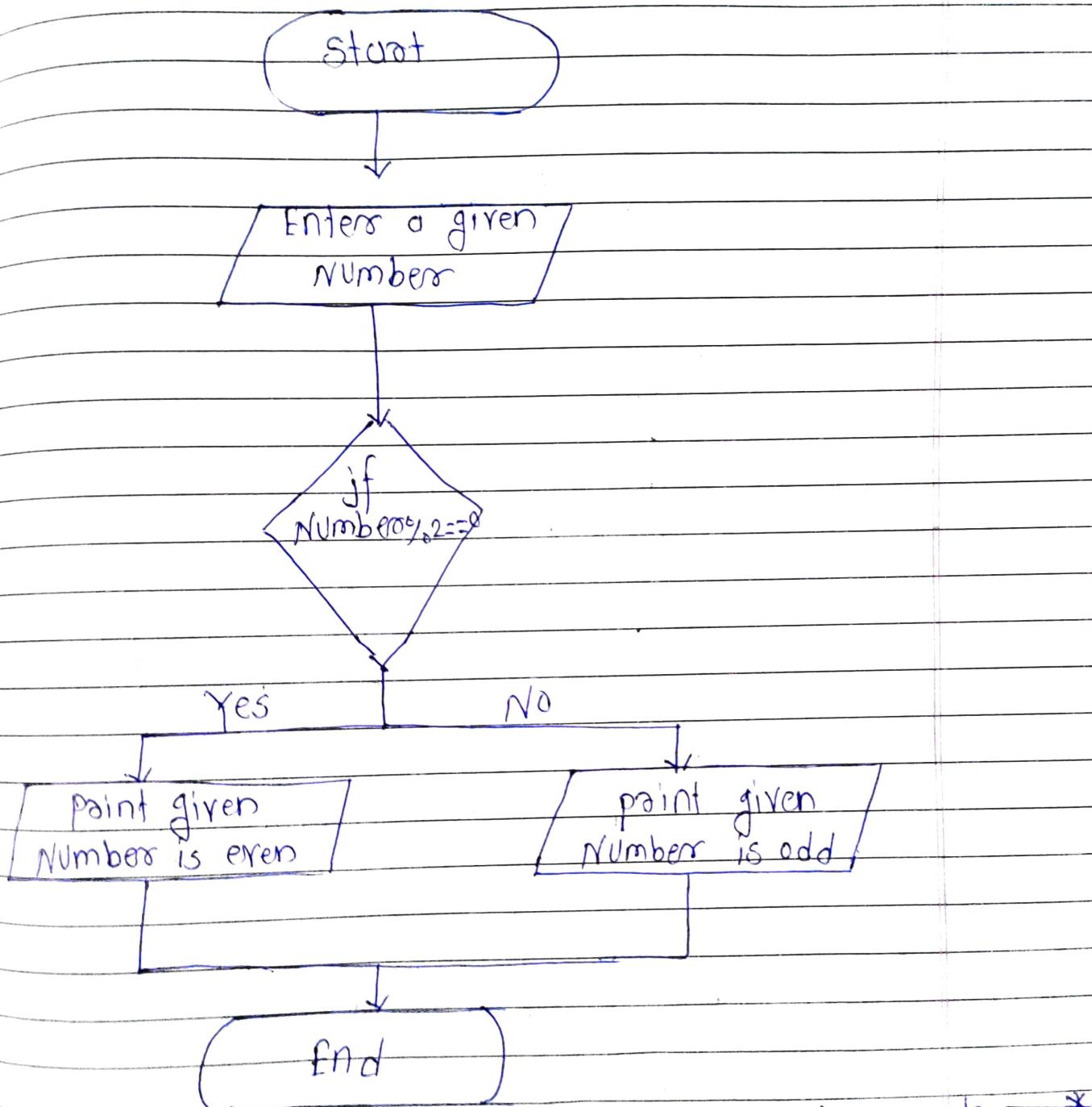


# ① Assignment No: 1

② write flow chart of following program

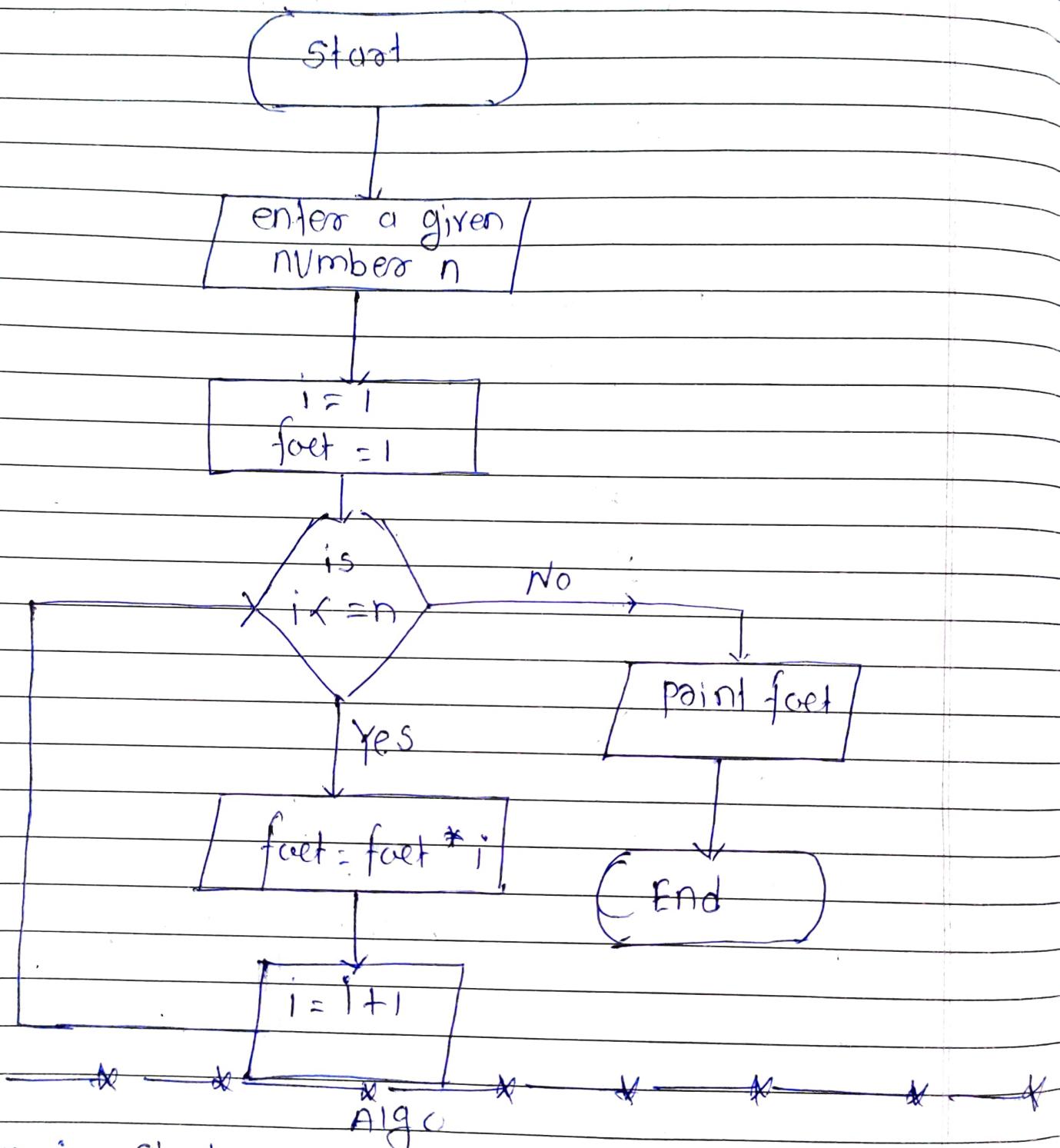
① check the given number is even or odd.

