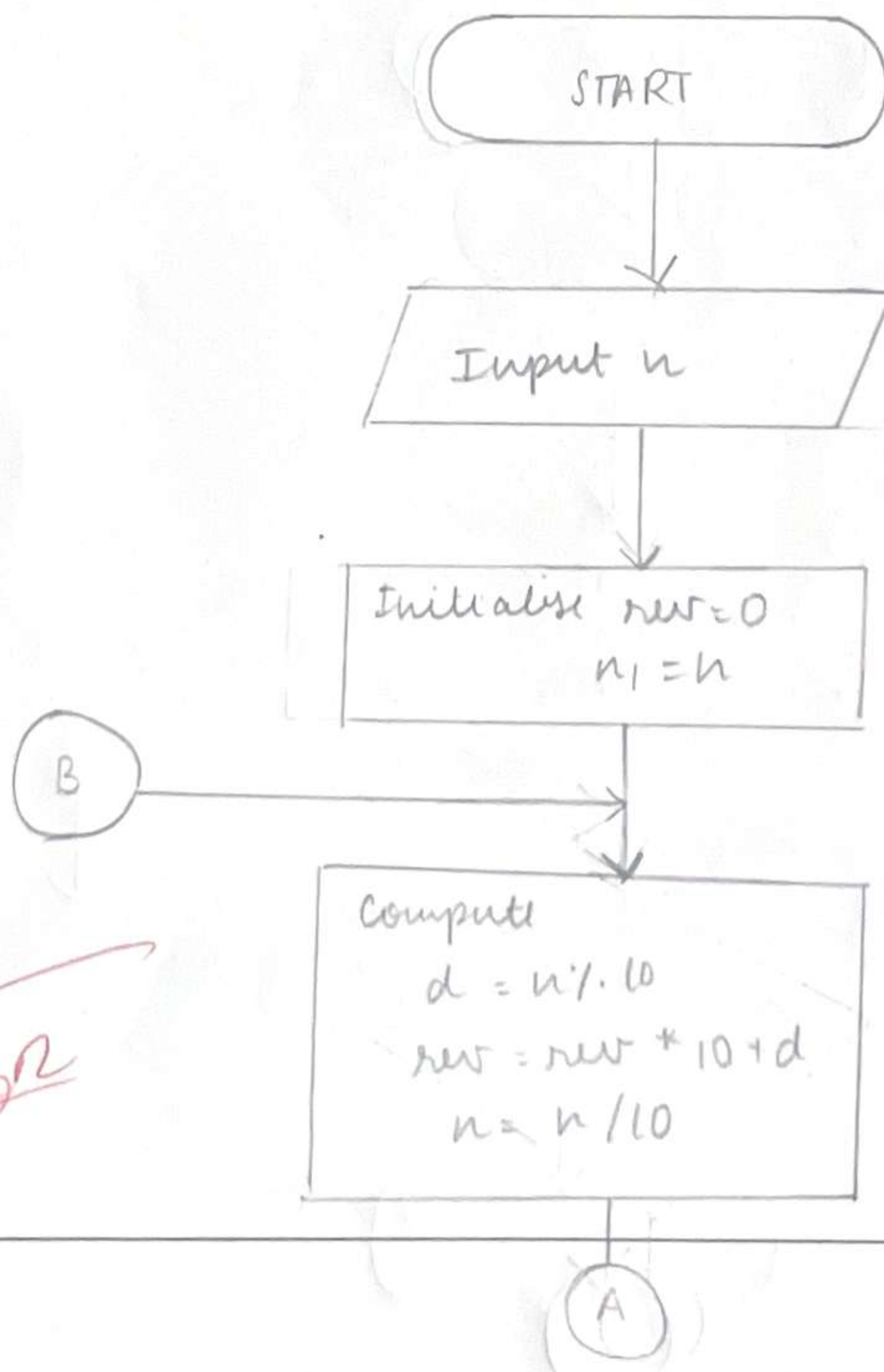
Ex. No.: Date: 18/10/2024**Palindrome Number**

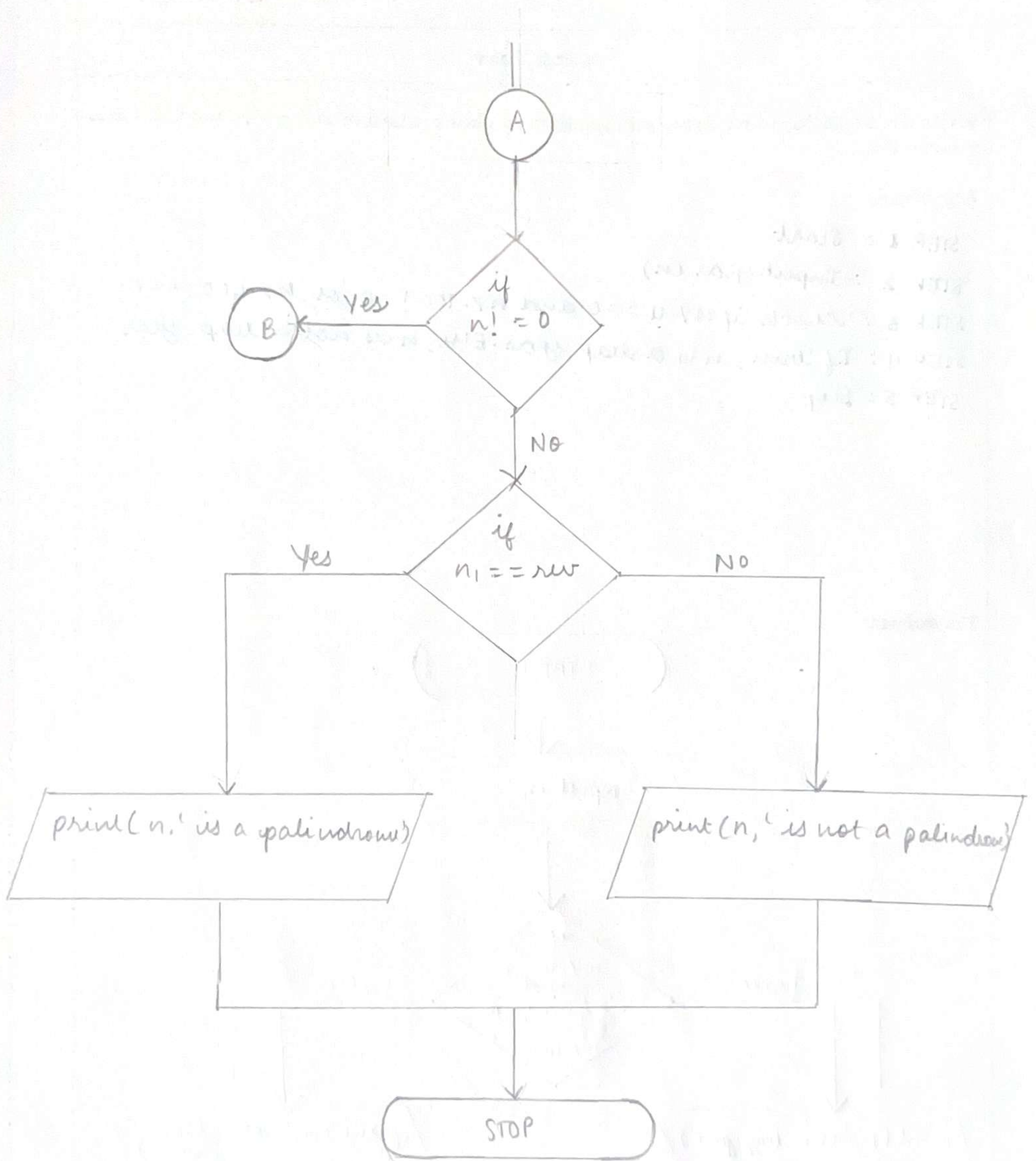
Write an Algorithm and draw a Flowchart to check whether the given number is palindrome number or not.

Algorithm:

- STEP 1: Start
 STEP 2: Input n
 STEP 3: Initialise $rev = 0$, $n_1 = n$
 STEP 4: Compute $d = n \% 10$
 STEP 5: Compute $rev = rev * 10 + d$
 STEP 6: Compute $n = n / 10$
 STEP 7: If $n \neq 0$, go to step 4. Else, go to step 8
 STEP 8: If $n_1 = rev$, print 'n is a palindrome'.
 STEP 9: Else, print 'n is not a palindrome'.
 STEP 10: Stop

Flowchart:





Ex. No.: V1Date: 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: Input n
 STEP 3: Initialise $s = 0$
 STEP 4: Compute $d = n \% 10$
 STEP 5: Compute $s = s + d$
 STEP 6: Compute $n = n / 10$
 STEP 7: If $n \neq 0$, go to step 4
 STEP 8: Else, go to step 9
 STEP 9: Print s
 STEP 10: Stop

Flowchart:

