

↓ Print sum of even numbers till n

Algorithm :

Step 1 : Start

Step 2 : Read the input by user as num

Step 3 : Initialize variables integers 'i' and sum

Step 4 : loop starts to check condition

Step 5 : Again check condition that is
 $i \% 2 == 0$

Step 6 : If yes print "sum = sum + i; i incremented"

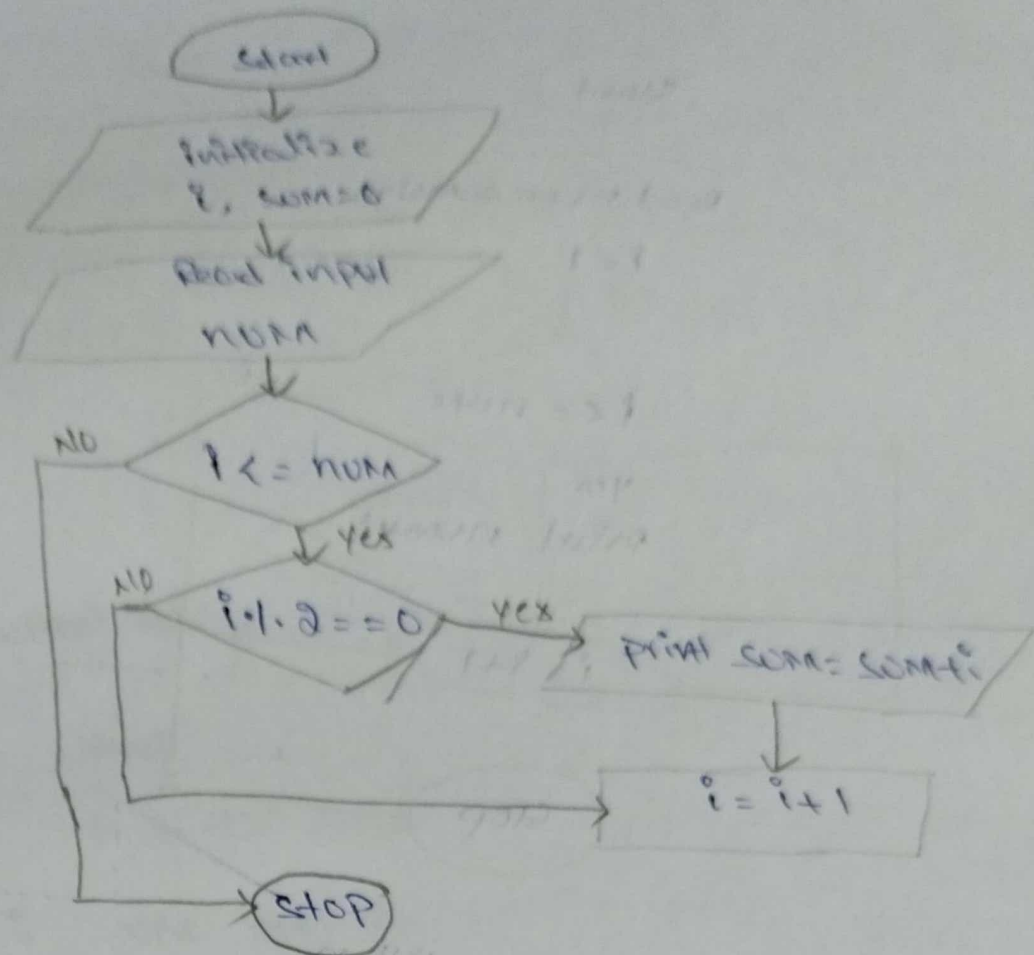
Step 7 : If no print $i = i + 1$;

Step 8 : Repeat 5, 6 until condition fails

Step 9 : Print Result

Step 10 : Stop

Flowchart



ii) Find GCD of two '2' numbers

Algorithm

STEP 1 : Start

STEP 2 : Read two inputs by user as first & second

STEP 3 : Initialize an integer variable gcd as '1'

STEP 4 : For loop starts to check the condition as
($i \leq \text{first}$ & $i \leq \text{second}$) after that
update 'i' value