↳



- ① st — Enter the number  
② if the number is  $\% 2 == 0$  then  
    given number is even  
③ if the number is  $\% 2$  is not  $= 0$  then given  
    number is odd

(2) write flow chart of find the factorial of a number given numbers



Step-I : Start

II : enter given number 'n'

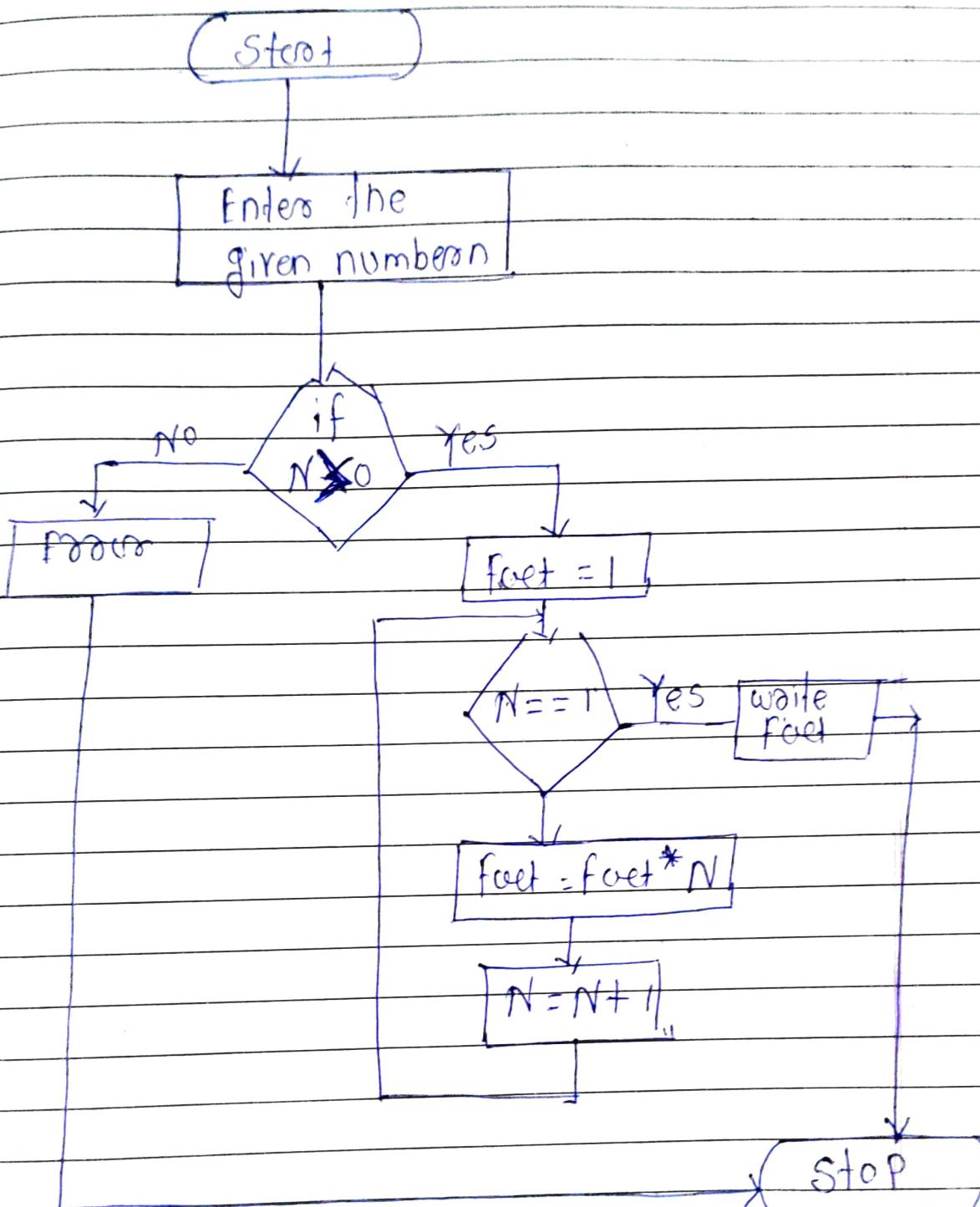
III : if  $n=1$  then factorial is 1

IV : if  $n > 1$  then  $\text{factorial} = \text{fact} * i$ ,  $i = 1$

V : get out put

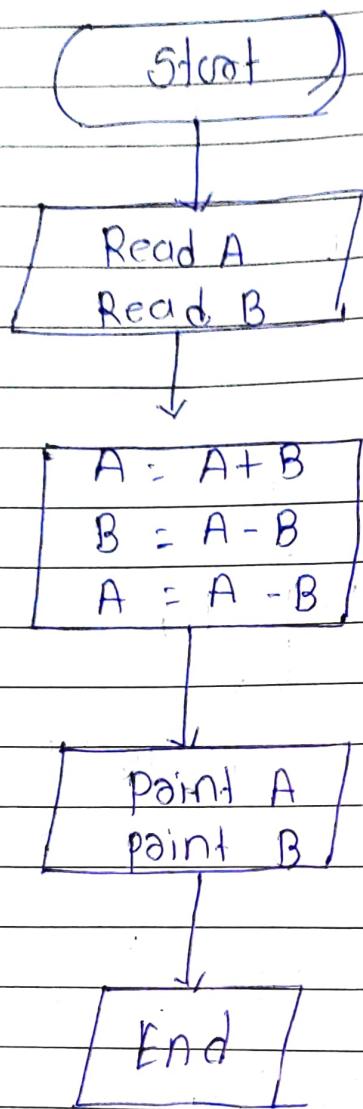
VI : end

b) To find factorial of a given numbers Using recursion



- I Step - I  $\rightarrow$  Enters a given number.
- II  $\rightarrow$  if number is  $>$  than 0 then
- III  $\rightarrow$  Fact = 1, Fact = Fact \* N, then increase  
ment  $N = N + 1$ ,
- IV  $\rightarrow$  get output factorial
- IV  $\rightarrow$  if  $n \leq 0$  then error, end

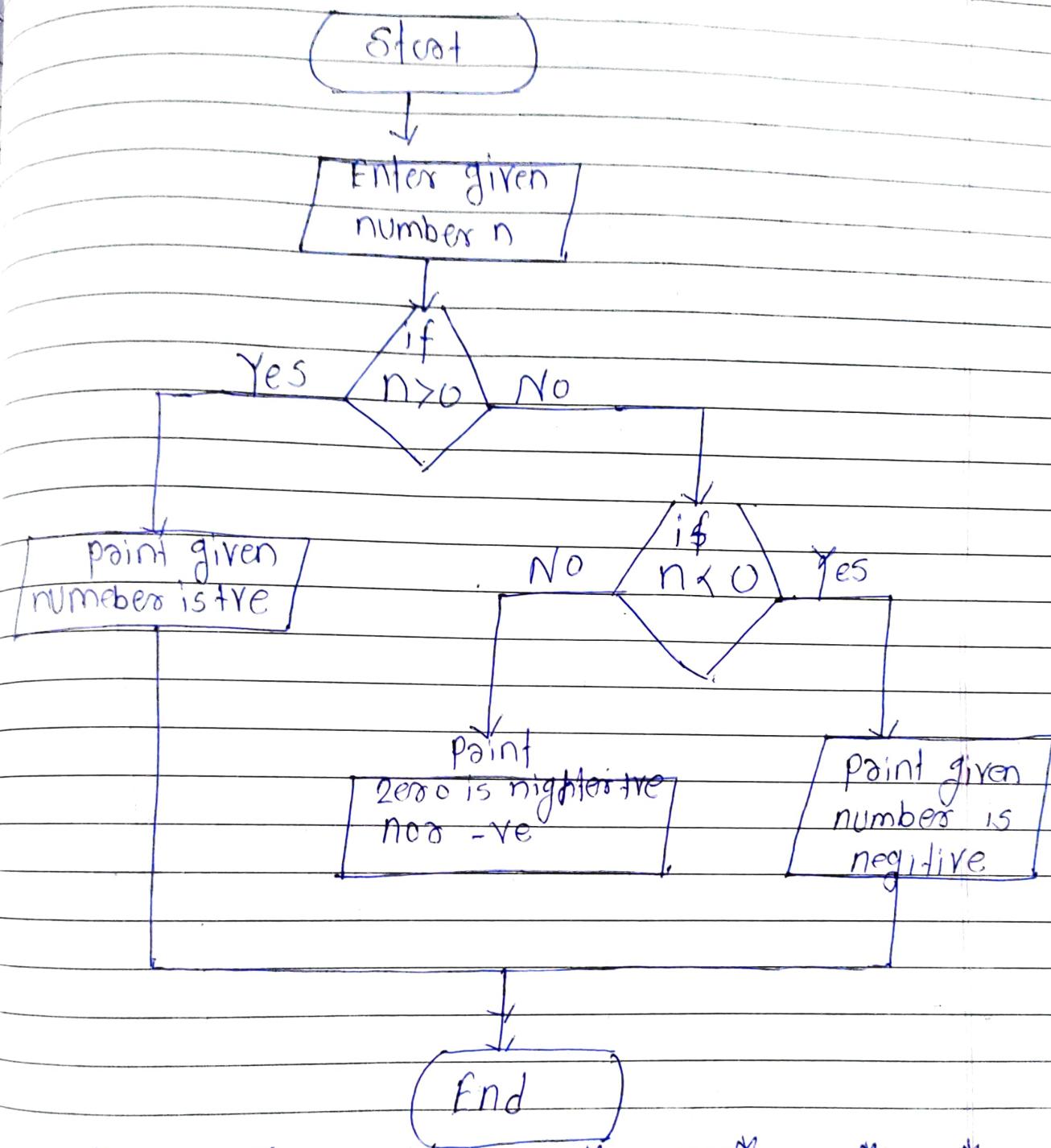
Q.4) Swap two numbers without using third variable.  
approach.



