Ex. No.: 1 **Date:** 21/10/24

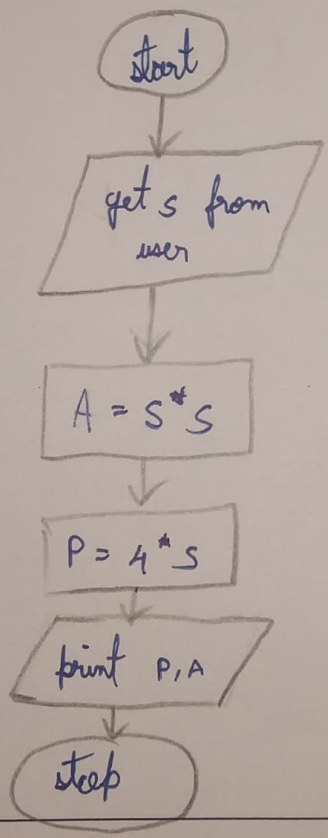
Calculate Area and Perimeter

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

Algorithm:

step-① - start
step-② - get s as side from user
step-③ - compute A=s*s
step-④ - print A
step-⑤ - Compute P=4*s
step-⑥ - print P
step-⑦ - stop

Flowchart:



Ex. No.: 2 **Date:** 21/10/24

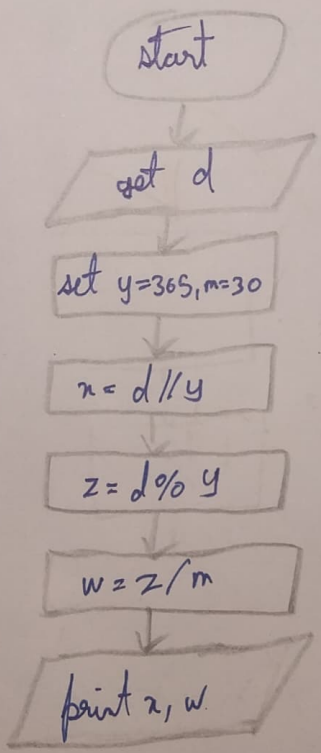
Days to Year Conversion

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

Algorithm:

step - ① - start
step - ② - get d as days
step - ③ - set y = 365, m = 30
step - ④ - x = d // y
step - ⑤ - z = d % y
step - ⑥ - w = z / m
step - ⑦ - print x as years, w as months
step - ⑧ - stop

Flowchart:



Ex. No.: 3 **Date:** 22/10/24

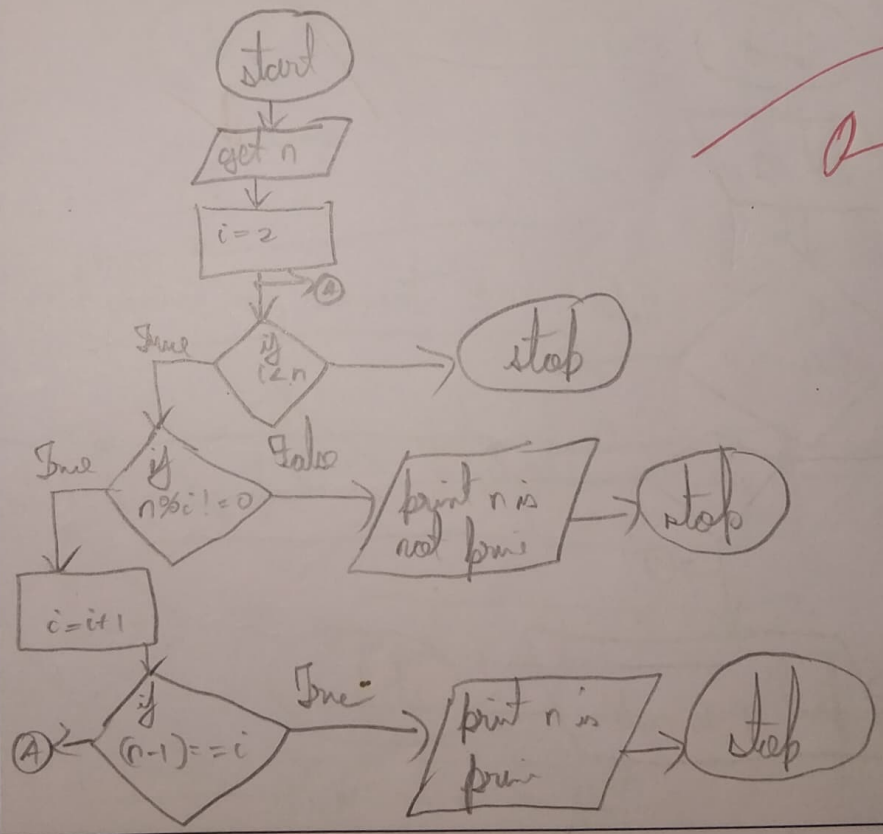
Prime Number

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

Algorithm:

step -① - start
step -② - get n from user
step -③ - i=2
step -④ - if i<n goto 5 otherwise goto 10
step -⑤ - if n%i != 0 goto ⑥ otherwise goto ⑨
step -⑥ - i=i+1
step -⑦ - if (n-1)= i goto 8 otherwise goto 4
step -⑧ - print n is prime goto 10
step -⑨ - print n is not prime
step -⑩ - stop

Flowchart:



Ex. No.: 4 **Date:** 22/10/24

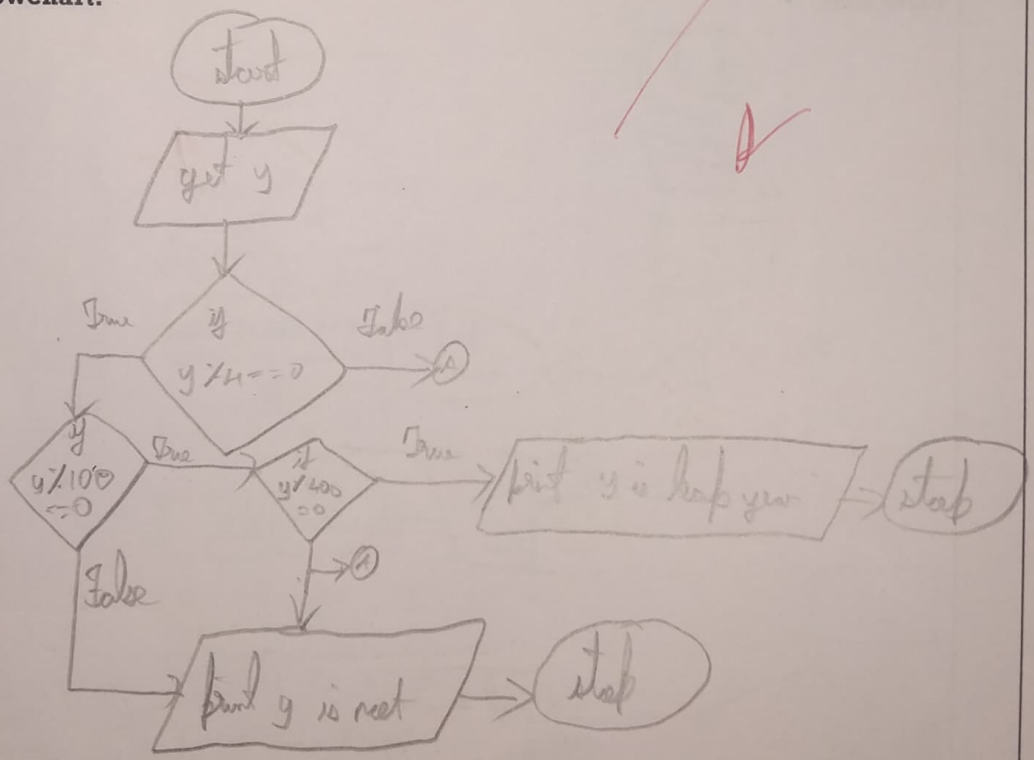
Leap Year

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

Algorithm:

step-①- start
step-②- get y from user
step-③- if y%4==0 goto 4 otherwise goto 7
step-④- if y%100==0 goto 5 otherwise goto 6
step-⑤- if y%400==0 goto 6 otherwise goto 7
step-⑥- print y is leap year goto 8
step-⑦- print y is not leap year goto 8
step-⑧- stop

Flowchart:



Ex. No.: 5 **Date:** 22/10/24

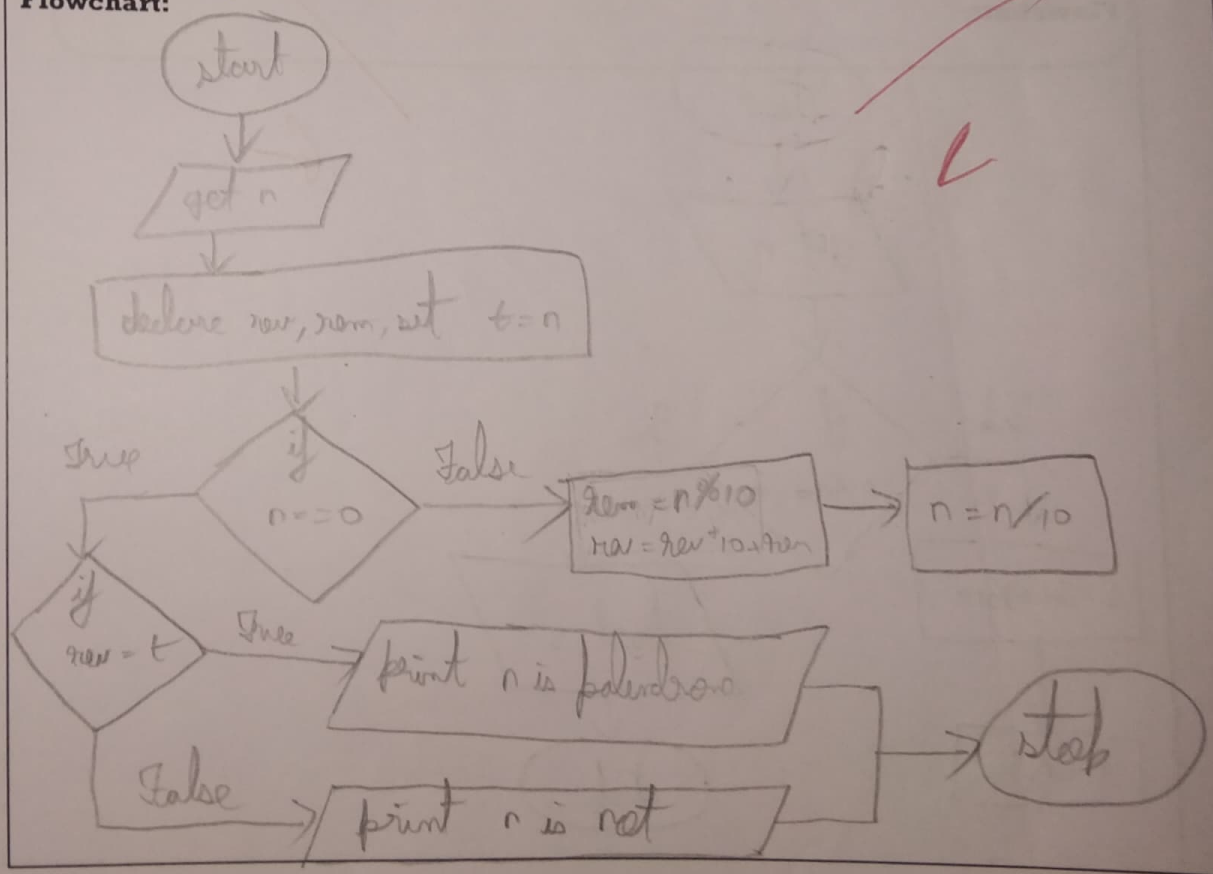
Palindrome Number

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

Algorithm:

step-① - start
step-② - get n
step-③ - declare rev, rem & set temp = n
step-④ - if n==0 goto ⑦ otherwise goto ⑤
step-⑤ - rem = n%10, rev = rev*10 + rem
step-⑥ - n = n/10 goto ④
step-⑦ - if rev == temp goto ⑧ otherwise Print n is not
step-⑧ - print n is palindrome
step-⑨ - stop

Flowchart:



Ex. No.: 6 **Date:** 22/10/24

Sum of Digits

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

Algorithm:

① start
step ②- get n from user, set s=0;
step ③- if n/10==0 goto ⑥ otherwise goto ④
step ④- s=s+n%10
step ⑤- print s n=n/10
step ⑥- print s
step ⑦- stop

Flowchart: