Ex. No.: I

Date: 28/10/24

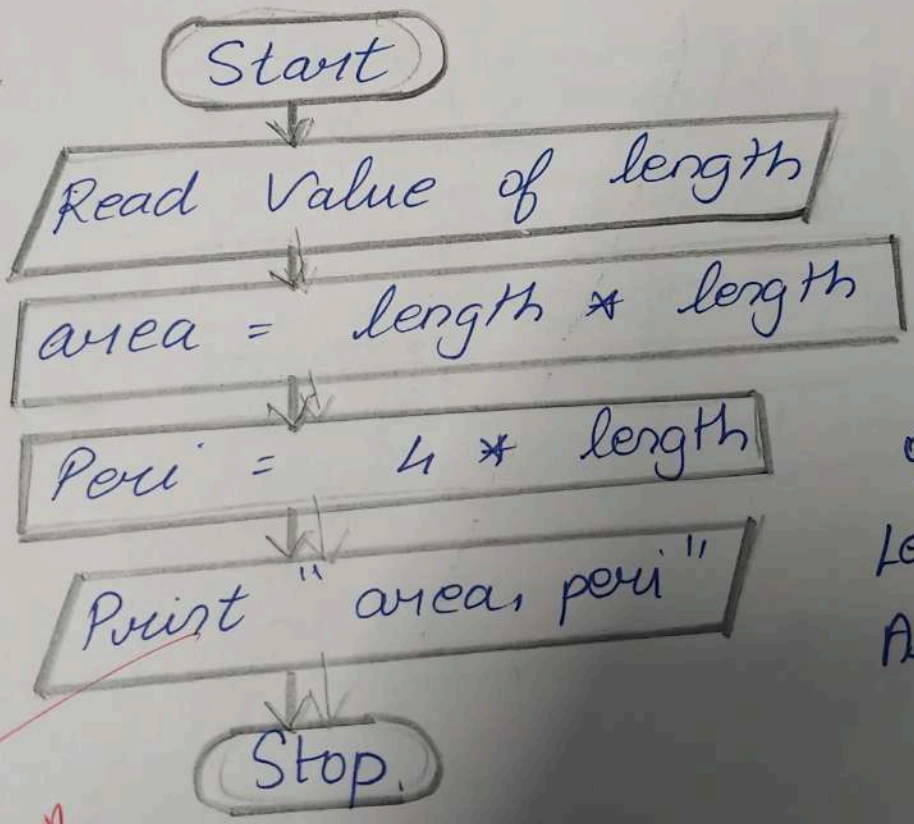
Calculate Area and Perimeter

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

Algorithm:

Step 1 :- Start
Step 2 :- Read value of length
Step 3 :- Take
area = length * length
Step 4 :- Take
Peri = 4 * length
Step 5 :- Print "area, peri"
Step 6 :- Stop

Flowchart:



O/P

Length = 5
Area = 25
Peri = 20

Ex. No.: 2 II

Date: 18/10/24

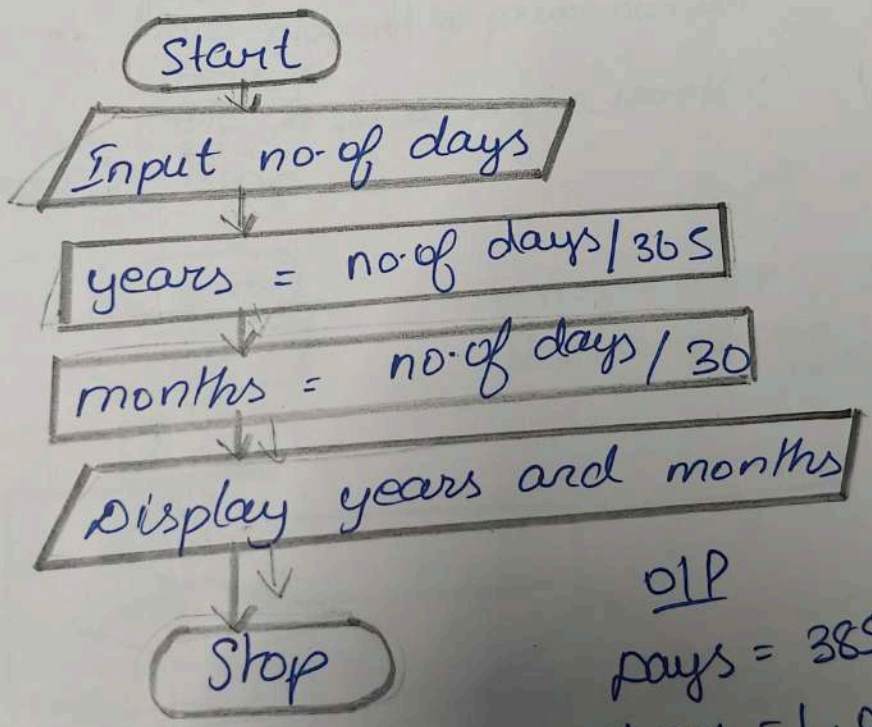
Days to Year Conversion

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

Algorithm:

Step 1 :- Start
Step 2 :- Input the given days
Step 3 :- Conversion of days to years
no. of days / 365
Step 4 :- Conversion of days to months
no. of days / 30
Step 5 :- Display years and months
Step 6 :- Stop

Flowchart:



O/P
Days = 385
Year = 1, 0 month, 20
Months = 12, 20day

Rapl

Ex. No.: 11

Date: 18/10/24

Prime Number

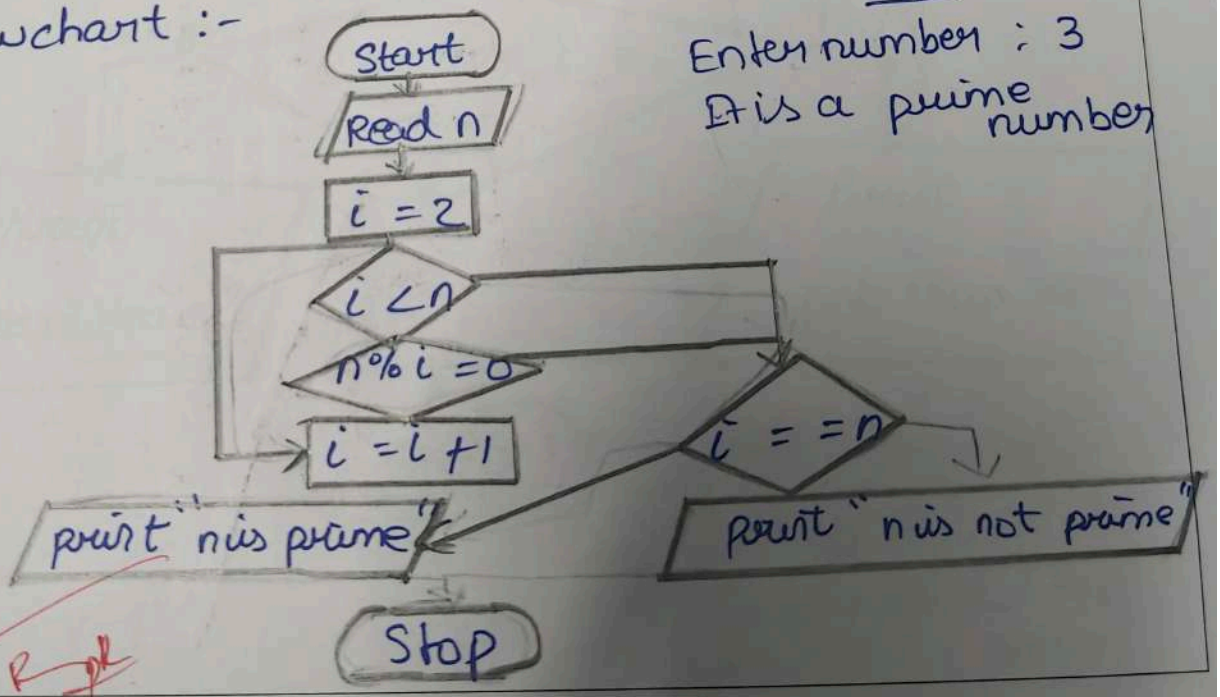
Write an Algorithm and draw a Flowchart to check whether the given number is Prime or not.

Algorithm:

Step 1 :- Start
Step 2 :- Read Value of n
Step 3 :- Set f = 1
Step 4 :- If n=1, then
n is not a prime number
Step 5 :- For i=2 to n-1
Step 6 :- if n % i == 0 then
set f=1 and break
else goto step 5
Step 7 :- if f == 1 then
Print "n is not a prime number"
otherwise
Print "n is a prime number"
Step 8 :- Stop.

~~Flowchart~~:

Flowchart :-



O/P

Enter number : 3
It is a prime number

Ex. No.: 4 IV

Date: 18/10/24

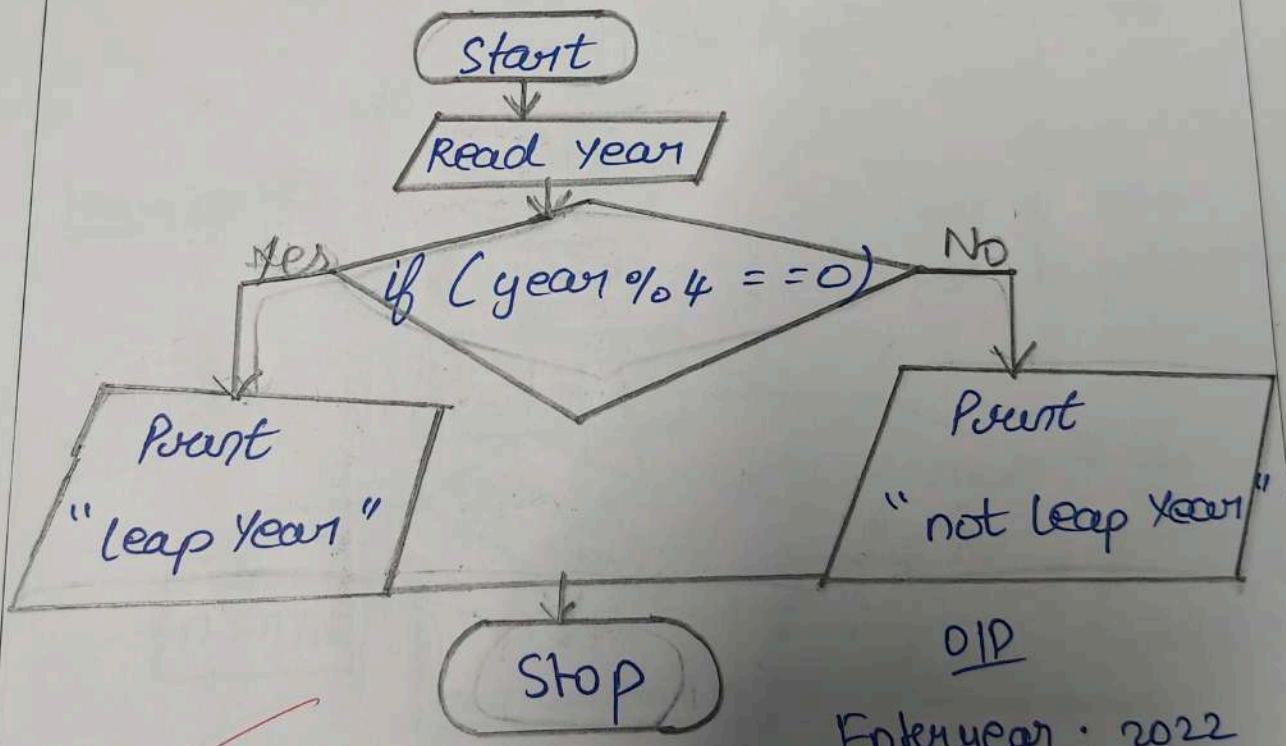
Leap Year

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 :- If the year divisible by 4, then it's a leap year.
Step 4 :- rem = year % 4
Step 5 :- if rem == 0 then print "leap year" else, print "not leap year"
Step 6 :- Stop

Flowchart:



O/P

Enteryear : 2022
It is not a leap year

RPR

Ex. No.: 5

Date: 18/10/24

Palindrome Number

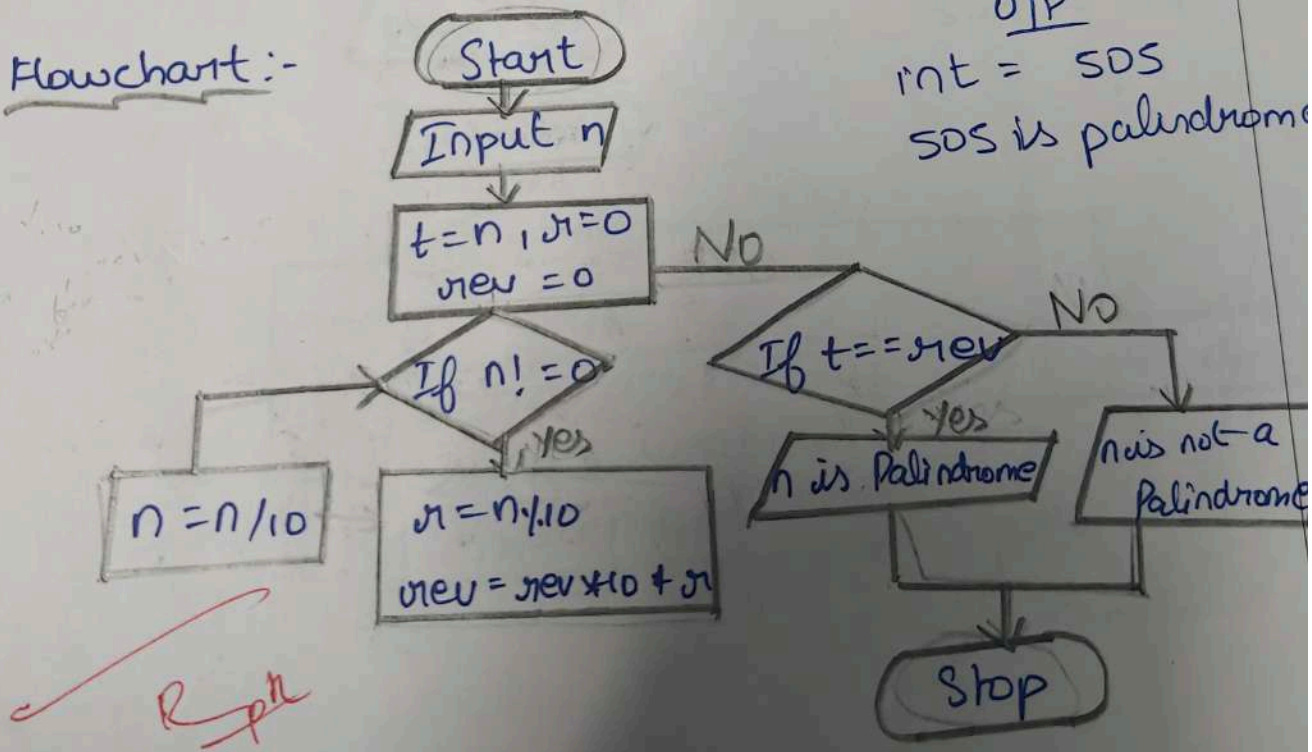
Write an Algorithm and draw a Flowchart to check whether the given number is palindrome number or not.

Algorithm:

Step 1 :- Start
Step 2 :- Read n
Step 3 :- Declare temp = n , rev = 0
Step 4 :- rem = n % 10
Step 5 :- rev = rev * 10 + rem
Step 6 :- n = n/10
Step 7 :- if (n>0) then go to Steps 4 to 6 else go to step 8
Step 8 :- if (temp == rev) then print "palindrome number" else Print "not a palindrome number"
Step 9 :- Stop

~~Flowchart:~~

Flowchart :-



O/P

int = 505

505 is palindrome

Right

Ex. No.: 6 VI

Date: 18/10/24

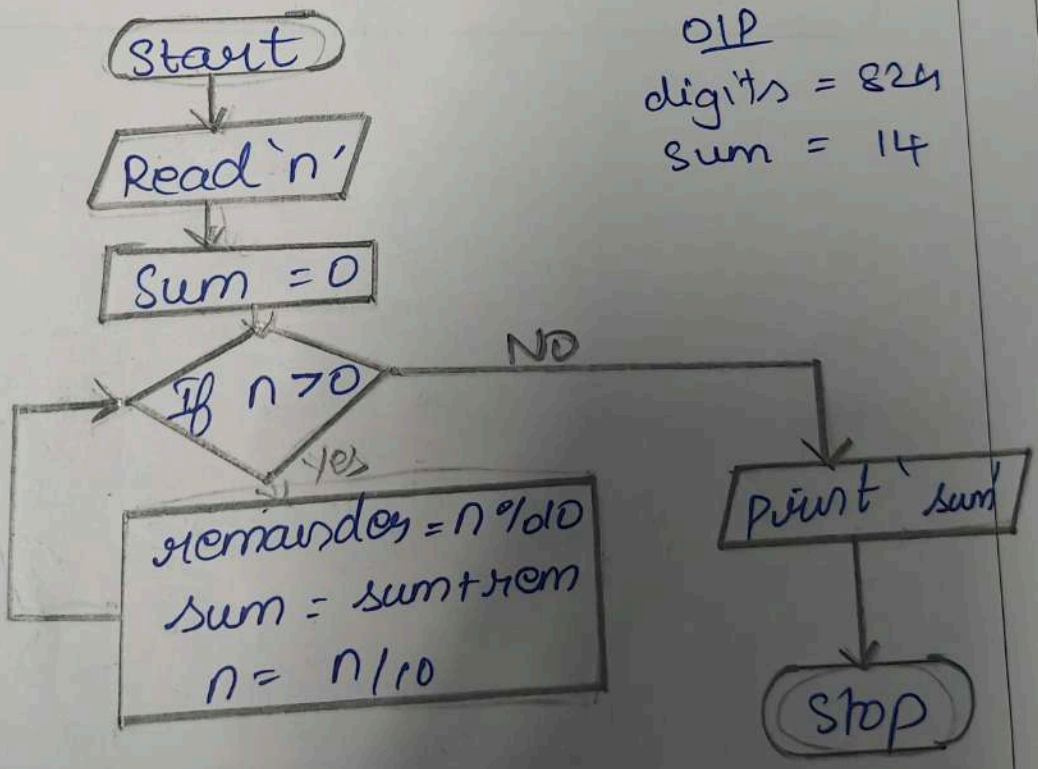
Sum of Digits

Write an Algorithm and draw a Flowchart to calculate the sum of digits in the given number.

Algorithm:

Step 1 :- Start
Step 2 :- Read number n
Step 3 :- Declare sum = 0
Step 4 :- remainder = n % 10
Sum = Sum + remainder
n = n/10
Step 5 :- If n > 0 then goto step 4 else go to next step
Step 6 :- Print "sum"
Step 7 :- Stop

Flowchart:



O/P
digits = 824
Sum = 14

Ryan