\* Algo →

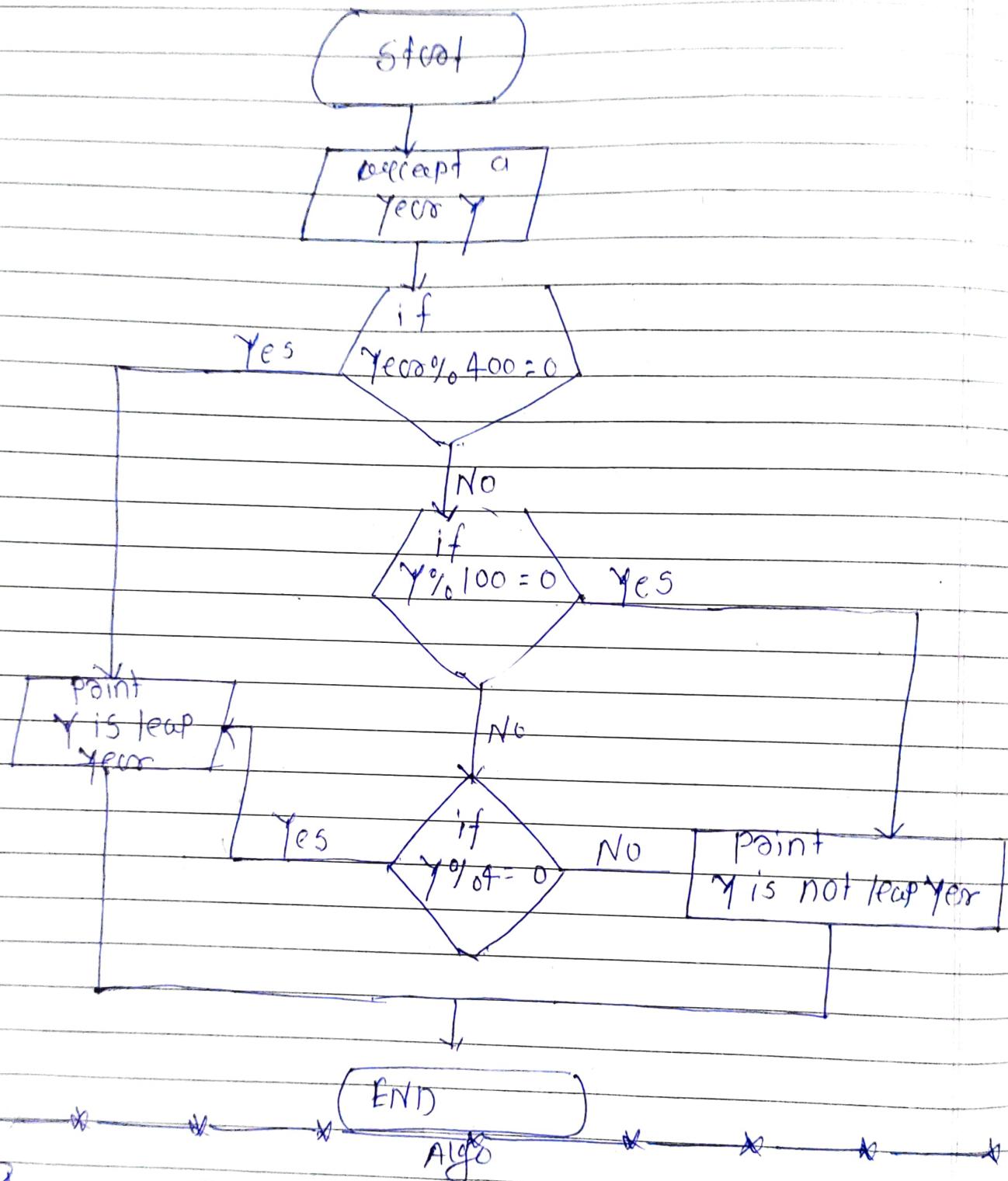
- Step 1 - Start
- Step 2 - Enter A, B
- Step 3 - PAINT A, B
- Step 4 - A = A + B
- Step 5 - B = A - B
- Step 6 - A = A - B
- Step 7 - Point A, B
- Step 8 - END

5) Flow chart of given number is +ve or -ve.



- Algo:
- I : Step - I : Start
  - II : enter given number
  - III : if given number is greater than zero  
then number is +ve
  - IV : if number  $\neq 0$  then check  $n = 0$  and  
 $n < 0$ ,
  - V : if  $n = 0$ , then, non-negative nor -ve
  - VI : if  $n < 0$ , then given number is -ve.

6) flow chart to check given year is leap or not



Step I → Start

II) → take any input from user Y

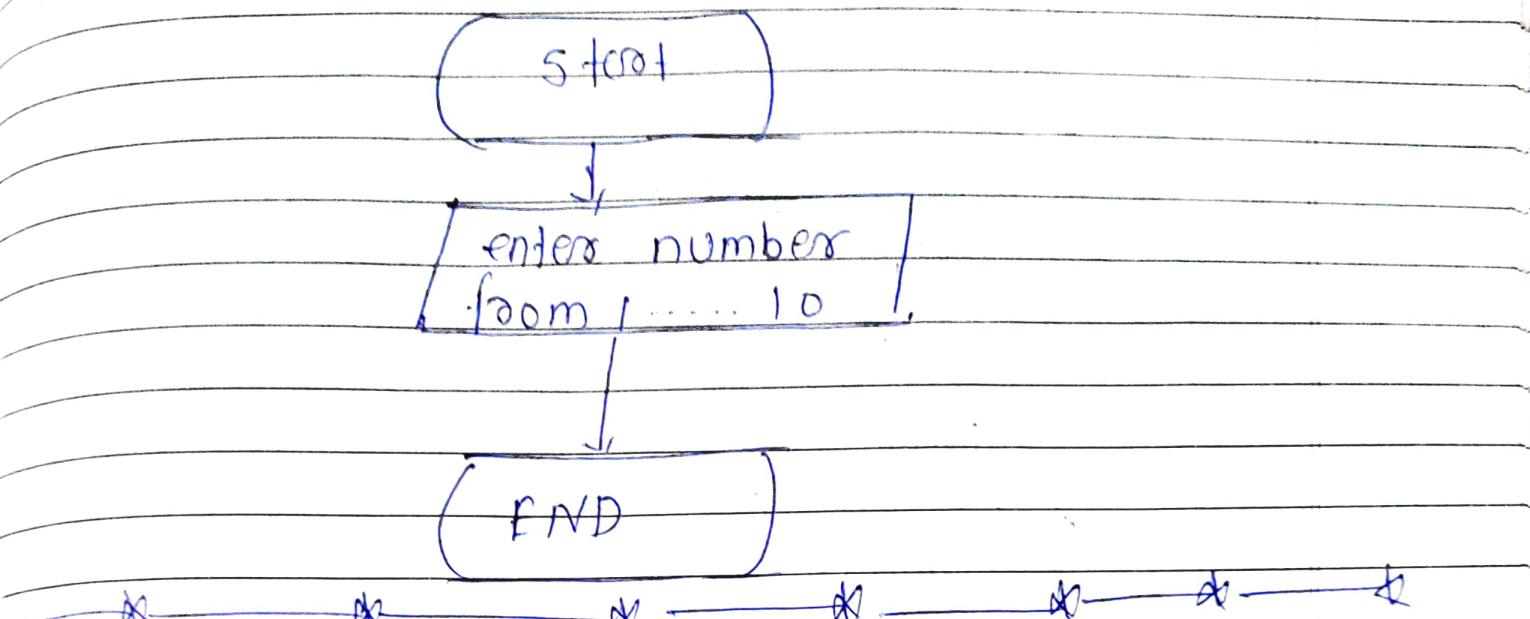
III) → if year Y is  $\% 400$ , exactly then, given year is leap

IV) → if No the check it is  $\% 100$ , if Yes then ~~not~~ leap

V) → if No check  $\% 4 = 0$  if Yes then Year is leap year

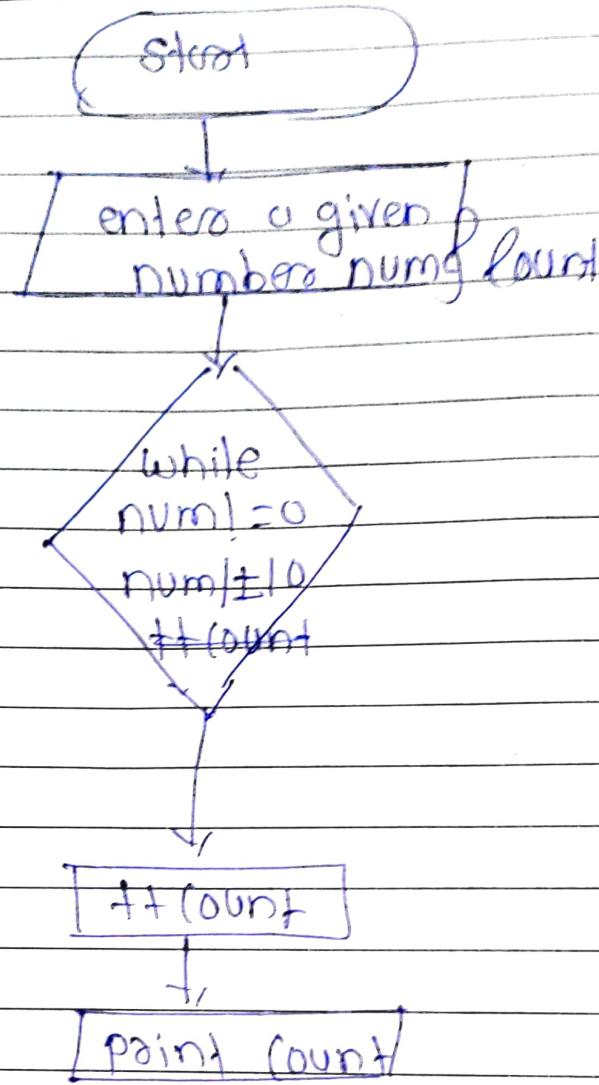
VI) → if No given year is not leap year.

7) flow chart of point (1... 10) number



- I) step I → start
- II) → enter the number which user want to paint
- III) → secret system.out.paintln( ) 10 times!
- IV) → END;

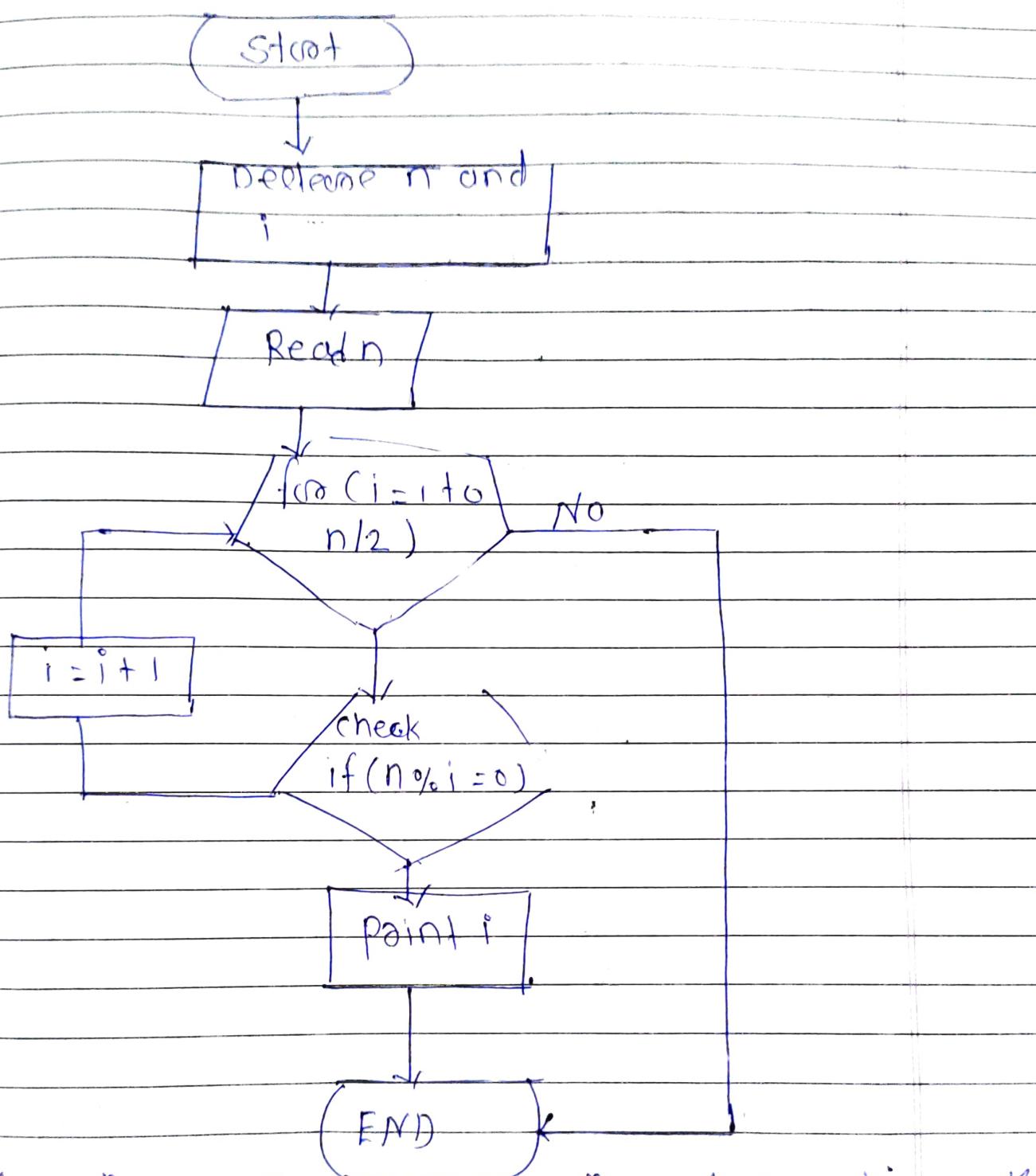
③ write a java program to print the digits of a given number



① start  
② enter the numbers n, & dec, count  
③ Using while loop num!=0  
④ num/10, count ++  
⑤ print "(count +)"  
⑥ end.

start  
enter the numbers n, & dec, count  
Using while loop num!=0  
num/10, count ++  
print "(count +)"  
end.

① write a Java program print all factors of given number



Step - I) → enter the two numbers

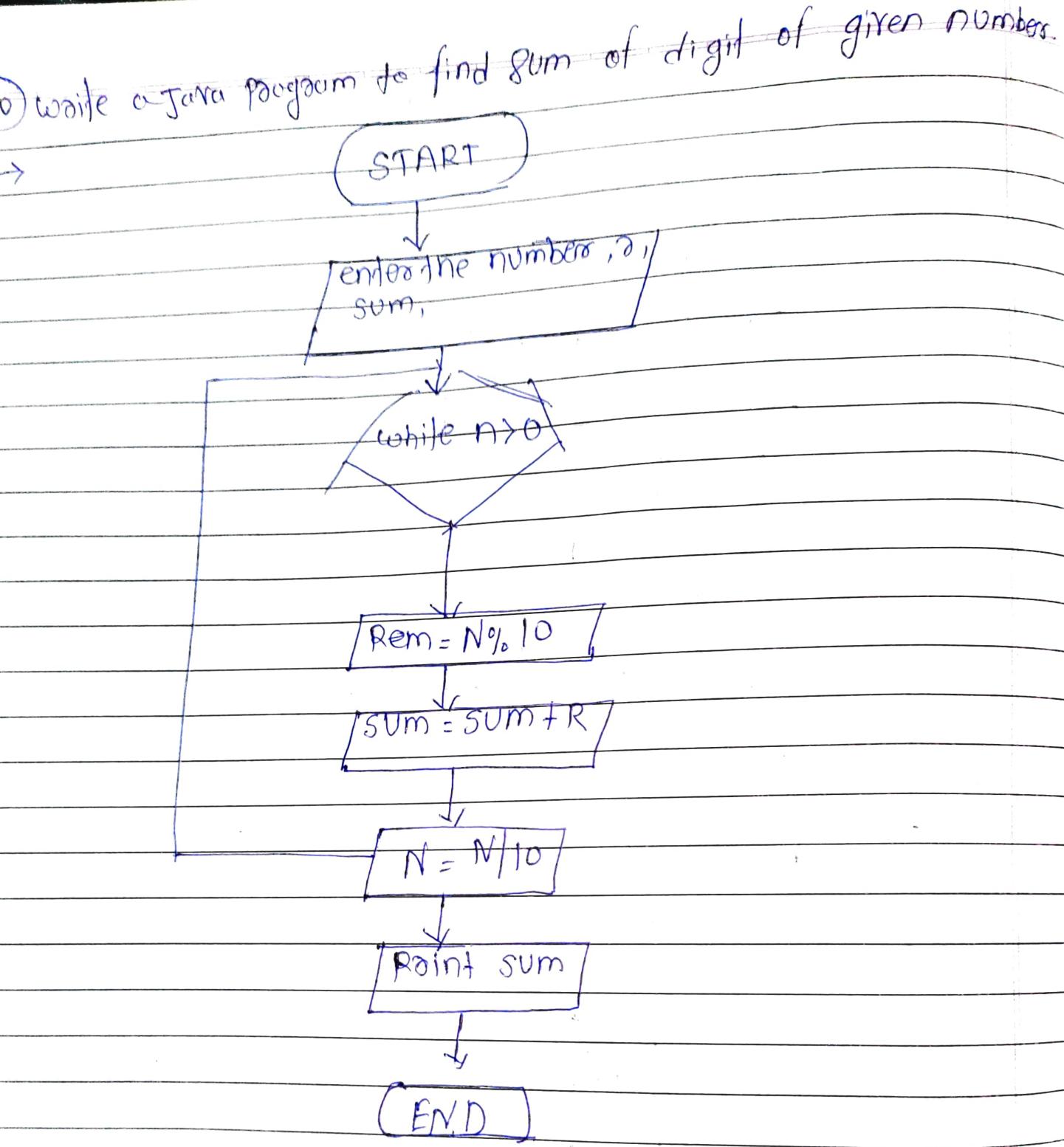
II) → if enter the 1<sup>st</sup> number &

III) :  $i \geq n$ , number is greater than n

IV) Dividing numbers i/n

V) paint the number i

VI) end.



Step-I) : enter the number a e.g) 126, 2, sum

Step-II) - while (n > 0)

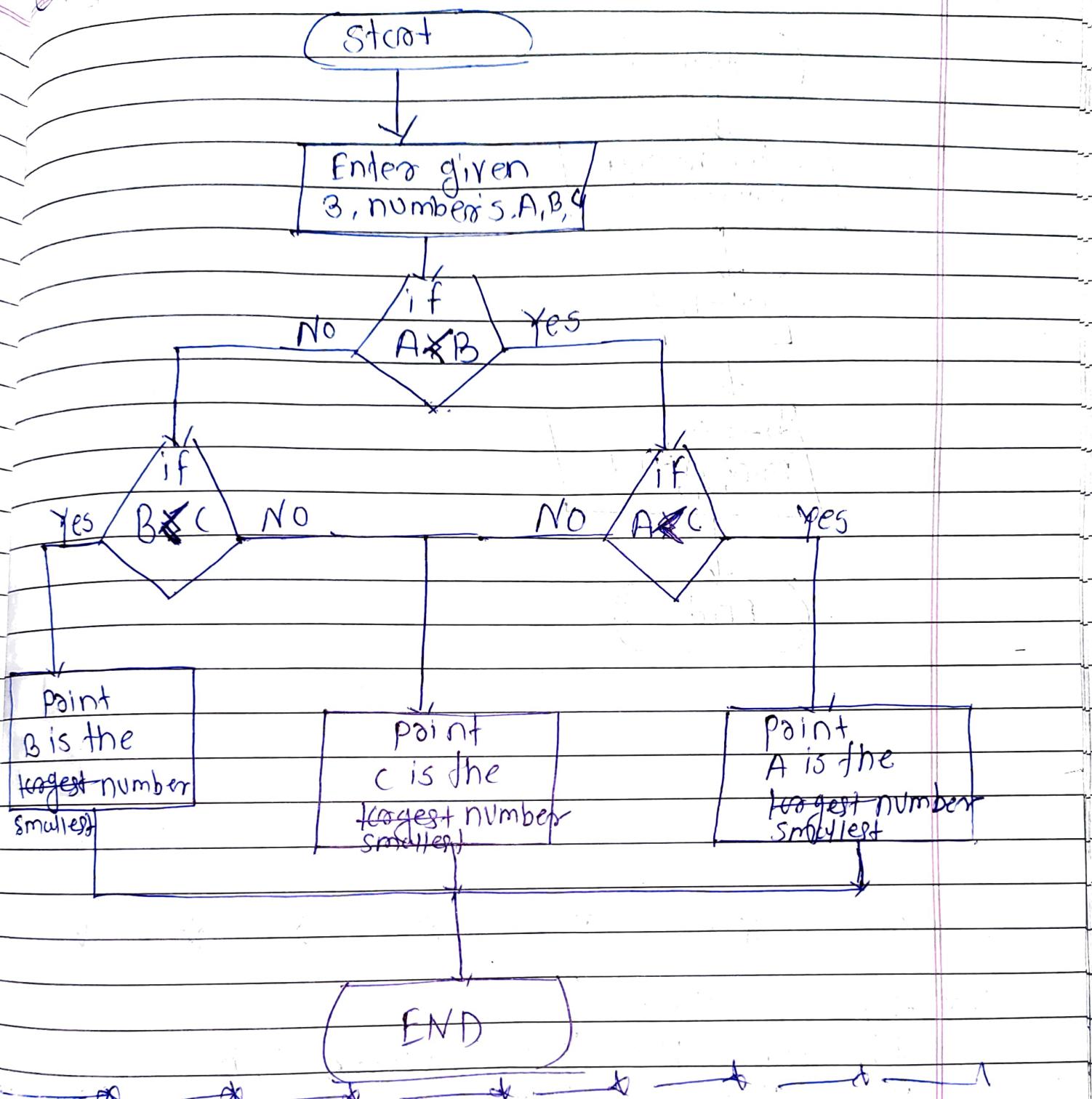
e.g)  $n = n \% 10$  ;

$sum = sum + r$  ;

$n = n / 10$  ;

$sum = 9$

flow chart of to find the smallest of 3 numbers



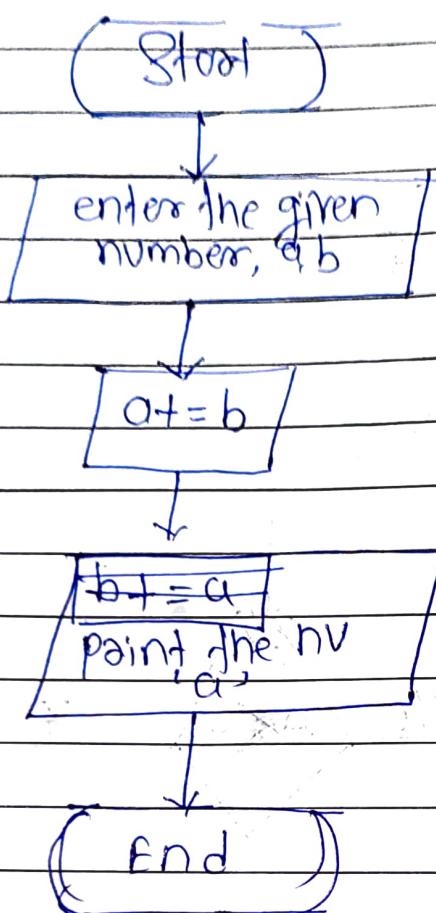
Step - I) enter the number a, b, c

II) if number  $A > B$  and  $A > C$  then A is smaller number

III) else b or c is smaller number

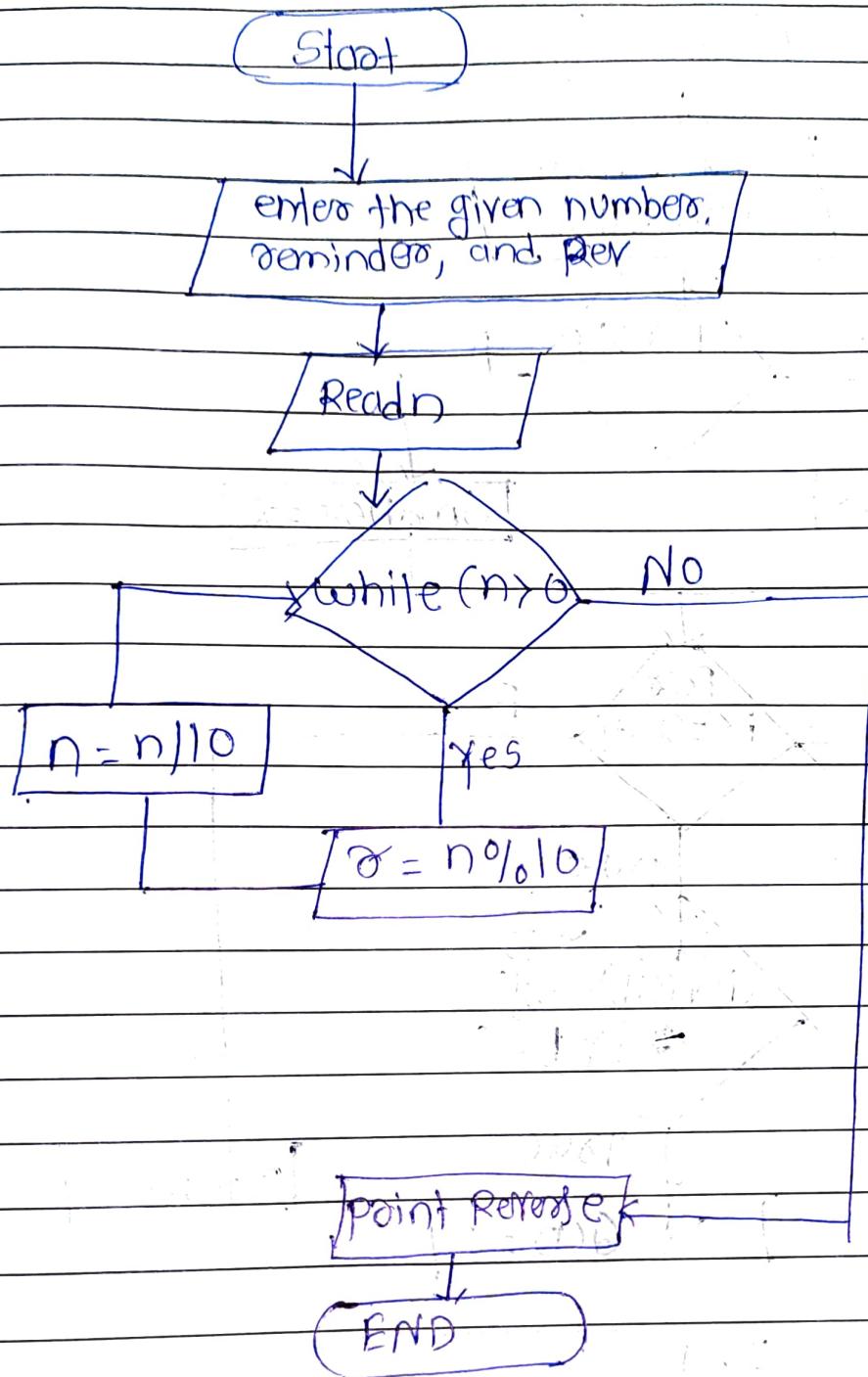
IV) check  $B < C$ , if Yes then B is smaller number, if No the C is smaller number

(12) How to add two numbers without arithmetic operator in java.



- Step - I) Start  
II) enter the two numbers, a, b  
III) Using shift and operator  $a + = b$   
IV) paint the a  
V) end

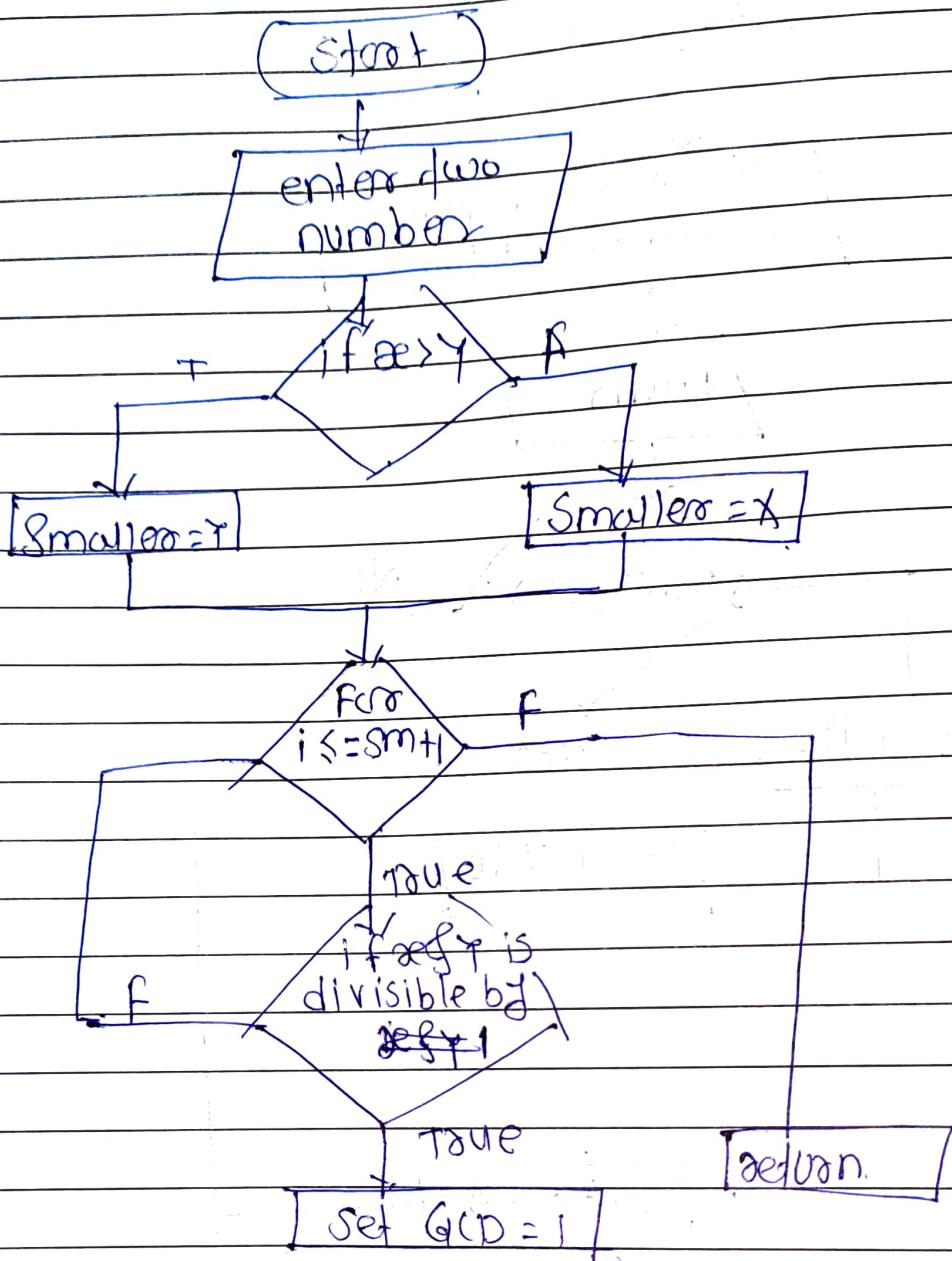
Q) write a Java program to Reverse a given number.