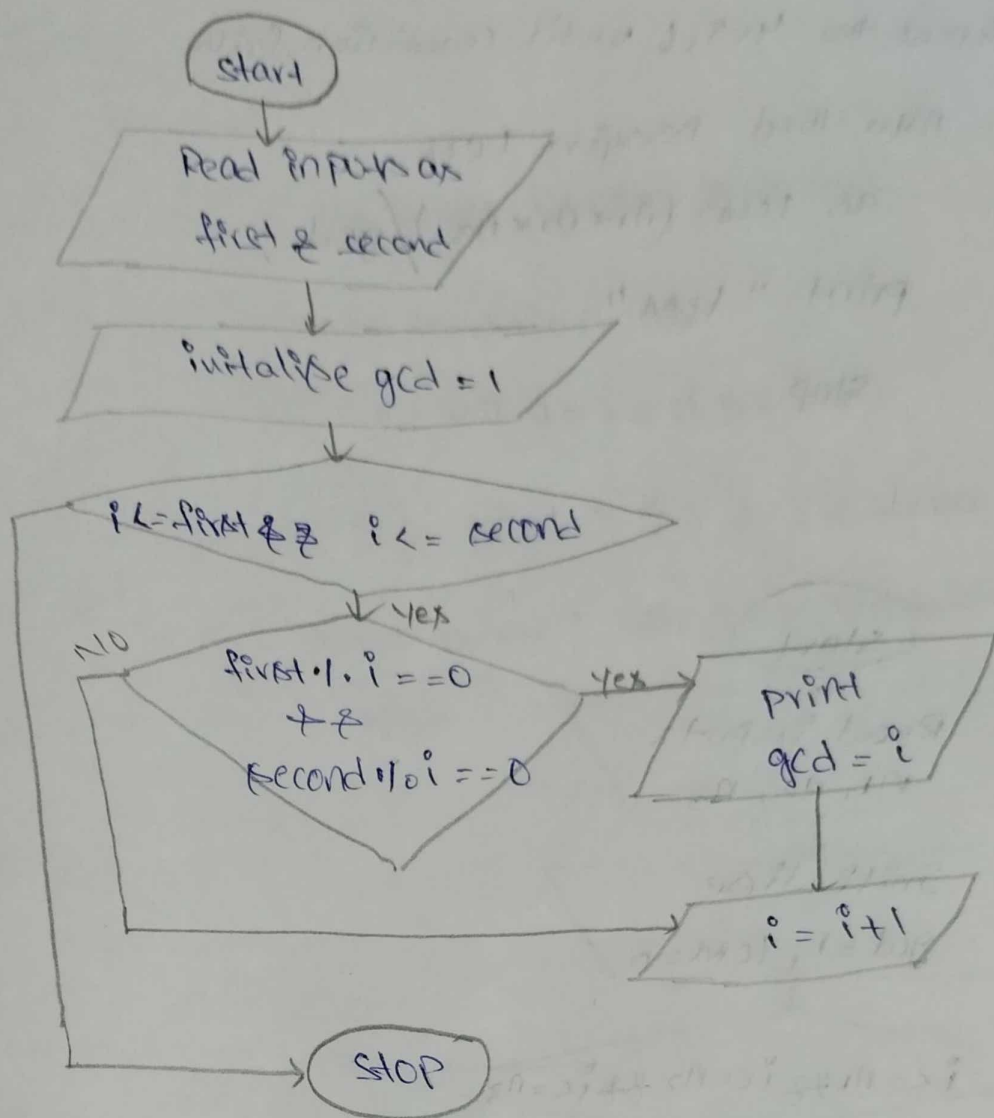
STEP 5 : check the condition as
 $\text{first} \% i == 0$ & $\text{second} \% i == 0$

STEP 6 : Then print gcd as 'i'

STEP 7 : print result

STEP 8 : stop

flowchart :-



12) print lcm of '3' numbers in java

Algorithm :-

step 1 :- start

step 2 : Read the inputs as n_1, n_2, n_3

step 3 :- initialise variables as gcd & lcm as integers

step 4 :- use loop as $(i \leq n_1 \ \&\& \ i \leq n_2 \ \&\& \ i \leq n_3)$

step 5 : Then check the condition as

$$n_1 \% i == 0 \ \&\& \ n_2 \% i == 0 \ \&\& \ n_3 \% i == 0$$

step 6 : After that if yes Assign $\text{gcd} = i$ & update 'i' value

Step 7 : else simply update 'i' value

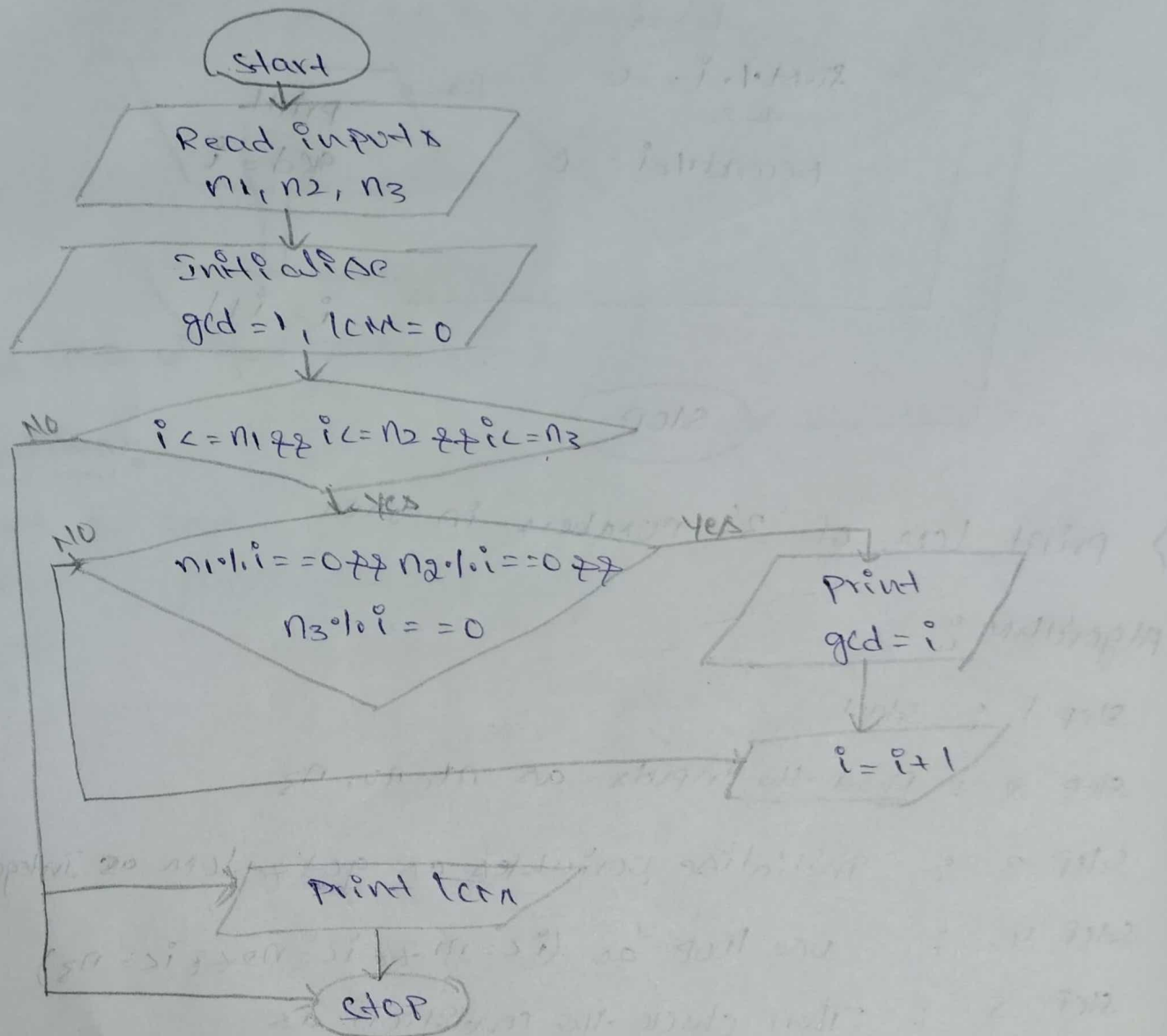
Step 8 : Repeat the 4, 5, 6 until condition fails

Step 9 : After that Assign LCM
as $LCM = (n_1 \times n_2 \times n_3) / gcd$;

Step 10 : Print "LCM"

Step 11 : STOP

Flow chart:



Check whether given triangle is Isosceles or not.

Algorithm :

Step 1 : Start

Step 2 : Read the inputs by user as a, b, c

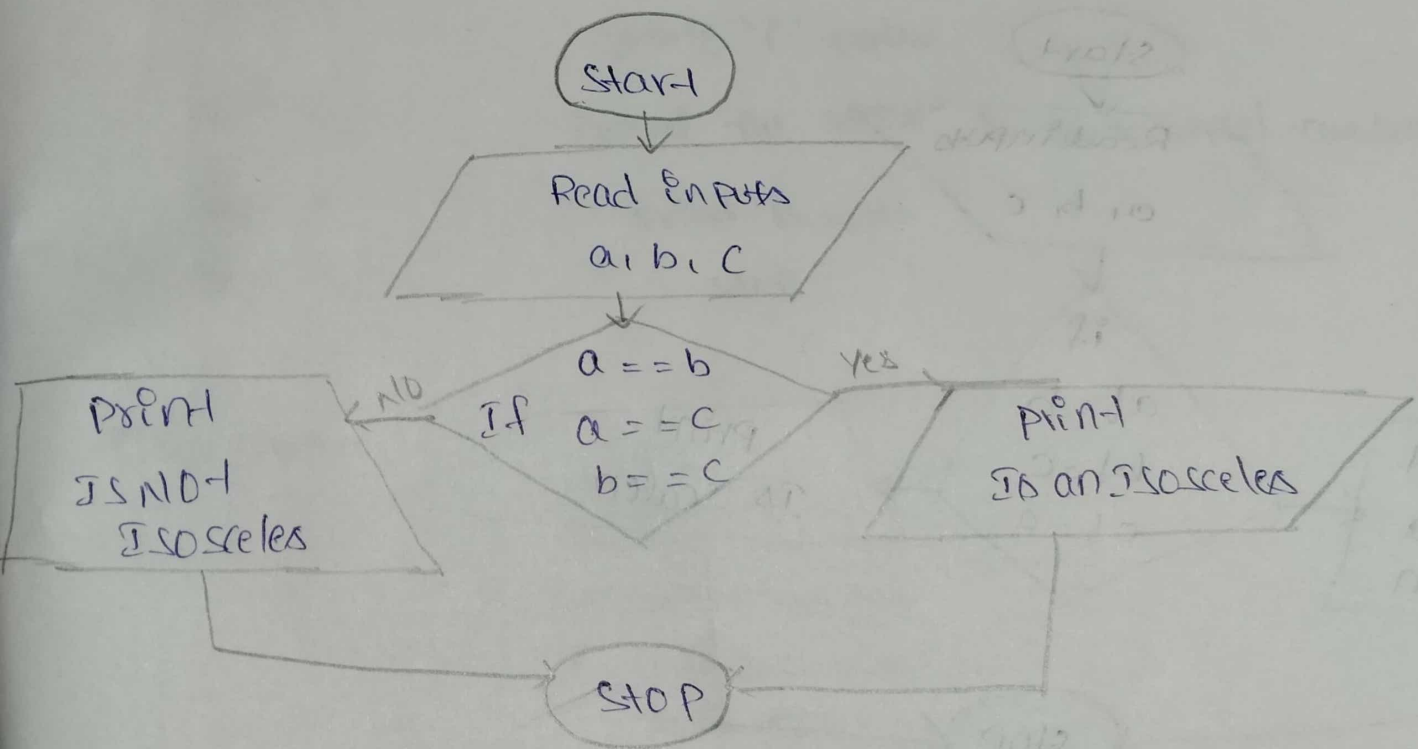
Step 3 : Check the condition as
 $\text{if}(a == b \parallel a == c \parallel b == c)$

Step 4 : If Yes print "It is an Isosceles triangle"

Step 5 : Else print "Not Isosceles triangle"

Step 6 : Stop

Flowchart :



14) Check whether a triangle is scalen or not

Algorithm:-

Step 1 : Start

Step 2 : Read the inputs a, b, c

Step 3 : check the condition as

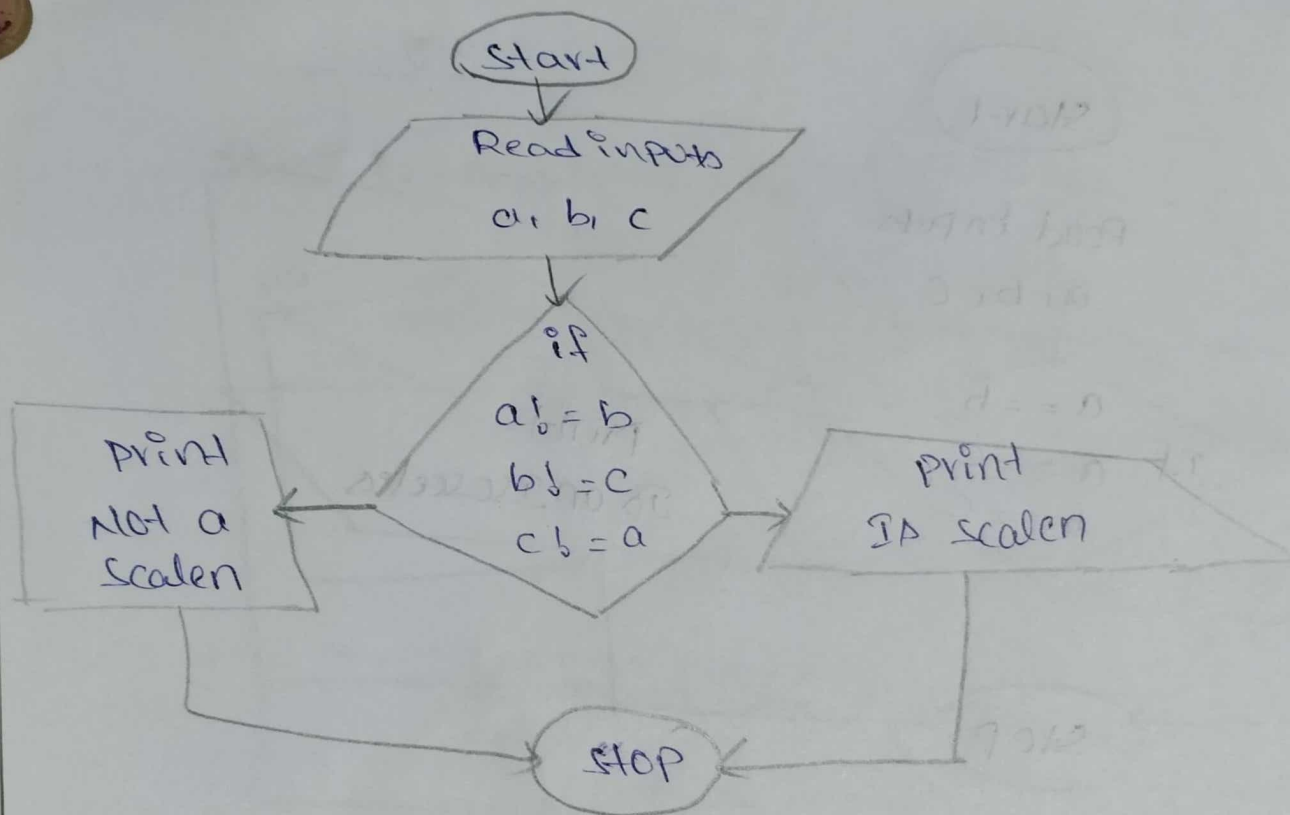
$$(a \neq b \neq a \neq c \neq b \neq c)$$

Step 4 : If yes print "It is a scalen"

Step 5 : Else print "It is not scalen"

Step 6 : Stop

Flow chart:



15) Print Fibonacci series

Algorithm:

Step 1 : Start

Step 2 : Initialize integer variable as
 $i = 1$, first = 0, second = 1 and 'num'

Step 3 : check the condition using while loop as
while ($i \leq \text{num}$)

Print "first"

Step 4 : Declare a variable that is integer
next-term = first + second; & update values as
first = second;
second = next;

Step 5 : update 'i' value

Step 6 : Repeat the steps 3, 4, 5 until condition fails

Step 7 : Print Results

Step 8 : STOP

Flow chart:

