

S 1 Check the given number is Even or Odd.

Algorithm :-

Step 1 :- Start

Step 2 :- Get number

Step 3 :- Divide given number by 2

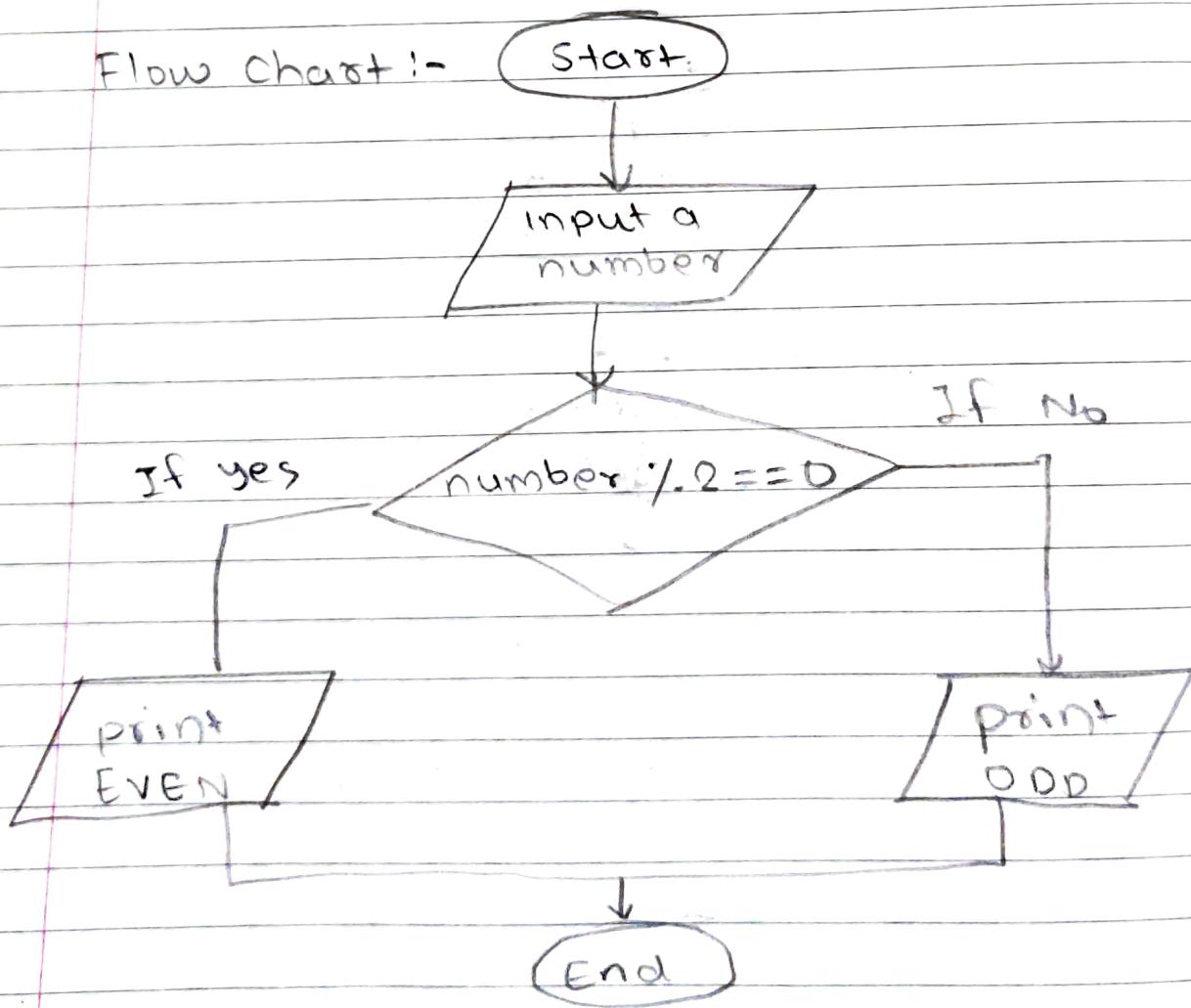
Step 4 :- check for remainder

Step 5 :- if remainder is equal to zero
print 'EVEN'

Step 6 :- else print 'ODD'

Step 7 :- End

Flow Chart :-



Q2 Write a Java program to find the factorial of given number.

Algorithm:-

Step 1:- Start

Step 2:- Get number, n

Step 3:- Initialize i=1 & factorial=1

Step 4:- repeat 4,5 & 6 until i=number

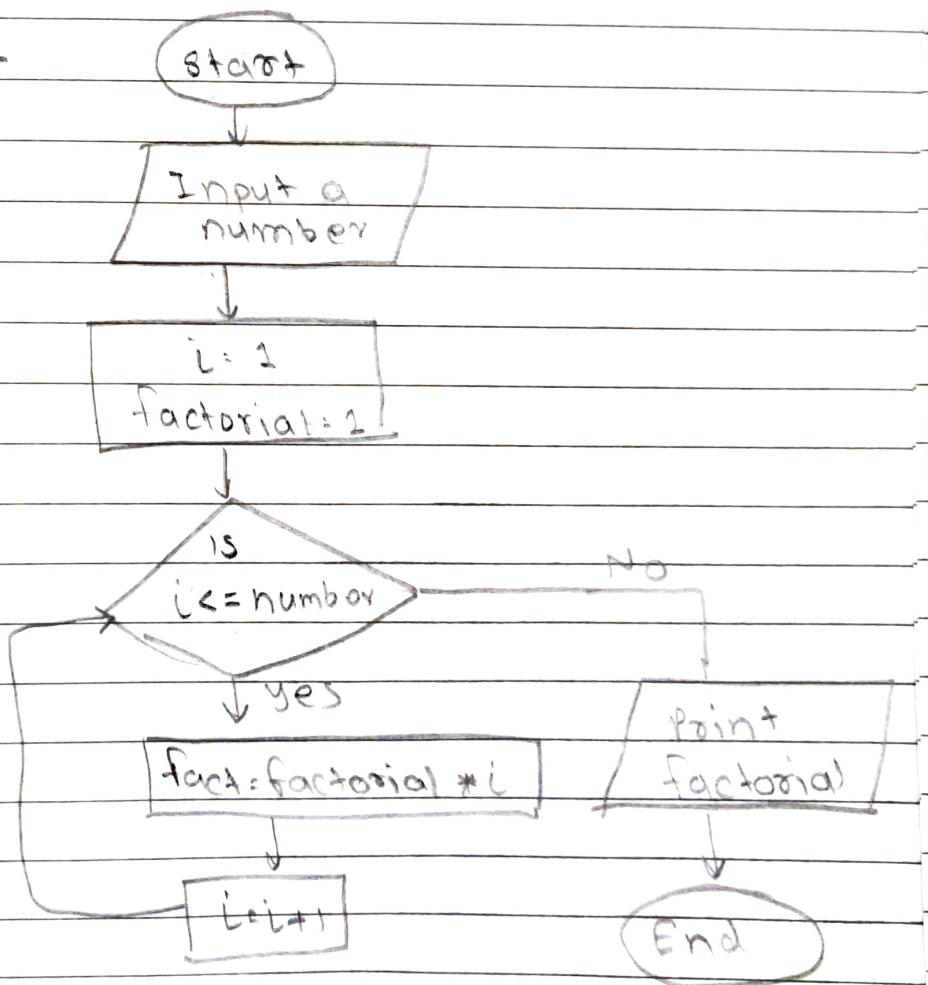
Step 5:- factorial = factorial * i

Step 6:- i=i+1

Step 7:- Print factorial

Step 8:- End

Flow chart:-



4 Swap two numbers without using third variable approach

→ Algorithm

Step 1 :- Start

Step 2 :- read input A & B

Step 3 :- $A = A + B$

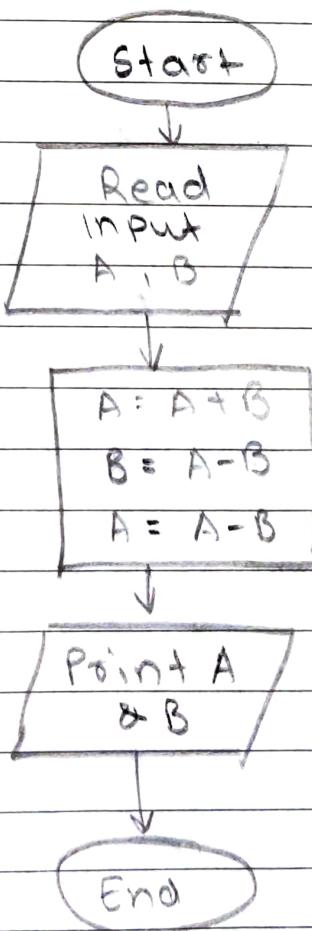
Step 4 :- $B = A - B$

Step 5 :- $A = A - B$

Step 6 :- Point A & B

Step 7 :- End

Flow chart :-



Q. 5 How to check the given number is positive or negative in Java?

Algorithm:-

Step 1 :- Start

Step 2 :- Read the input number

Step 3 :- if number is greater than

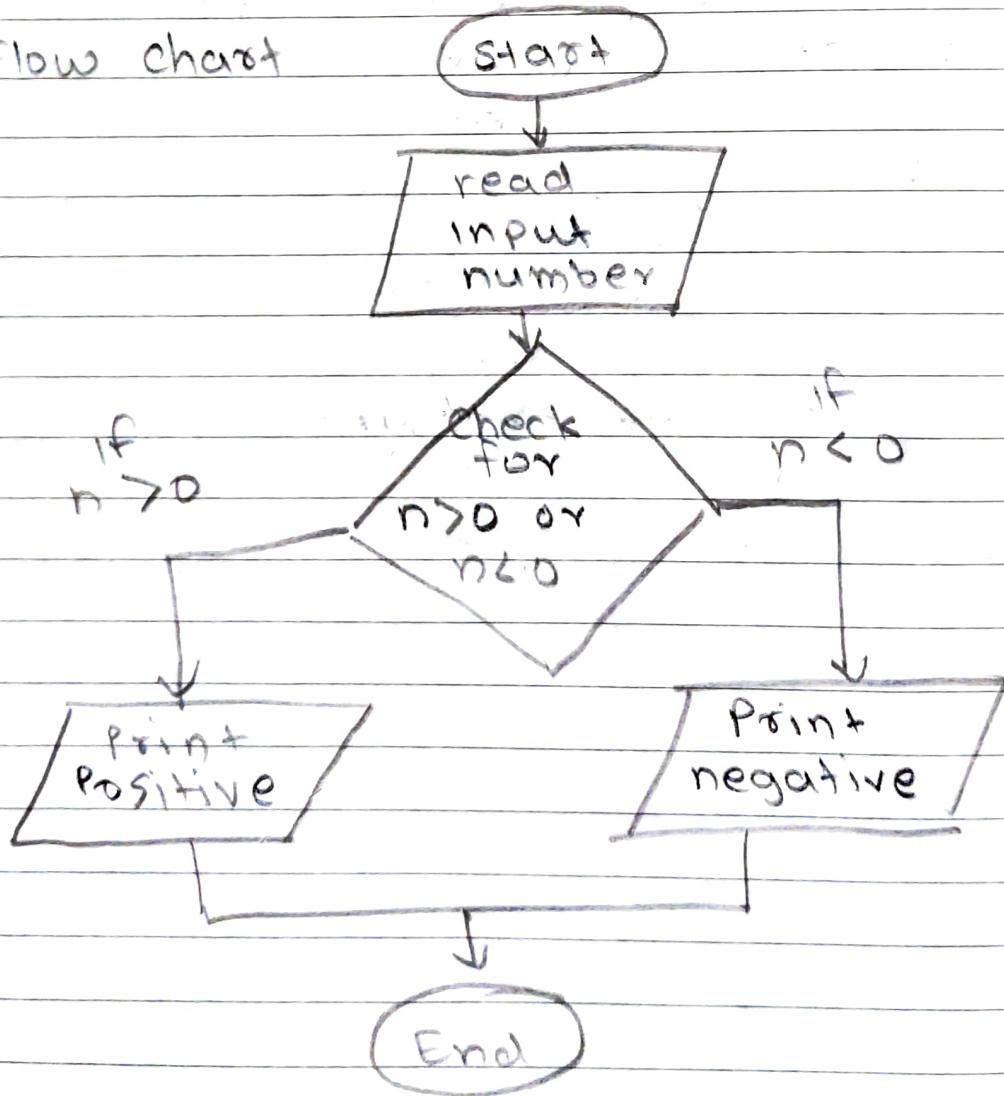
Step 4 :- point Positive

Step 5 :- if number is less than

Step 6 :- point Negative

Step 7 :- End

Flow chart



6 Write a Java Program to find whether given number is leap year or Not ?

→ Algorithm

Step 1:- Start

Step 2:- Read given number

Step 3:- Is year divisible by 4?

Step 4:- If No is answer to step 3 then
year is not a leap year

Step 5:- If yes is answer to step 3 then
continue

Step 6:- Is year divisible by 100?

Step 7:- If 'No' is answer to step 6 then
year is leap year

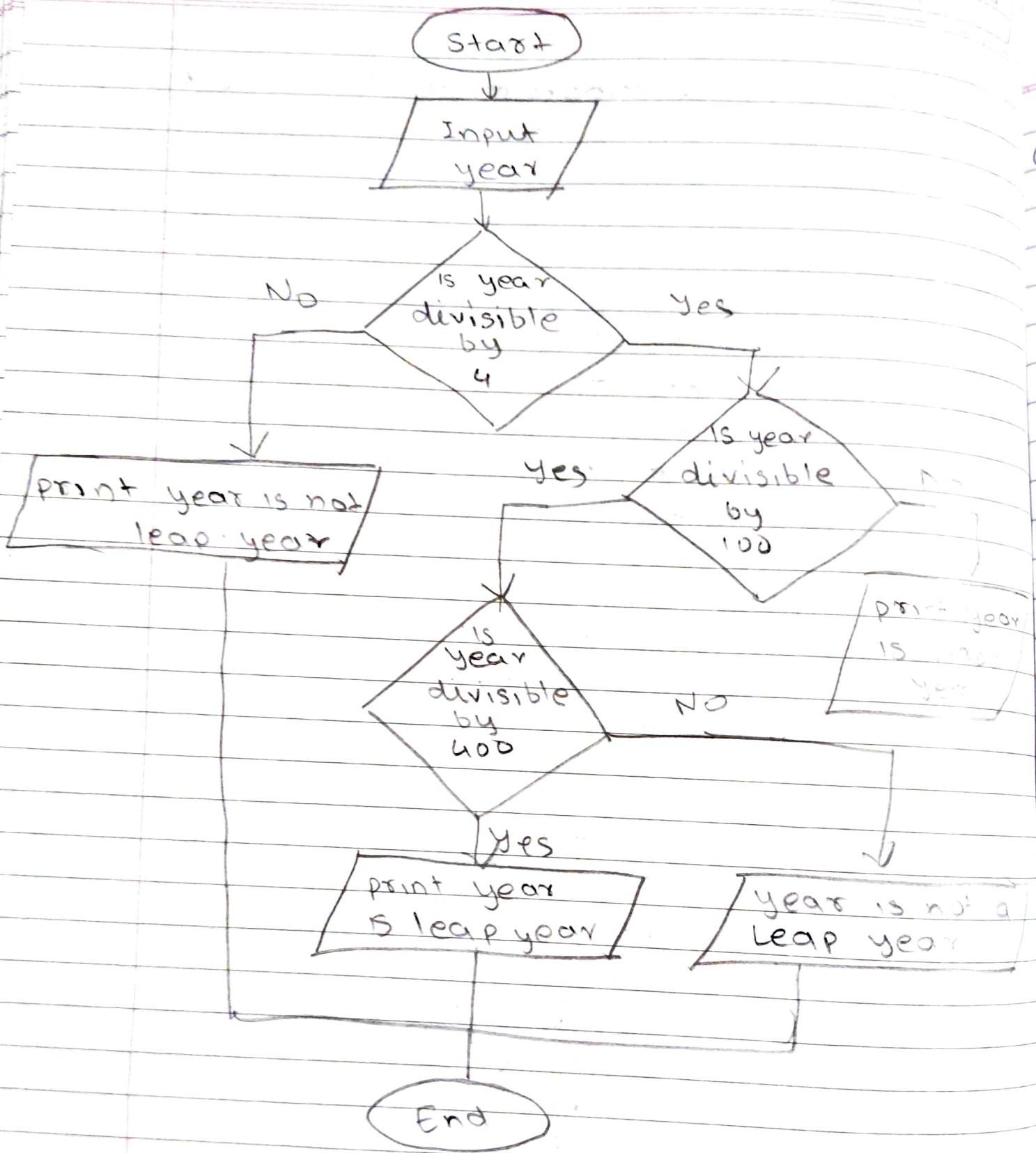
Step 8:- If yes is answer to step 6 then
continue

Step 9:- Is year divisible by 400?

Step 10:- If yes then year is leap year

Step 11:- If No then year is not a leap
year

Step 12:- End



Q7 Write a Java program to Print 1 to 10 without using loop.

Algorithm:-

Step 1 :- Start

Step 2 :- print 1

Step 3 :- print 2

Step 4 :- print 3

Step 5 :- print 4

Step 6 :- print 5

Step 7 :- print 6

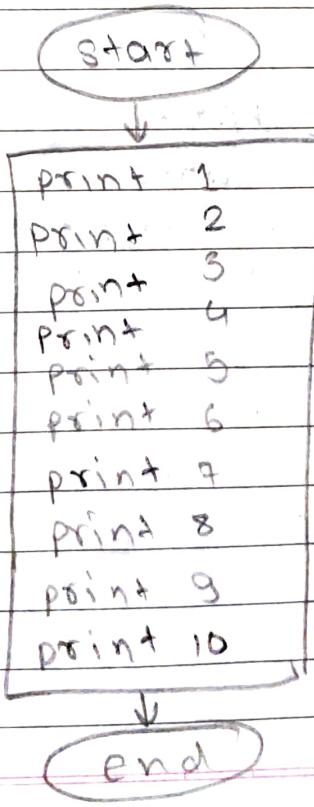
Step 8 :- print 7

Step 9 :- print 8

Step 10 :- print 9

Step 11 :- print 10

Step 12 :- End



Q 8 Write a Java program to print the digit of given number.

→ Algorithm

Step 1 :- Start

Step 2 :- Read input number

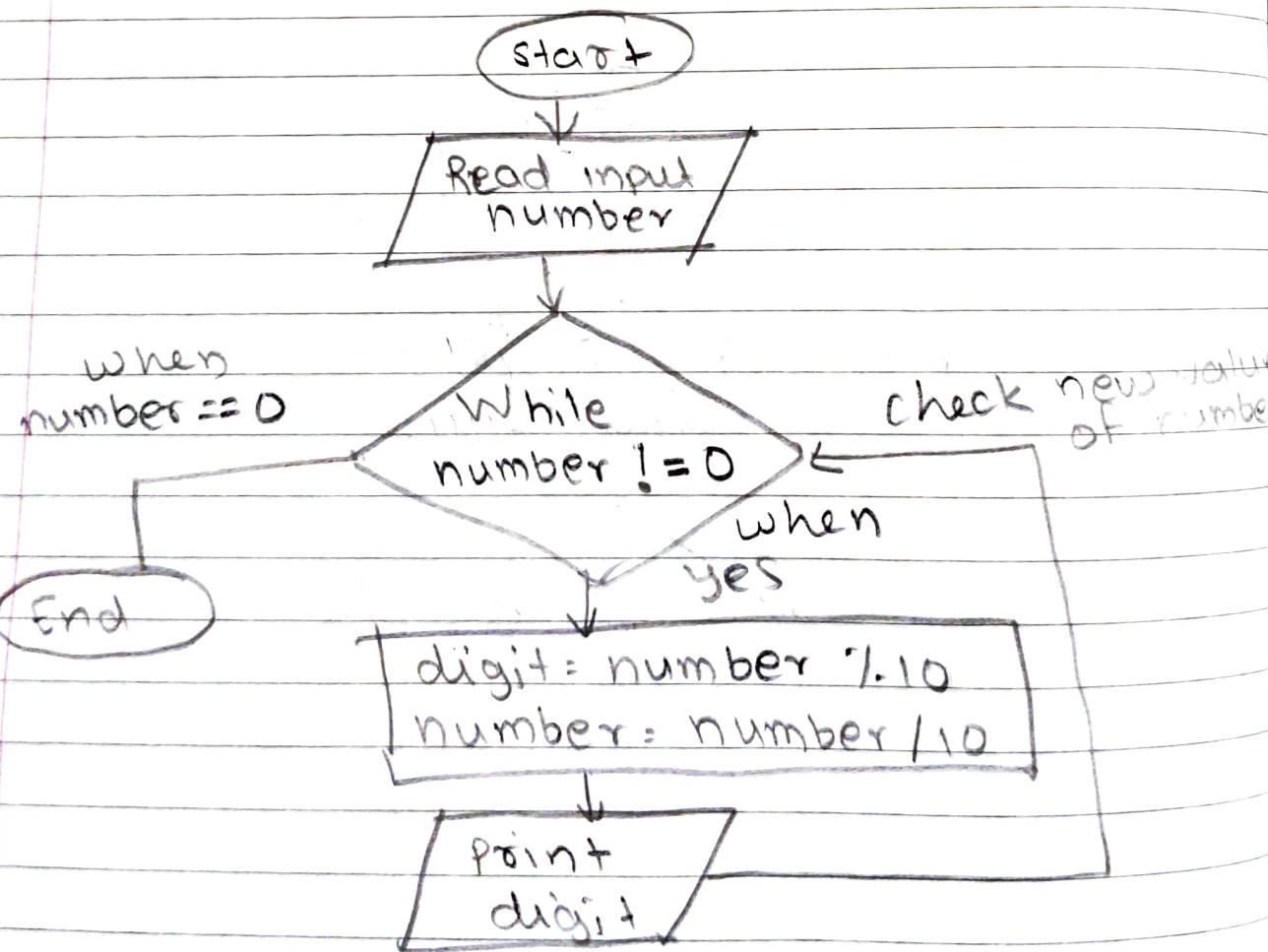
Step 3 :- Initialize var digit

Step 4 :- digit = number % 10

Step 5 :- number = number / 10

Step 6 :- Print digit

Step 7 :- Repeat Step 4, 5 & 6 till number is zero



Q9 Write a Java Program to print all the factors of given number

→ Algorithm

Step 1 :- Start

Step 2 :- Get given number

Step 3 :- initialize factor variable

Step 4 :- Set i=1

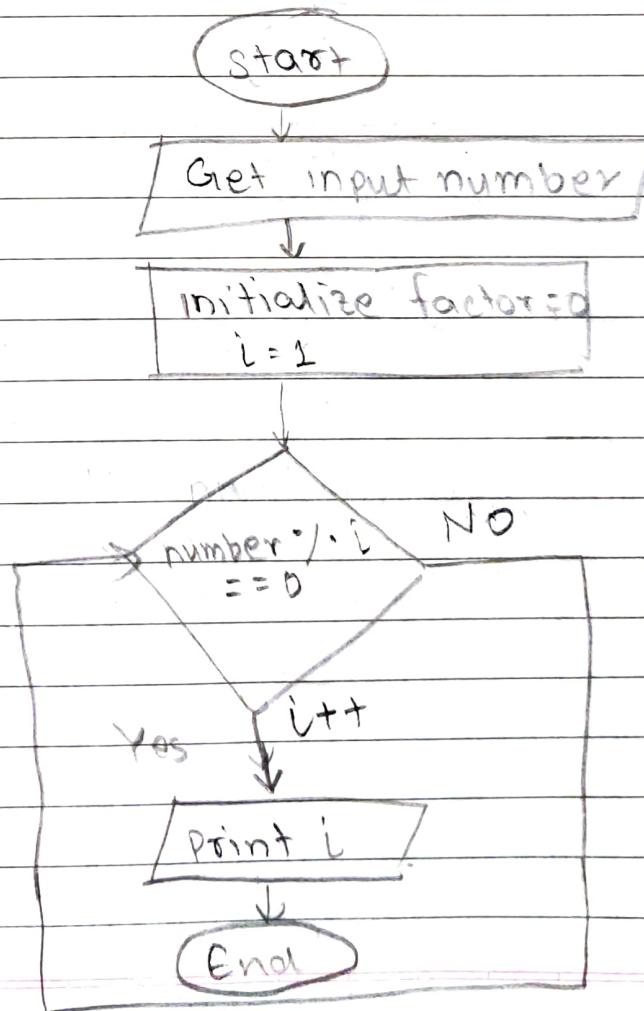
Step 4 :- if(number % i == 0)

Step 5 :- Print i if step 4 satisfies

Step 6 :- Increment i

Step 7 :- Repeat 4, 5 & 6 till i < number

Step 8 :- End



Q 10 Write a Java program to find sum of digits of a given number.



Step 1 :- Start

Step 2 :- Read input number

Step 3 :- initialize Var digit, sum = 0

Step 4 :- digit = number % 10

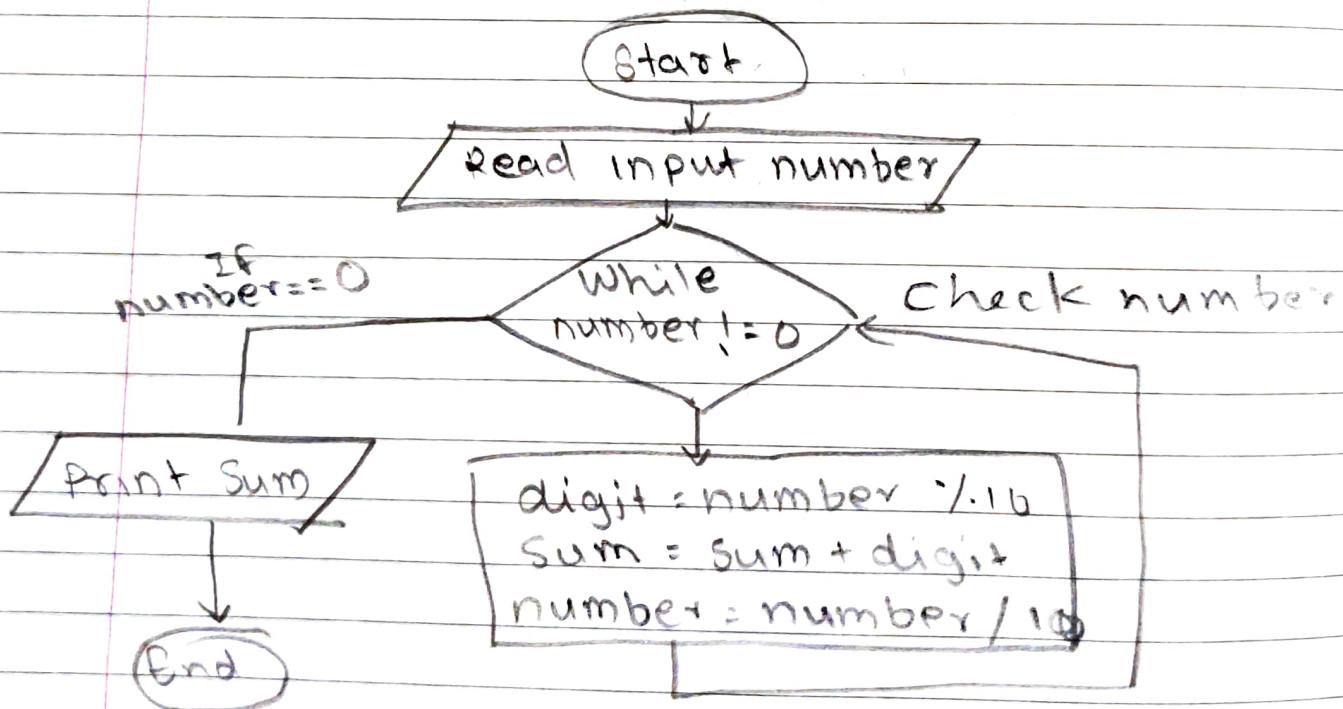
Step 5 :- sum = sum + digit

Step 6 :- number = number / 10

Step 7 :- Repeat step 4, 5 & 6 till
number is zero

Step 8 :- Print Sum

Step 9 :- End



Q 11 Write java programs to find the smallest of 3 numbers

→ Step 1 :- Start

Step 2 :- Get 3 numbers (a, b, c)

Step 3 :- Check $a < b$

Step 4 :- If Yes is the answer of step 3 then check $a < c$

Step 5 :- If NO is the answer of step 3 then check $b < c$.

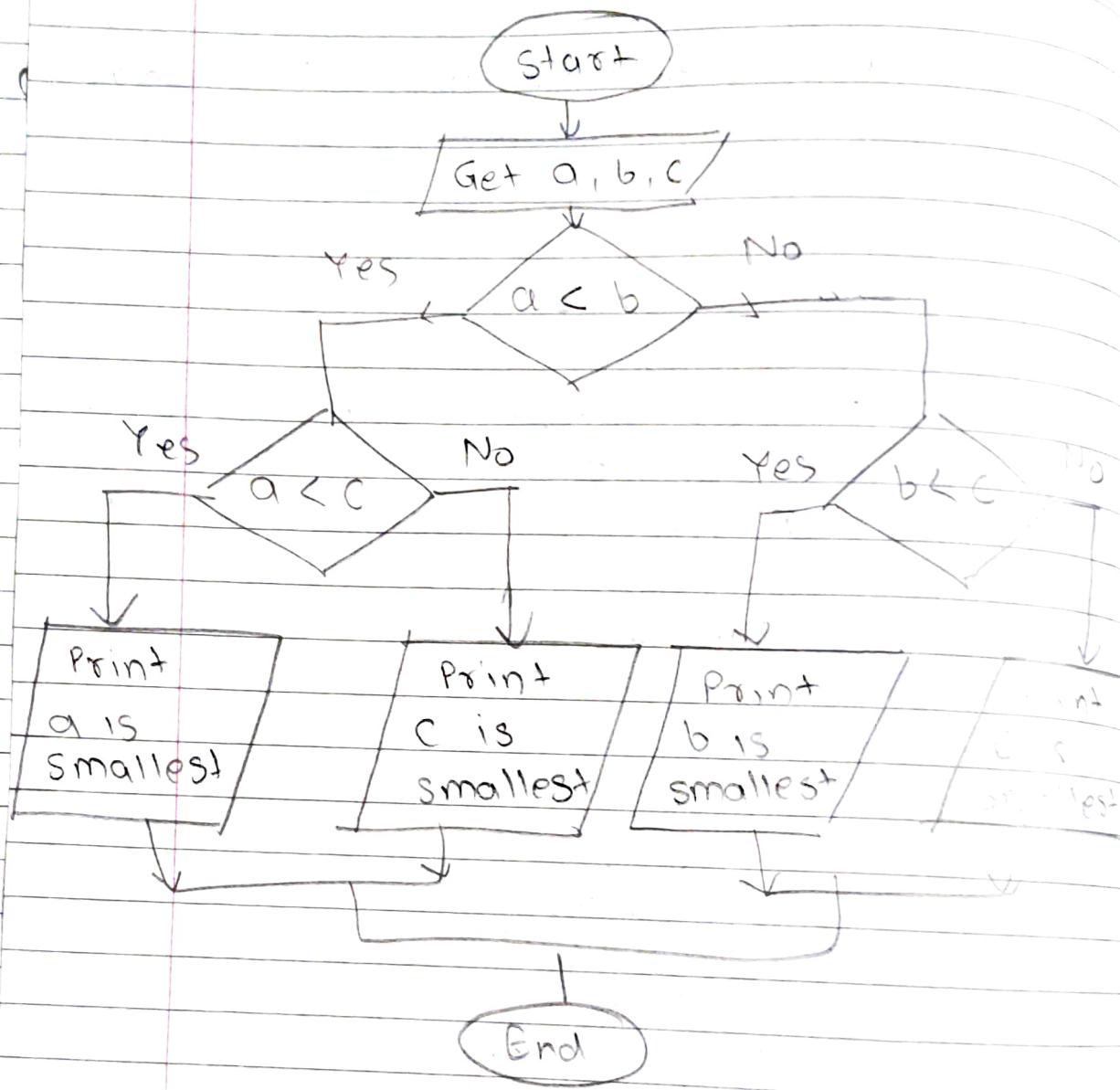
Step 6 :- If yes is the ans of step 4 then a is smallest number

Step 7 :- If NO is the ans of step 4 then c is smallest number

Step 8 :- If Yes is the ans of step 5 then b is smallest number

Step 9 :- If NO is the ans of Step 5 then c is smallest number

Step 10 :- End



Q 12 How to add two numbers without using the arithmetic operators in Java

Step 1 :- Start

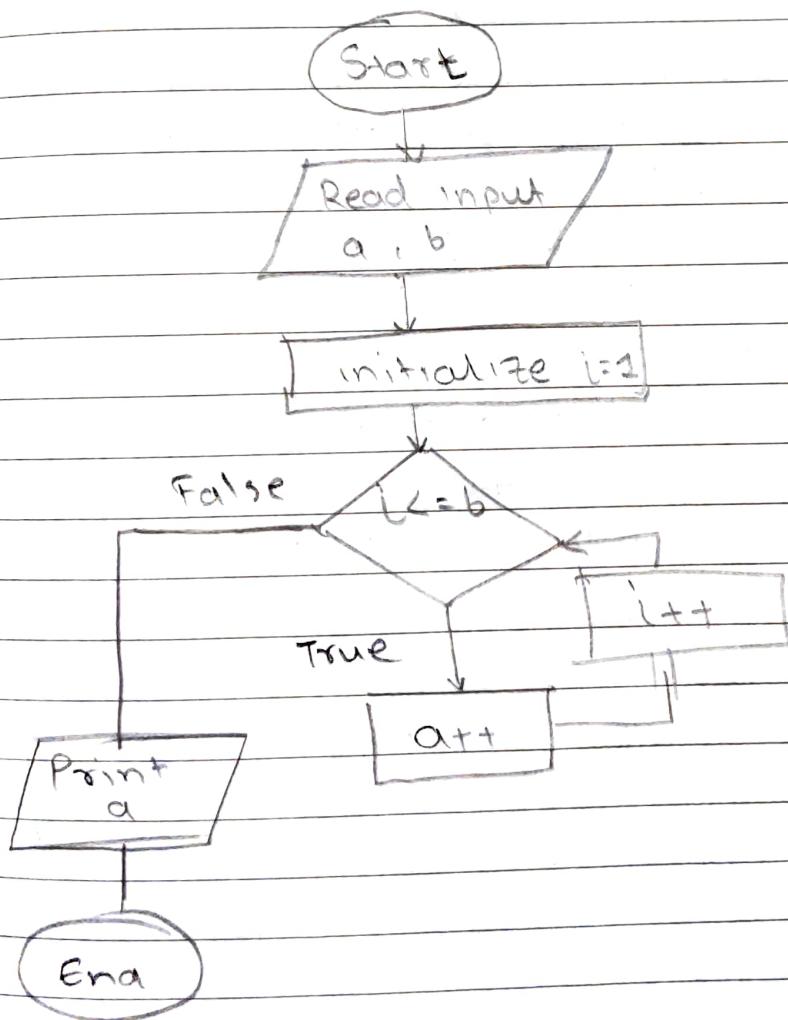
Step 2 :- Read input a, b

Step 3 :- Initialize i

Step 4 :- Increment i from 1 to b

Step 5 :- increment a

Step 6 :- END



Q.13. Write a Java program to reverse a given number

→ Step 1:- Start

Step 2:- Get input (n)

Step 3:- Initialize reverse, remainder vari

Step 4:- Check $n > 0$

Step 5:- rem = $n \% 10$

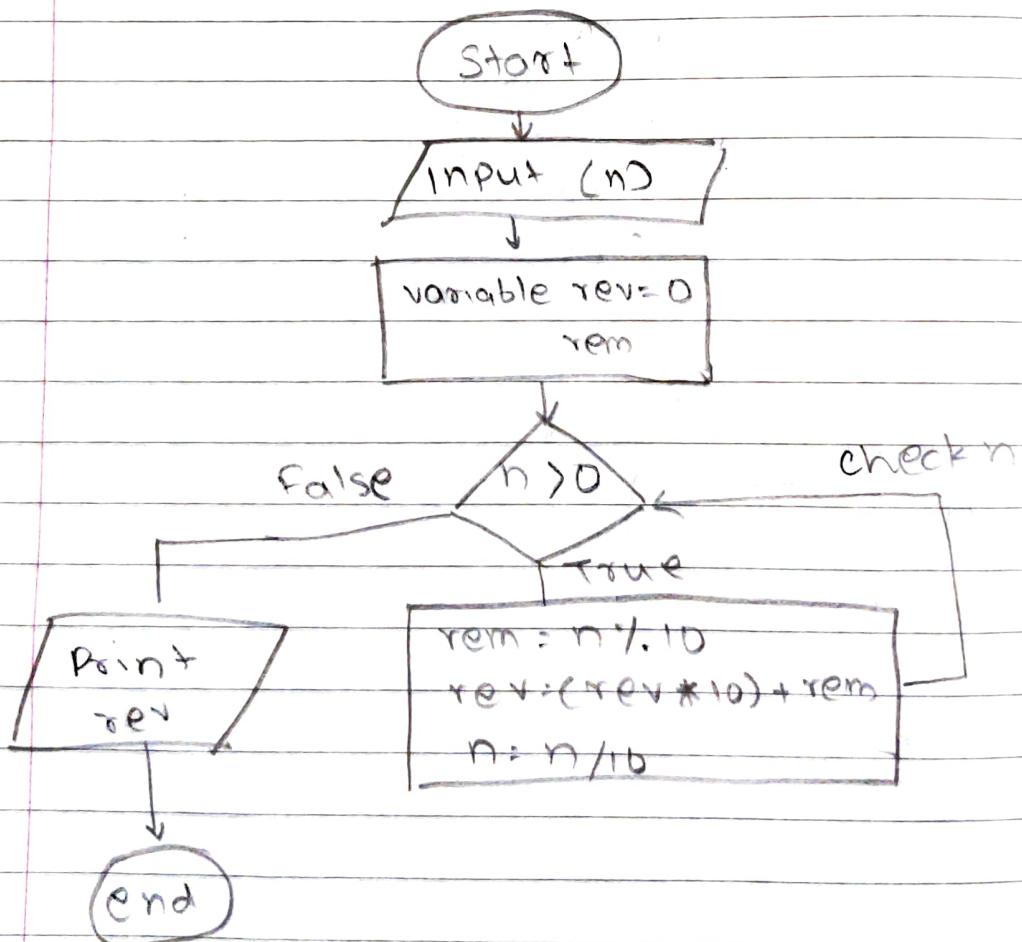
Step 6:- rev = (rev * 10) + rem

Step 7:- n = n / 10

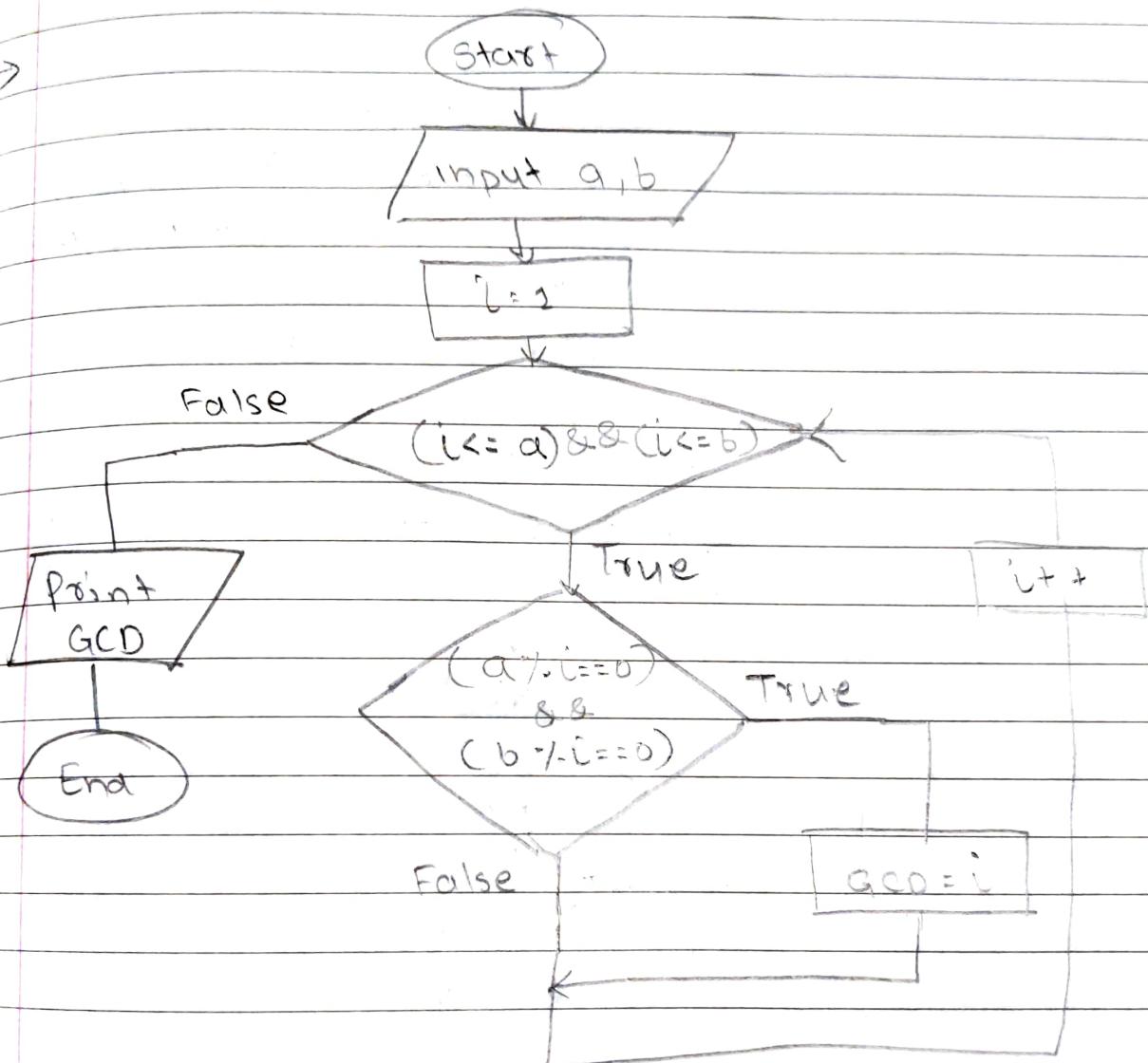
Step 8:- Repeat till step 4 is satisfied

Step 9:- Print 'rev' when step 4 is false

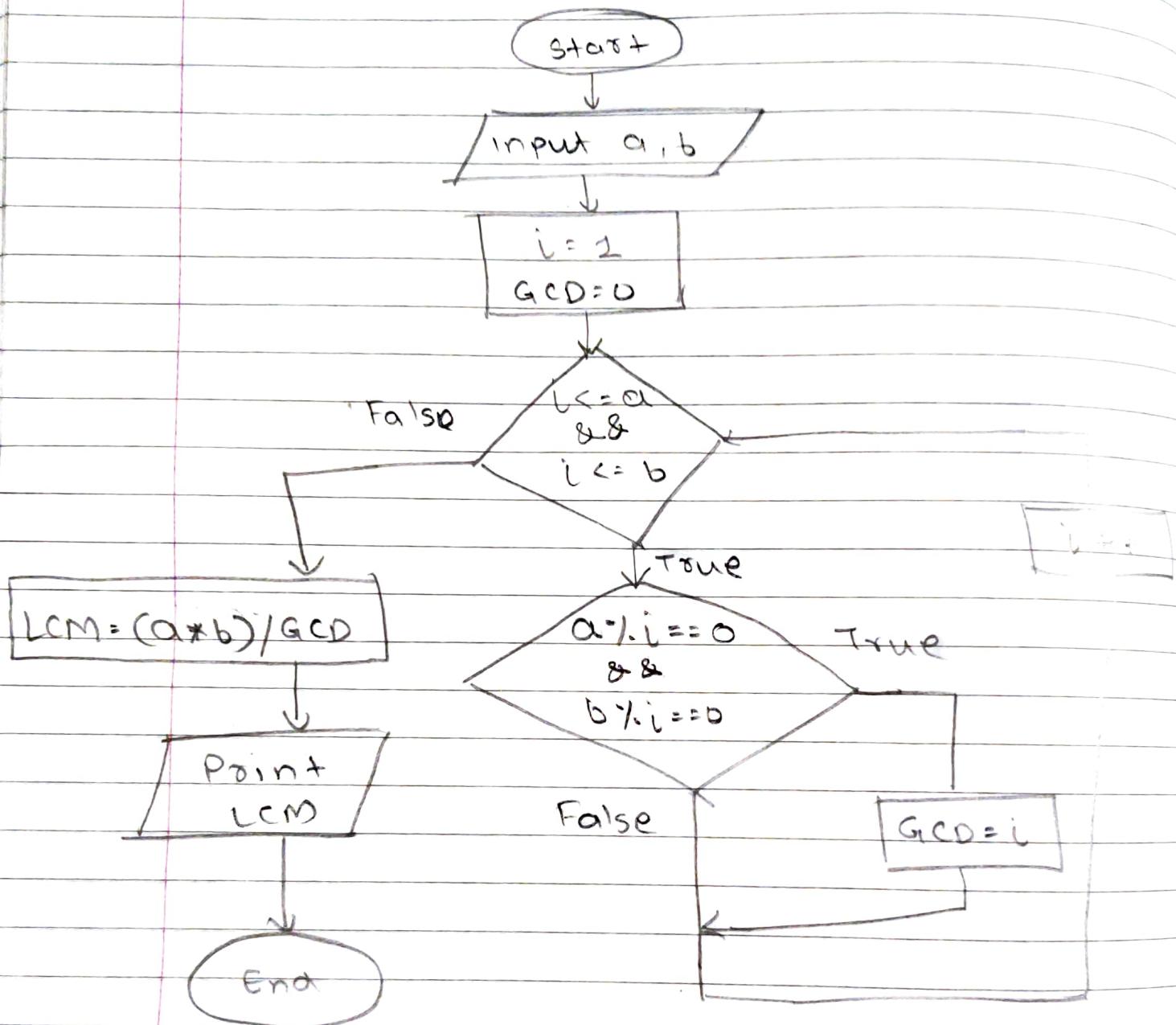
Step 10:- END



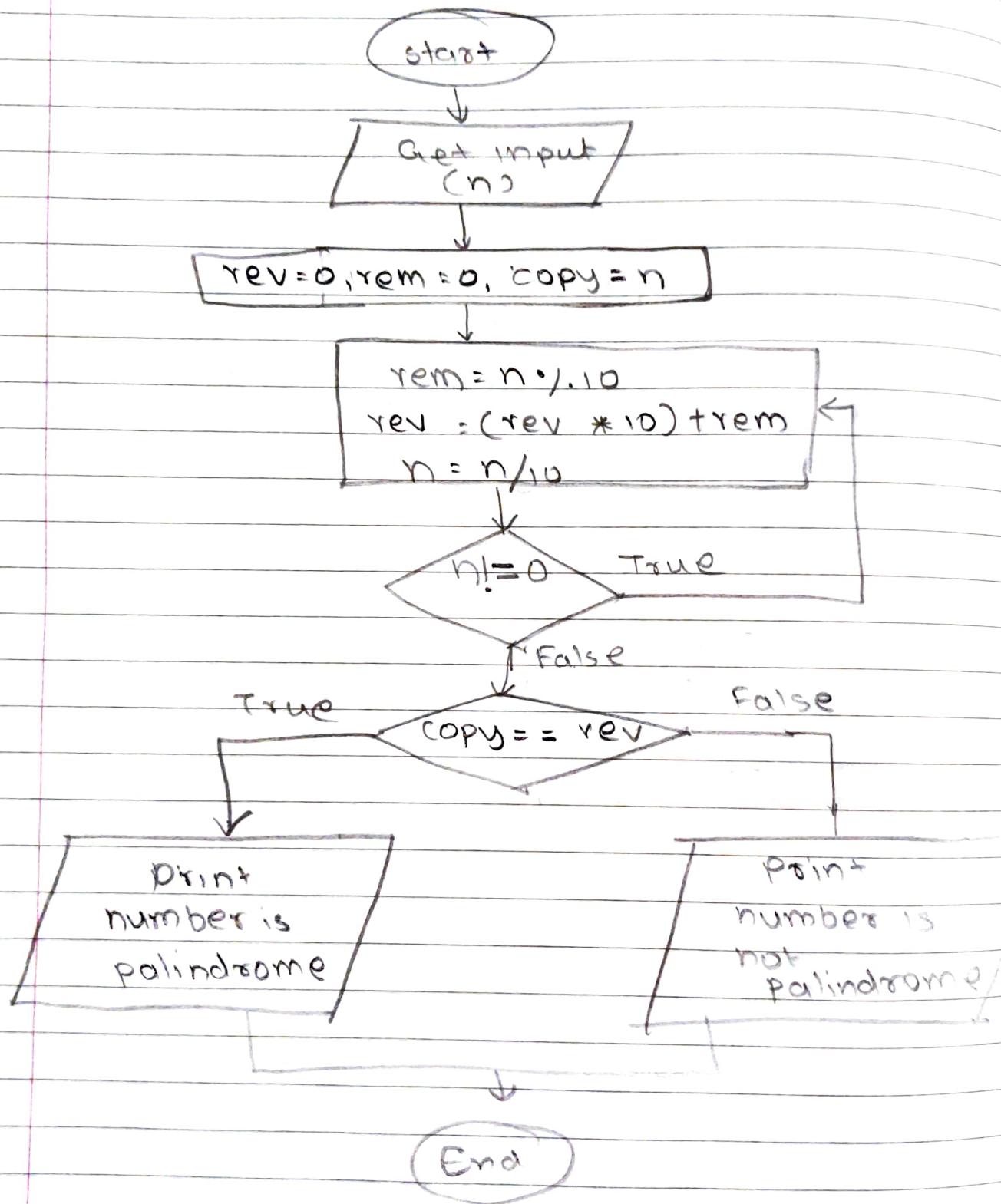
Q) 14 Write a Java program to find GCD of two given numbers



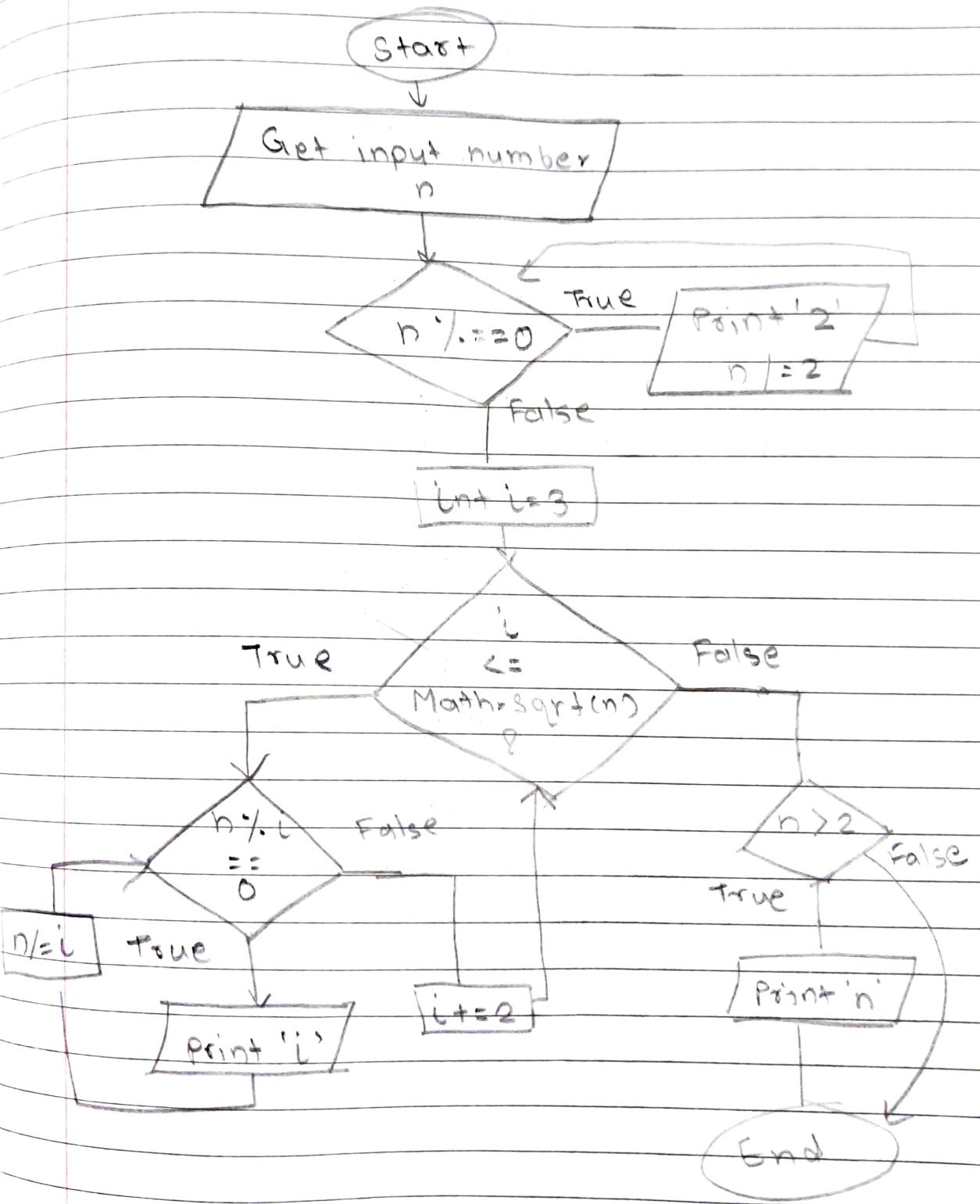
Q 15 Write a java program to find LCM of two number.



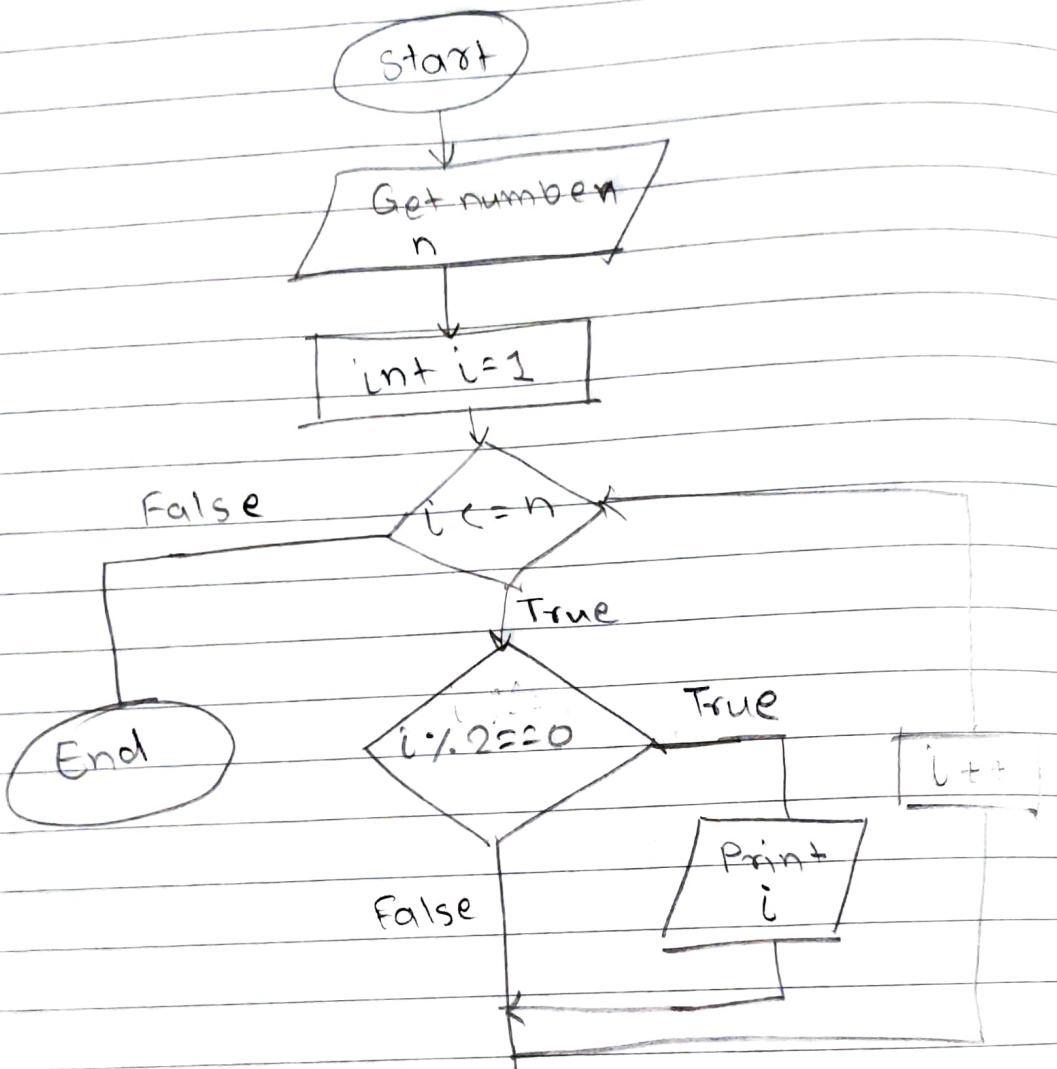
Q 17 Check whether the given number is a palindrome or NOT



Q 18 Write a Java program to print all the prime factors of the Given Number



Q 19 To print the following series EVEN number
series 2 4 6 8 10 12 14 16 ..



Q 20 To print the following series ODD number series 1, 3, 5, 7, 9, 11, 13 ...