- (1) enter the number:  $n = 777$ ,  $x = ?$
- (2) while ( $n > 0$ )
- (3)  $x = n \% 10$
- (4) point  $x$
- (5)  $n = n / 10$
- (6) point reverse number.

write a Java program to find GCD of two given numbers

(14)



Step - +

Start

II) Declase two Variable a&y

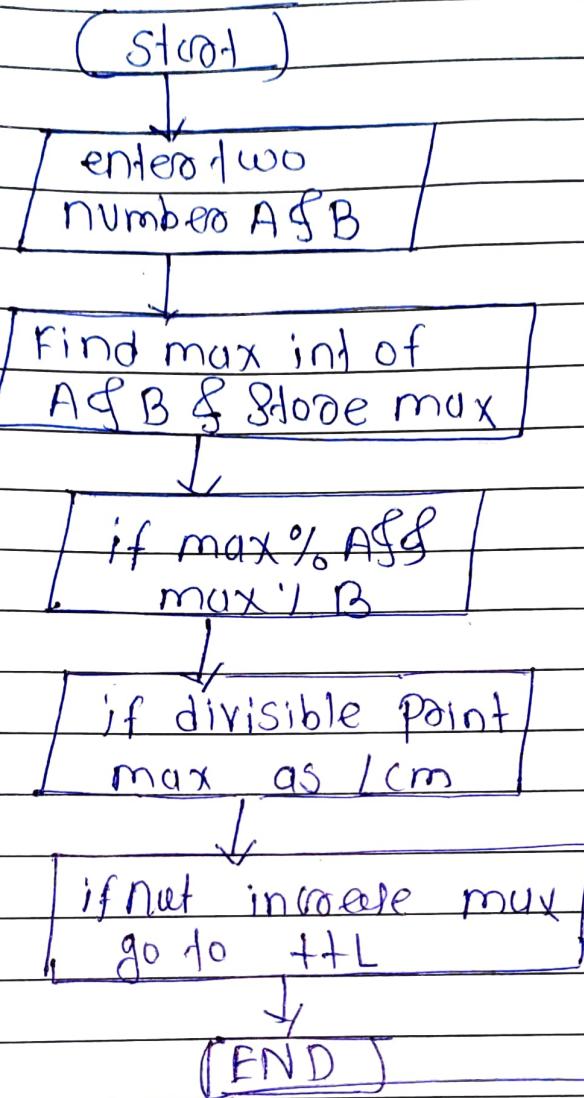
III) Loop For a&y for i to max of a&y

IV) check that the number divided by both  
a&y completely or not , if divide's then  
print that variable i.

V) Divide End.

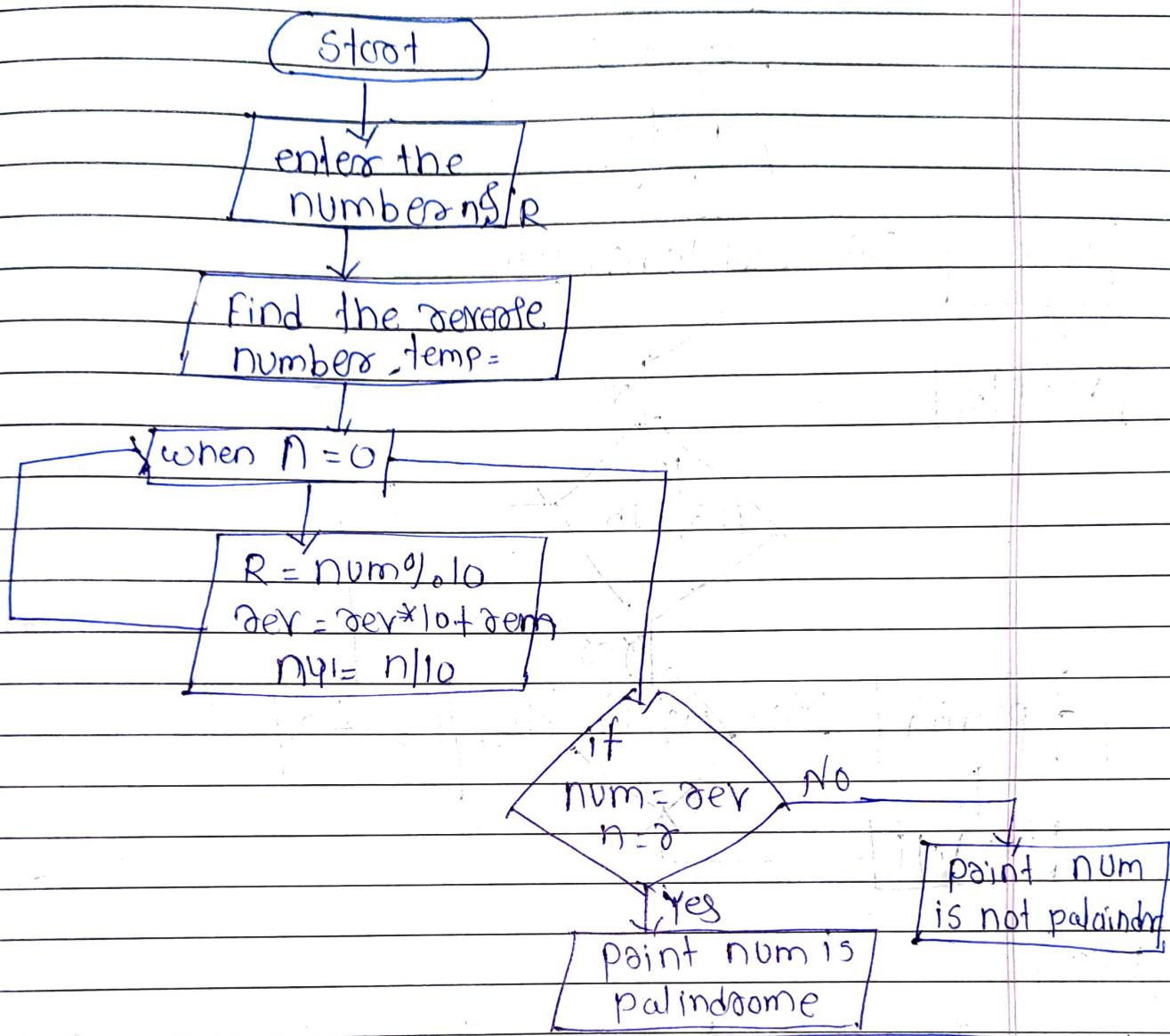
15. Write a Java program to find Lcm of two given numbers.

L



- (1) initialize A & B with positive integers
- (2) Store maximum of A & B to the max
- (3) Check if max is divisible by A & B
- (4) if divisible display max as Lcm
- (5) if not divisible then step incott, go step 3

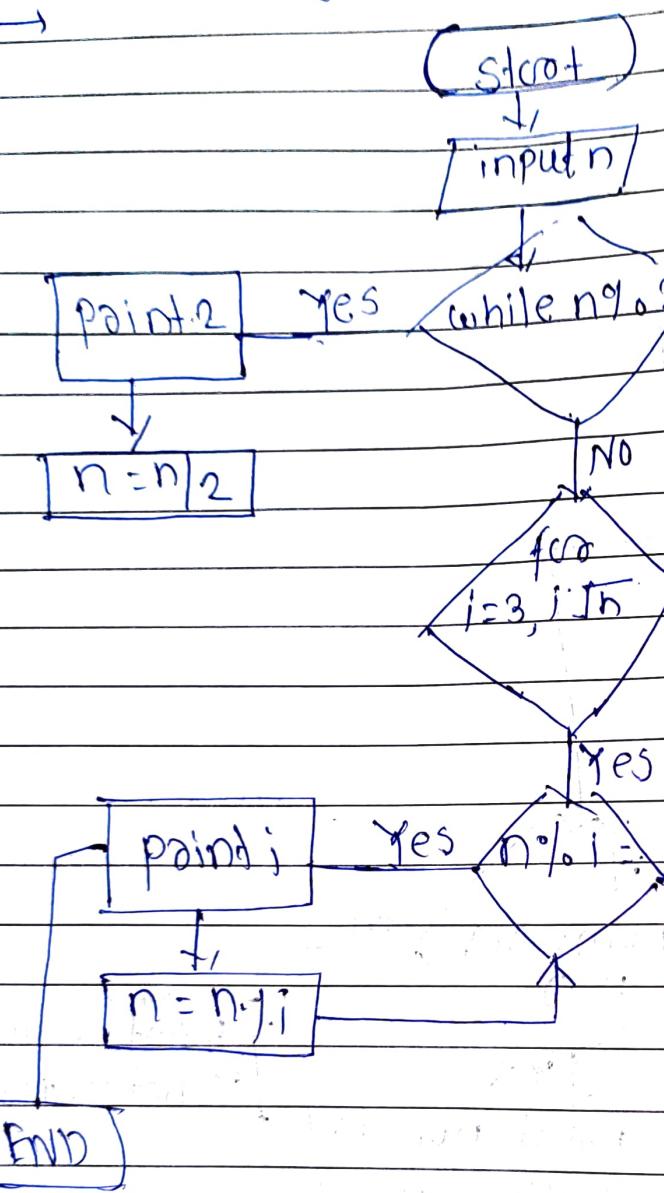
1) write the program the given number is palindrome or not



- I) step - I  $\rightarrow$  Start
- II  $\rightarrow$  input the number
- III)  $\rightarrow$  find the reverse of number &
- IV)  $\rightarrow$  if reverse of the number is equal to the number, i.e.  $\text{rev} = n$
- V)  $\rightarrow$  return true or false.

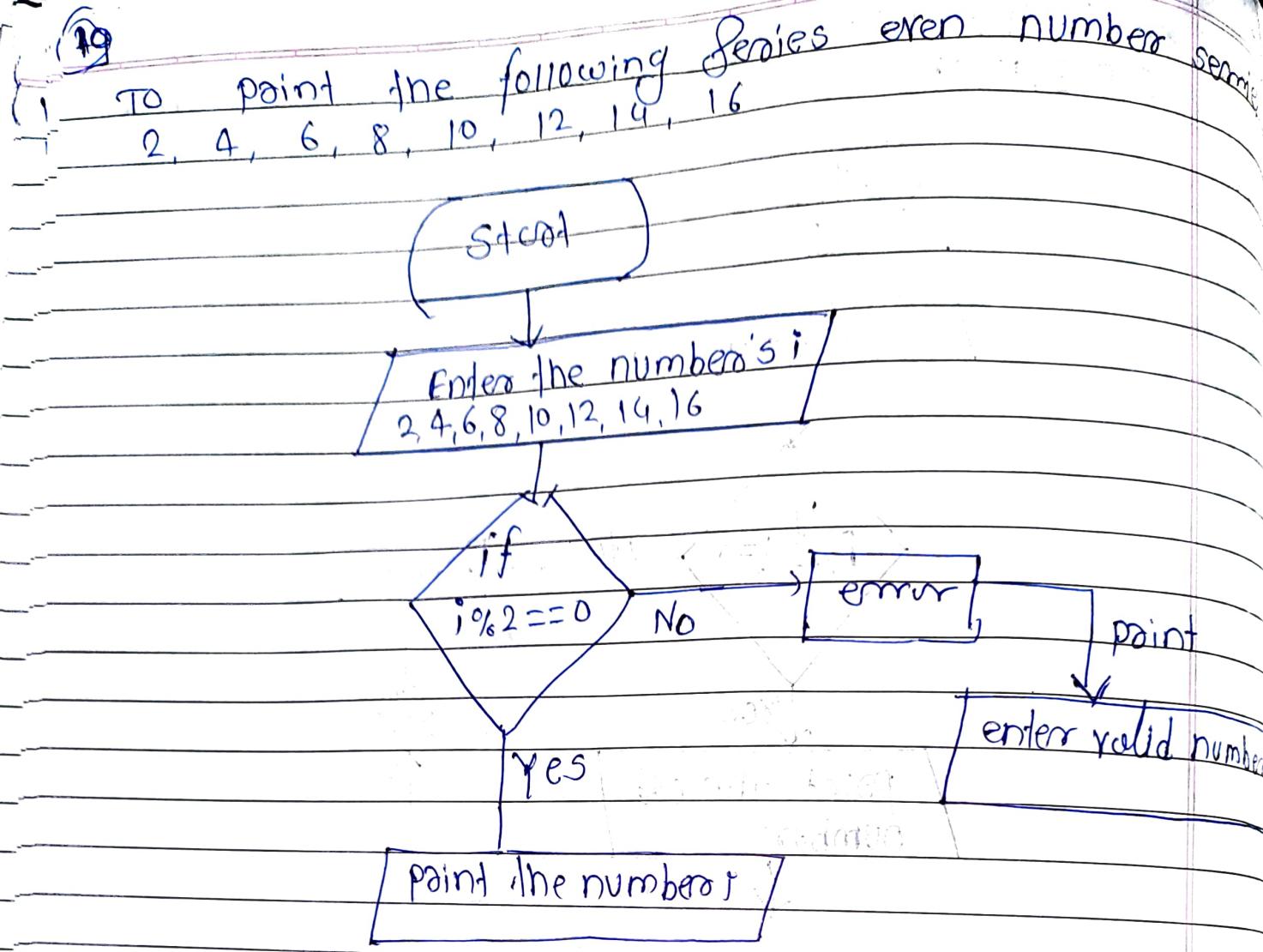
(18)

write a Java program to print all the prime factors of given number.



Start

- (1) while n is divisible by 2 , paint 2 & divide by 2
- (2) after step-I , n must be odd
- (3) now start loop from i=3 to square root n ..
- (4) if n is a prime number & is greater than 2
- (5) n will not become 1 by above step
- (6) point n if it greater than 2



- I
- II
- III
- IV
- V

Algo

Step - I)

II) Start

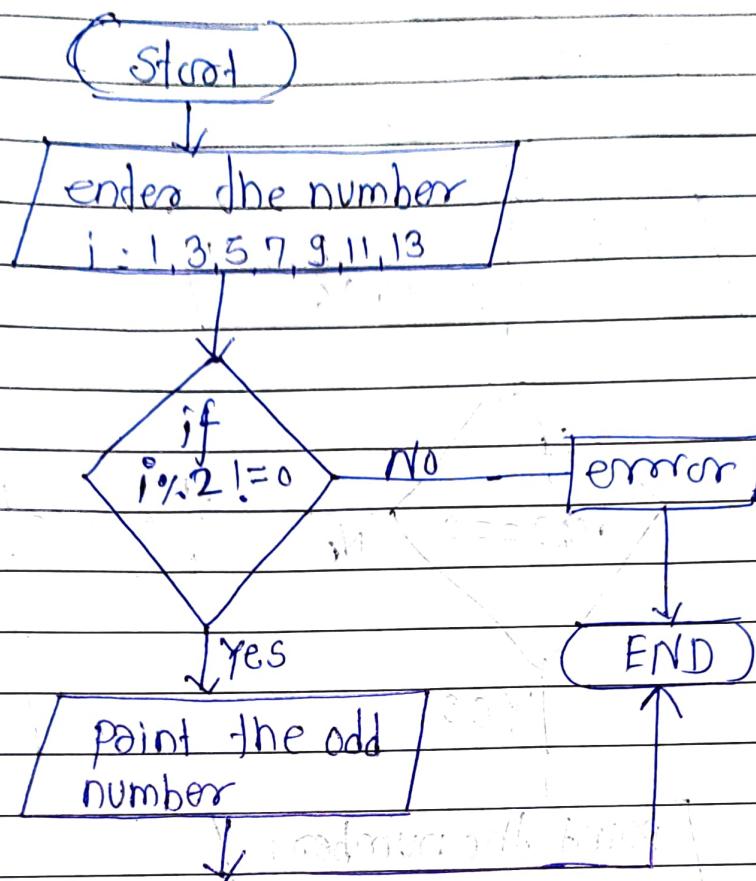
III) endea the number i = 2, 4, 6, 8, 10, 12, 14, 16

if (i%2 == 0);

IV) paint the number.

V) END

To point the following Semirel odd number Semries  
1, 3, 5, 7, 9, 11, 13;



### #\* Algo \*#

- ① step - I → start
- II → enter the number i : 1, 3, 5, 7, 9, 11, 13
- III) → if  $i \% 2 \neq 0$
- IV) → paint the number
- V) → stop