

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 variable, S, P, A

Step 3: Read S

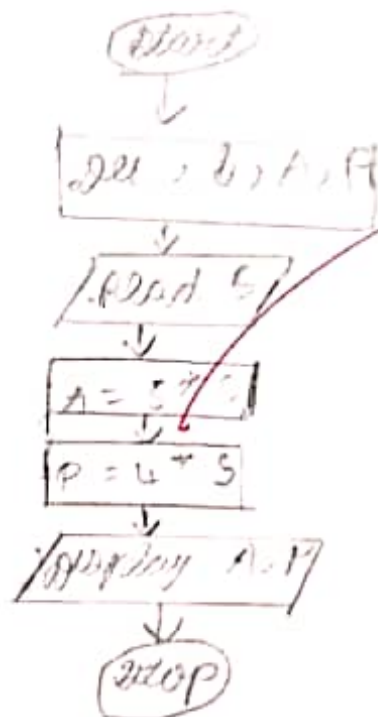
Step 4: Calculate $A = S * S$

Step 5: Calculate $P = 4 * S$

Step 6: Display A & P

Step 7: End

Flowchart:



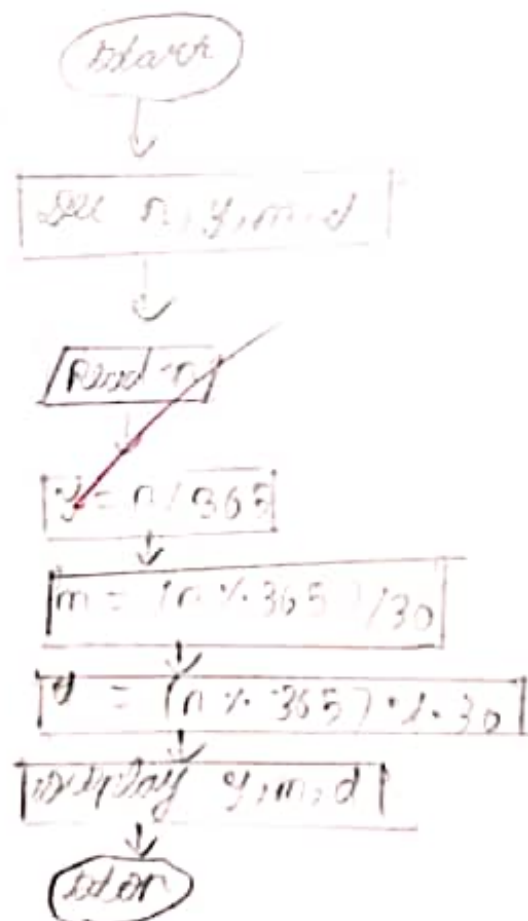
Days to Year Conversion

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

Algorithm:

- Step 1: Start
 Step 2: Declare Variable, n, y, m, d
 Step 3: Read n
 Step 4: Calculate years $\Rightarrow y = n / 365$
 Step 5: Calculate months $\Rightarrow m = (n \% 365) / 30$
 Step 6: Calculate days $\Rightarrow d = (n \% 365) \% 30$
 Step 7: Display y, m, d
 Step 8: Stop

Flowchart:



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

Step 3: Read

Step 4: Set $i = 2$

Step 5: Repeat step 5, 6 until $i \leq n$

Step 6: [Check whether the n is divisible or not]

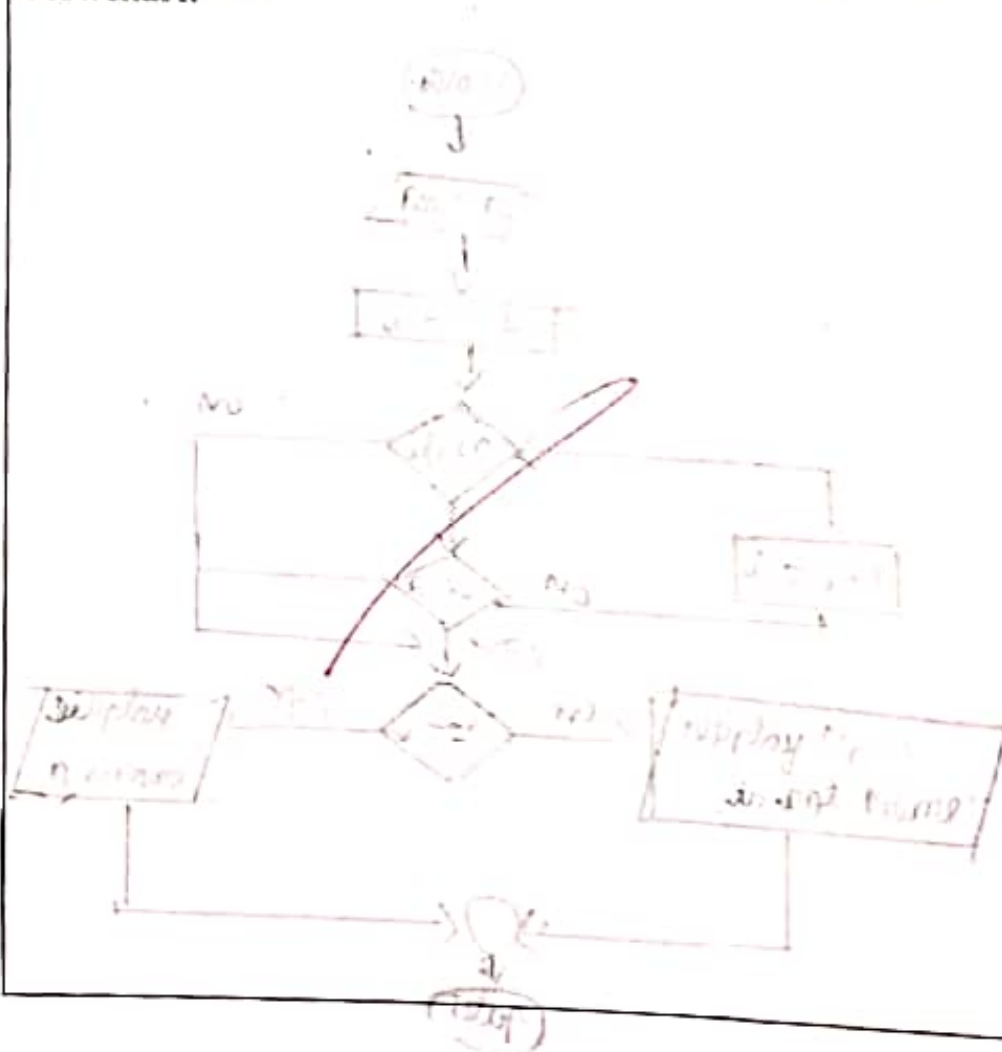
if $n \% i == 0$ then go to stop else go to step 7

Step 7: Set $i = i + 1$

Step 8: If $i == n$ then it is prime so else it is not prime

Step 9: Stop

Flowchart:



Ex. No.: 4

Date: 5.10.2024

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: declare variables years, rem

Step 3: read years

Step 4: calculate $rem = year \% 4$

Step 5: if $(rem == 0)$ then

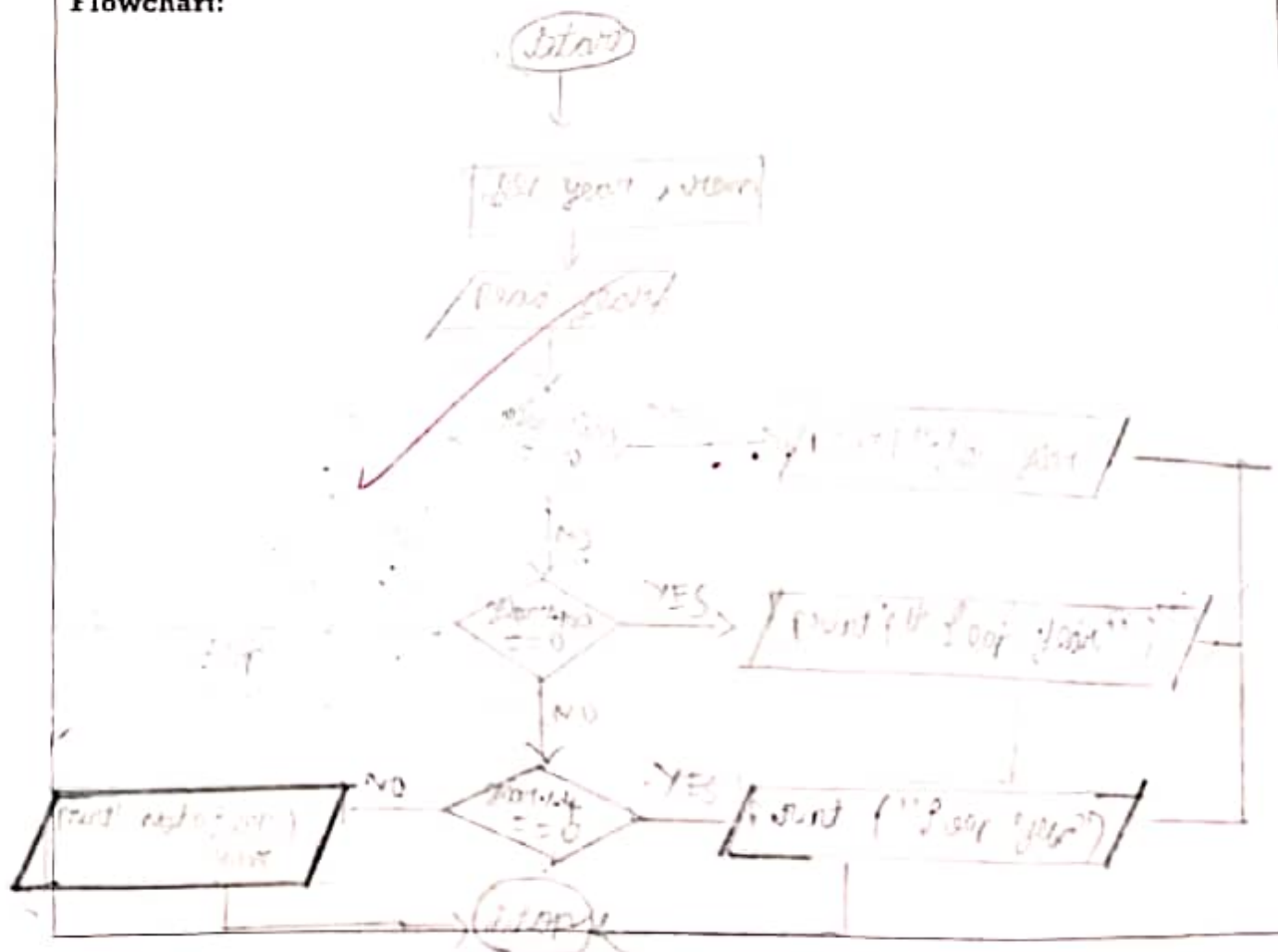
print ("Leap year")

else

print ("not a Leap year")

Step 6: stop

Flowchart:



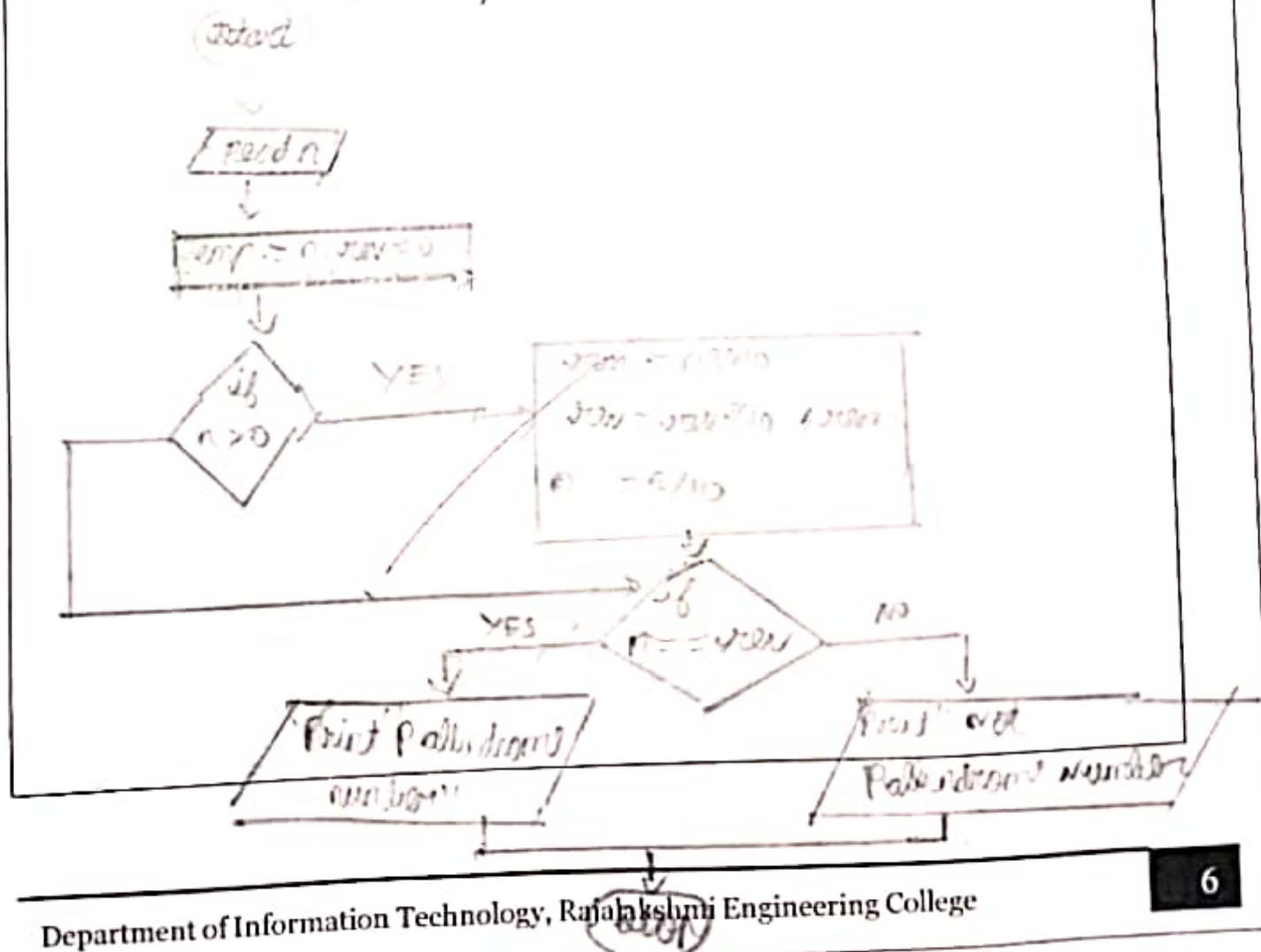
Palindrome Number

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 Temp = 0, rev = 0
 Step 3: Read n
 Step 4: rem = n % 10
 rev = rev * 10 + rem
 n = n / 10
 Step 5: If (n > 10) go to step 4 to step 6
 Step 6: If temp == rev then
 print ("Palindrome number")
 else
 print ("not palindrome number")
 Step 7: Stop

Flowchart:



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 n
 Step 3: Declare $sum = 0$
 Step 4: $remainder = n \% 10$
 $sum = sum + remainder$
 $n = n / 10$
 Step 5: If $(n > 0)$ then go to step 4
 • Else go to step 6
 Step 6: Print sum
 Step 7: Stop

Flowchart:

