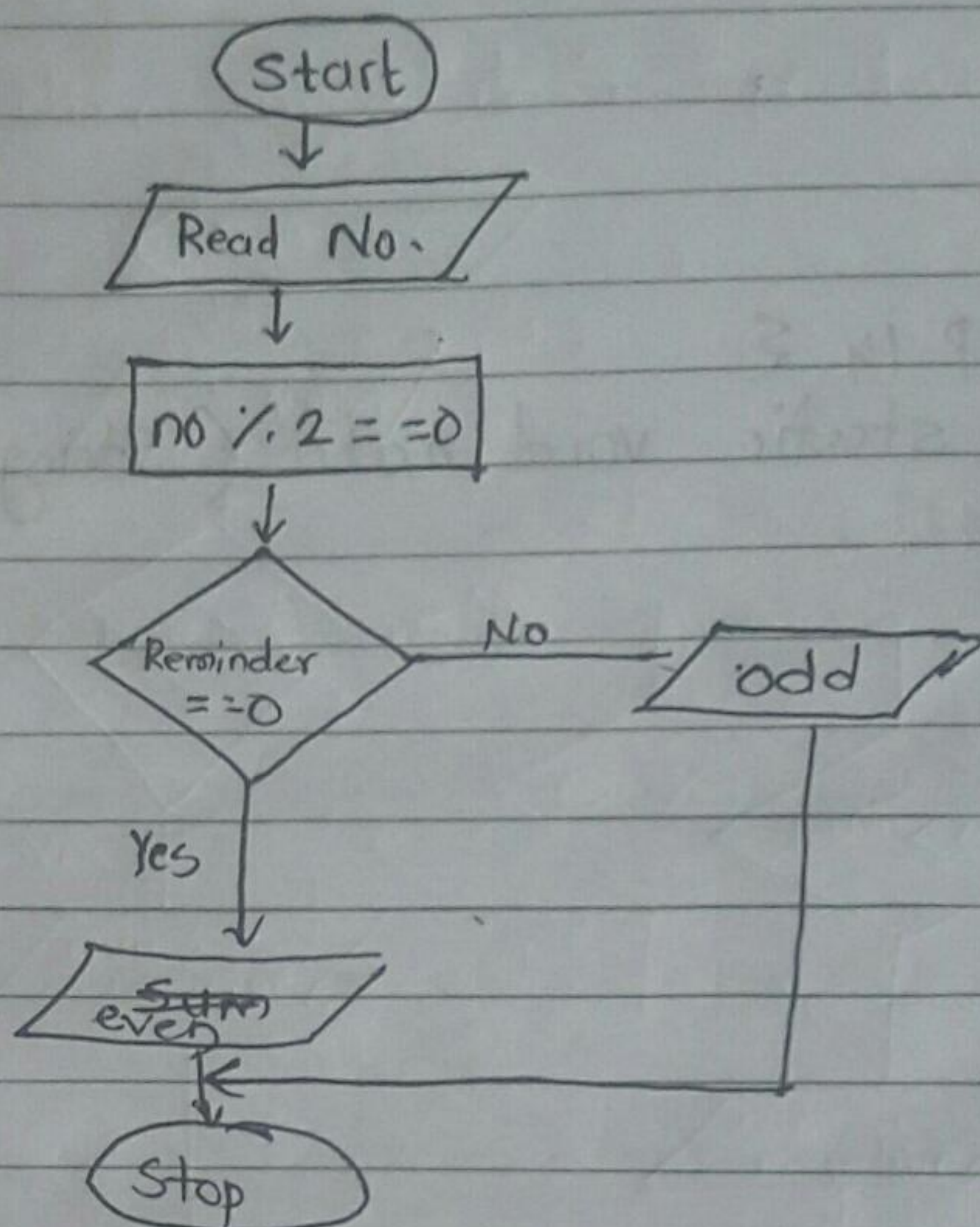


## Assignment - 1

Q 1] Check if the given number is Even or Odd.

Flowchart →



Algorithm → 1] start

2] Read no.

3] If no. is divisible by 2 then no. is even

4] no. is not divisible by 2 the no. is odd

Q 2] Find factorial of given number.

Algorithm → 1] start

2] Read num.

3] Fact = 1, i = 1 Set

4] Check  $i \leq \text{number}$  if false go to stop

5] else Fact = Fact \* i

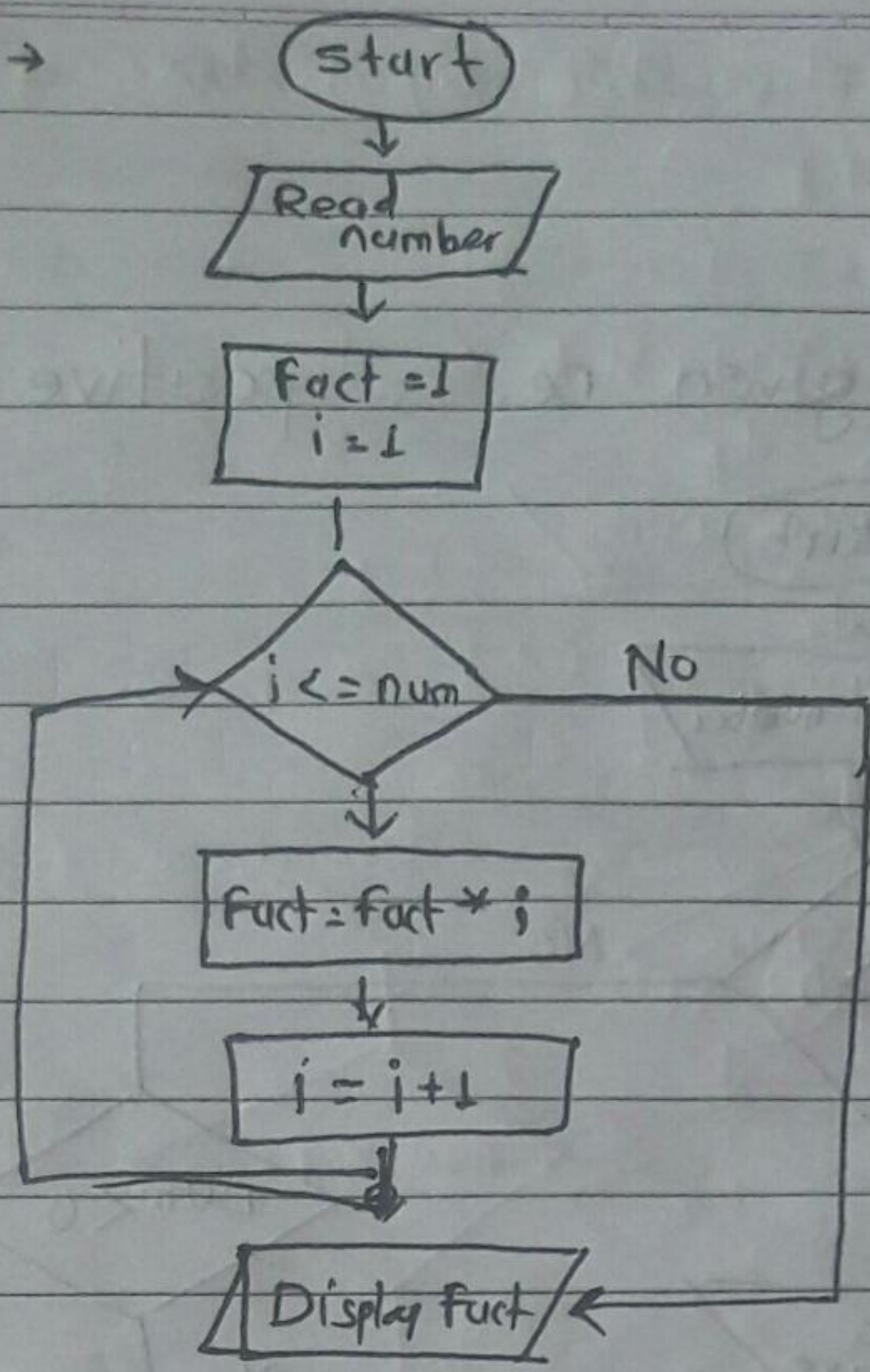
6] then  $i = i + 1$  again check cond<sup>n</sup>. (step 4)

7] display fact.

8] stop

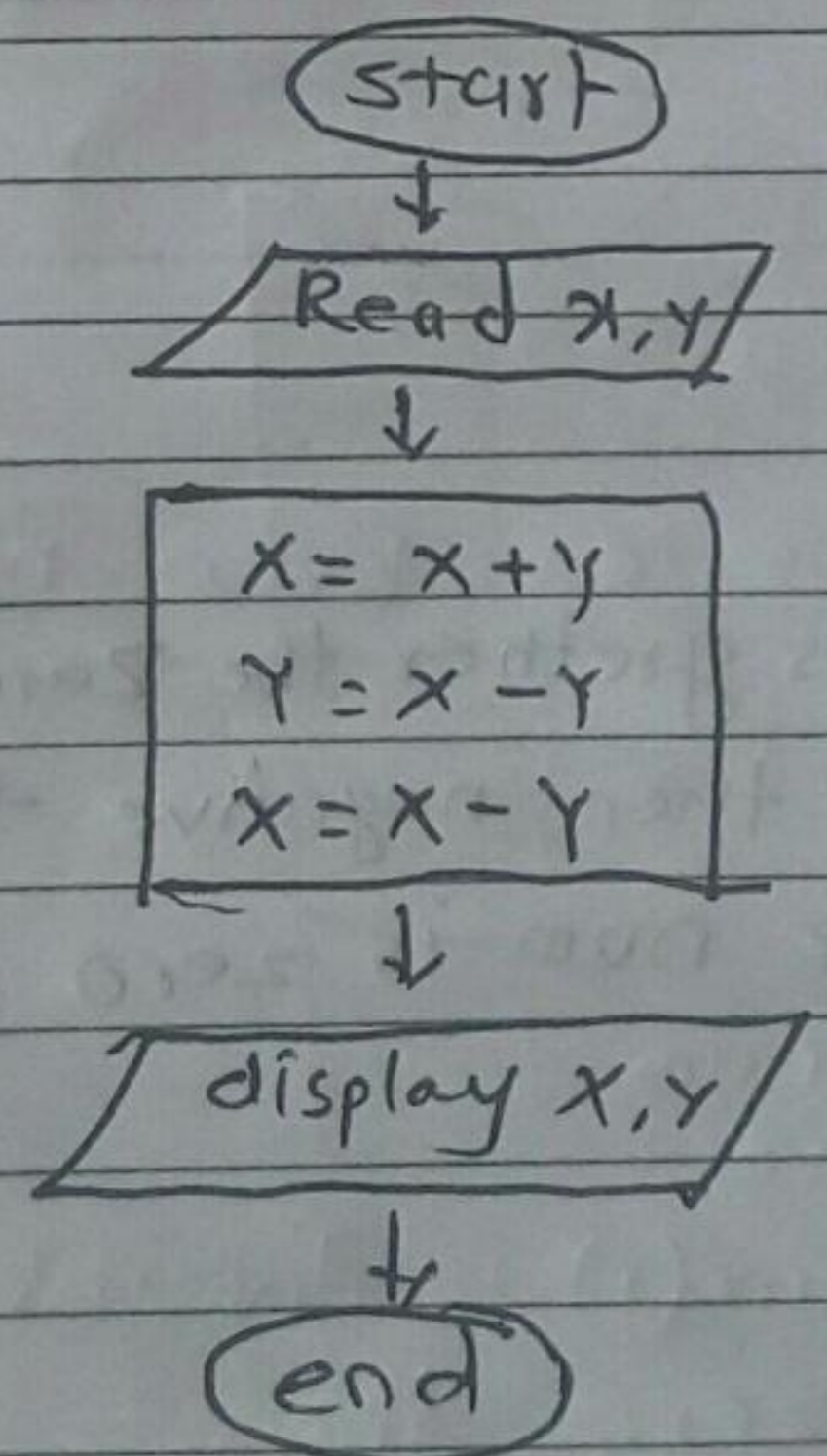


Flowchart →



Q 4] Swap two number without using 3<sup>rd</sup> variable

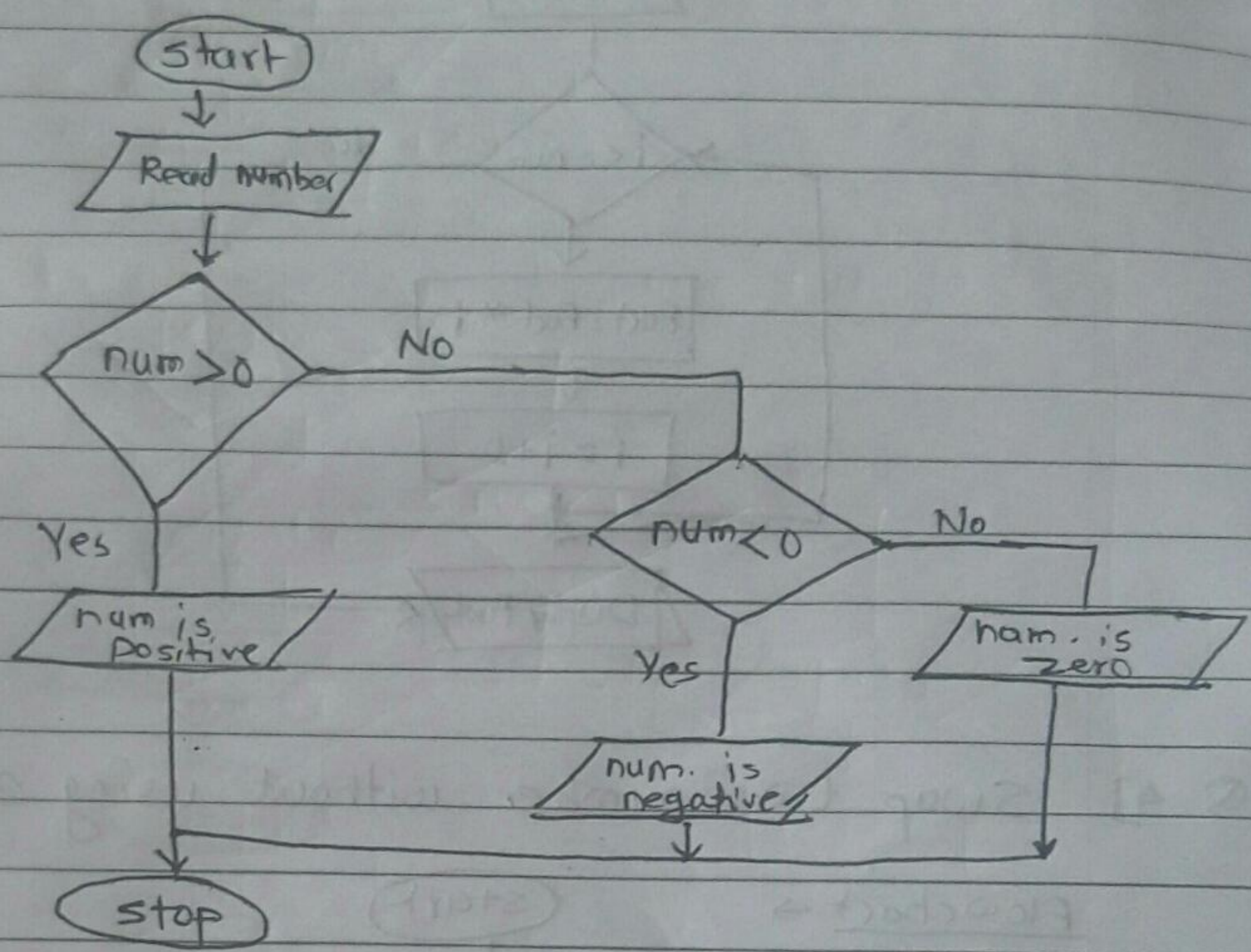
Flowchart →





Q.5) Check wheather given no. is positive /negative

flowchart →



algorithm →

- 1) start
- 2) Read num.
- 3) if ~~if~~ num is greather the zero the positive & stop
- 4) if else ~~if~~  $num < 0$  then negative & stop
- 5) ~~else~~ else num is zero
- 6) end.

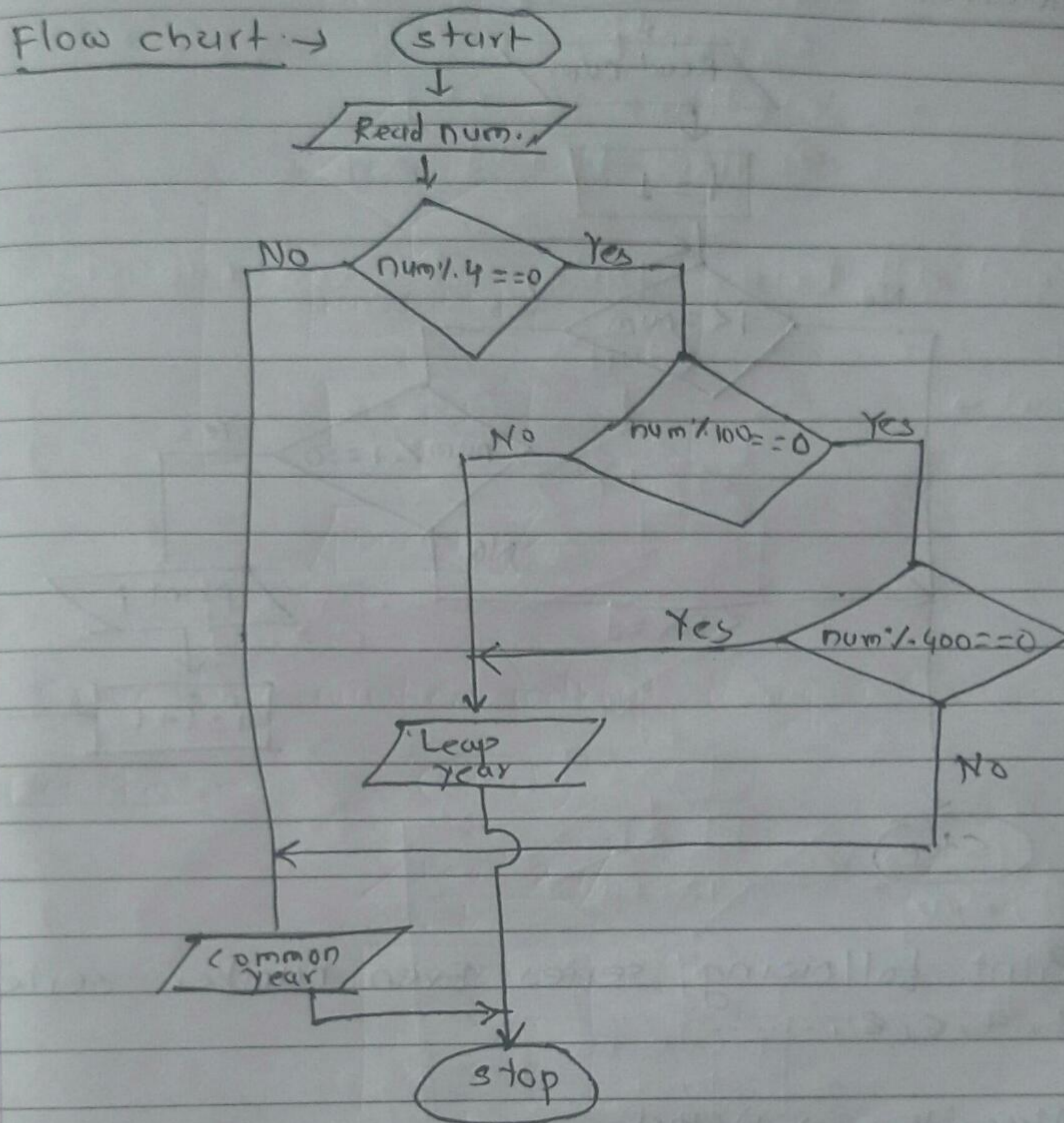
Q.6) Find wheather given number is Leap year or not.

algorithm →

- 1) Start
- 2) Read number
- 3) Check number  $\% 4 == 0$



- 4) then check  $\text{num} \% 100 == 0$  the not leap year  
 5) otherwise check  $\text{num} \% 400 == 0$ . when  
 & remainder is zero the Leap year otherwise Not.



Q. 9) Print all factors of given number.

Algorithm → 1) start

2) Read number

3) set  $i = 1$

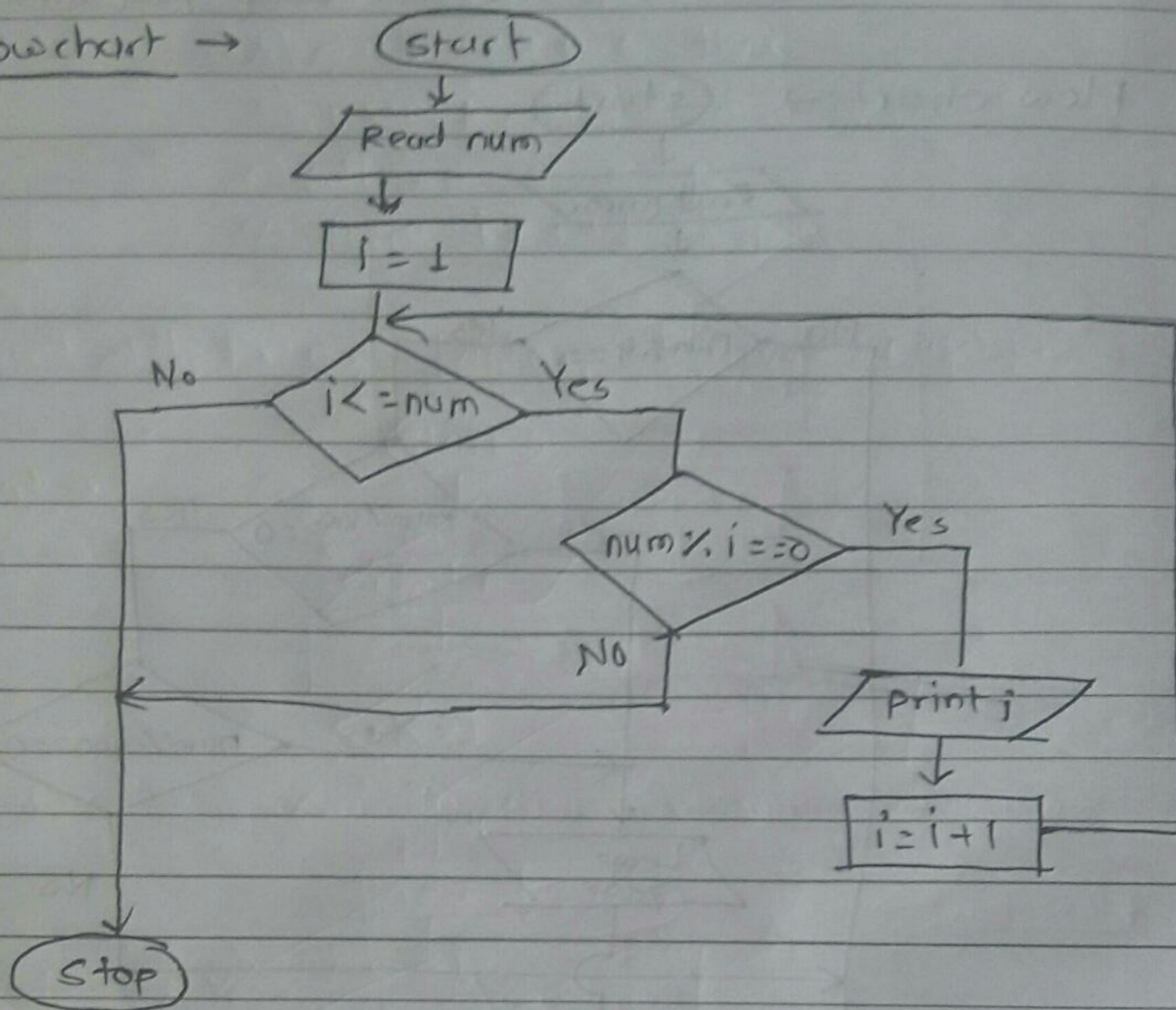
4)  $i \leq \text{number}$  check if it is not then stop.

5)  $i \leq \text{number}$  then check input number is  
divisible by  $i$  or not



- 6) number is divisible by  $i$  then print  
 7) then  $i = i + 1$

Flowchart →



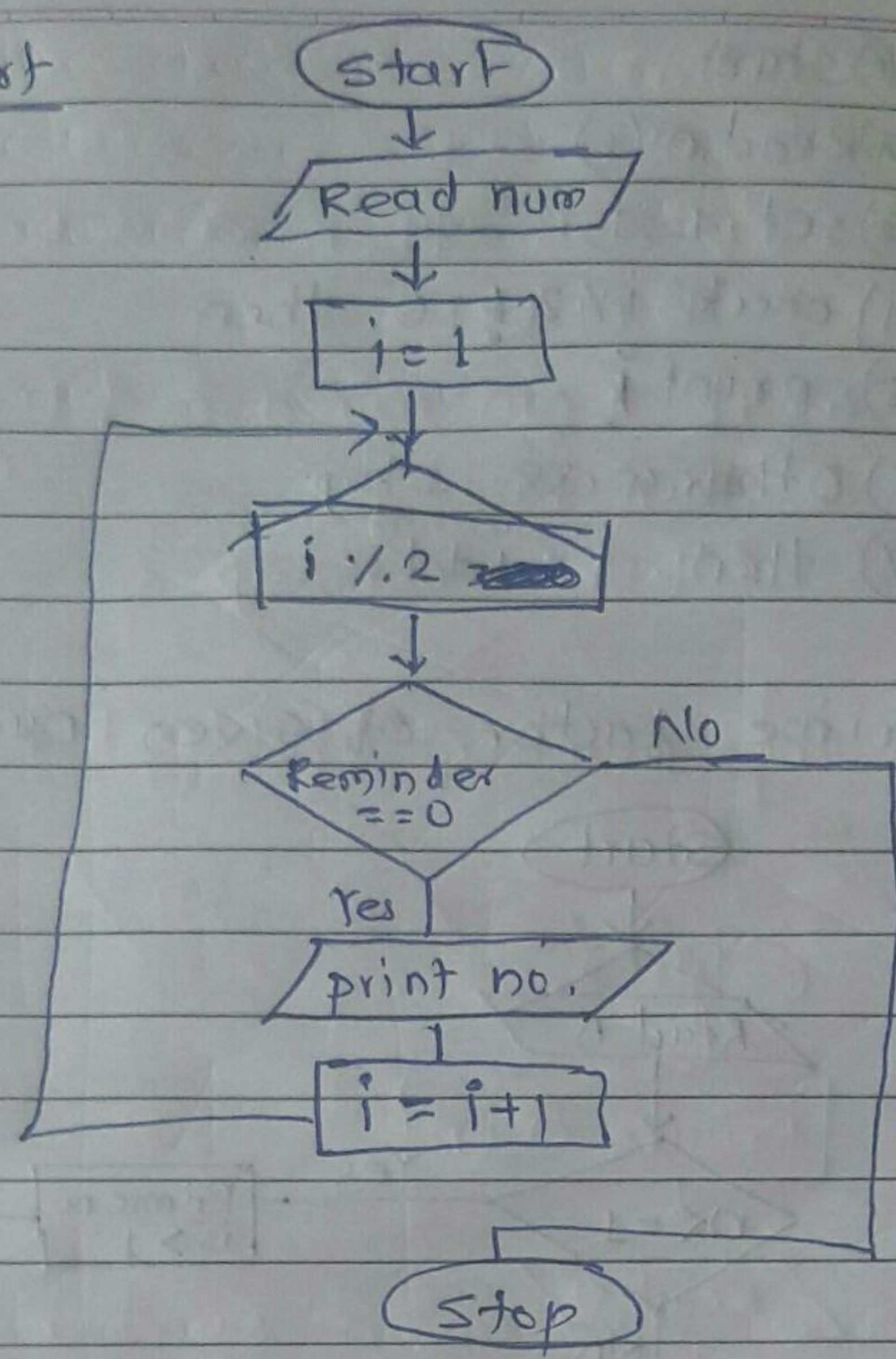
- 19) Print following series Even number series  
 2, 4, 6, 8, ...

Algorithm →

- 1) Start
- 2) Read num
- 3) Set  $i = 1$
- 4) If  $\text{num}(i)$  is divisible by 2 and remainder is zero then
- 5) Display  $\text{num}(i)$
- 6) then  $i = i + 1$

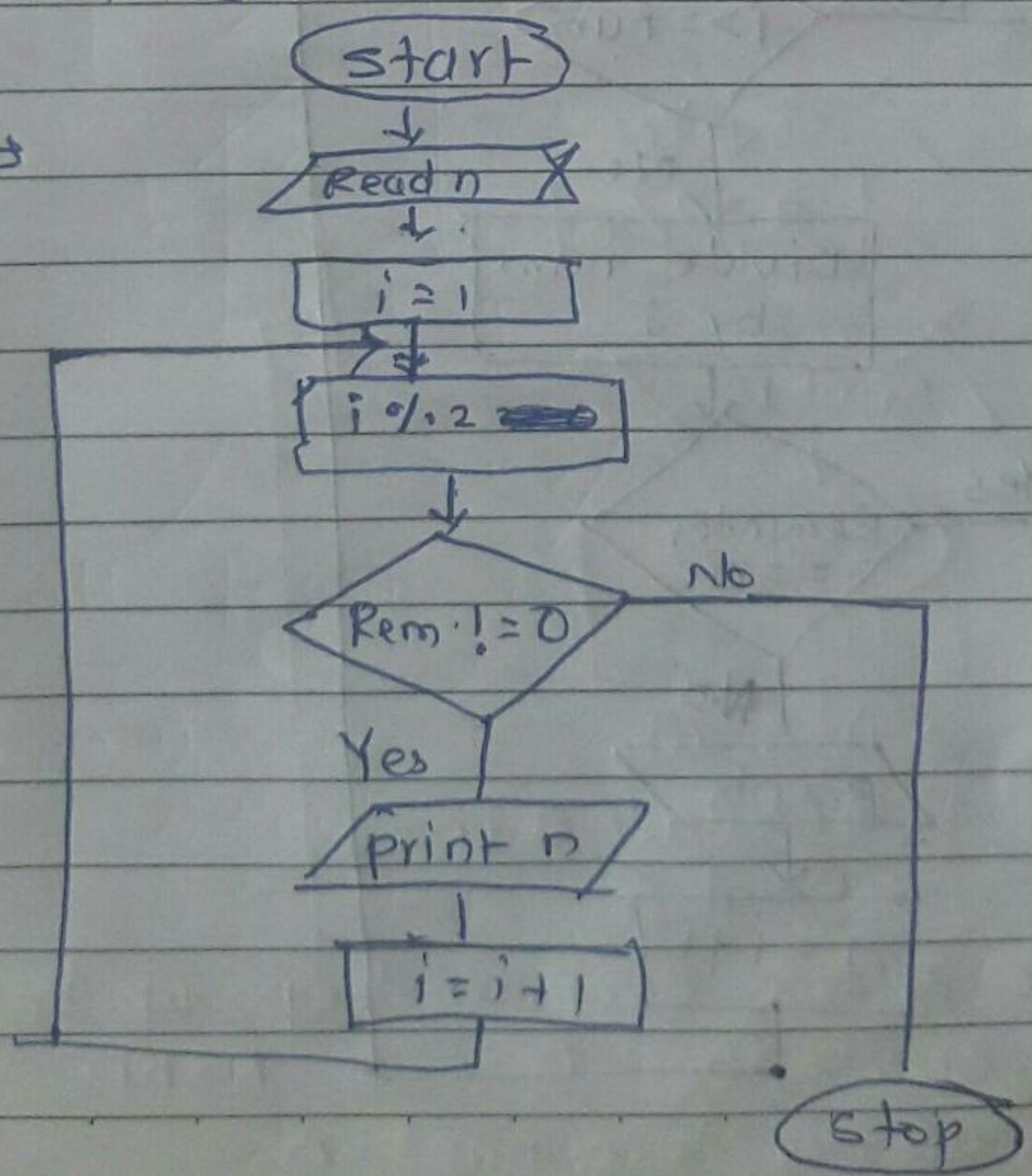


Flowchart



20] Print following series ODD number series  
1, 3, 5, 7, 9, ----

Flowchart →



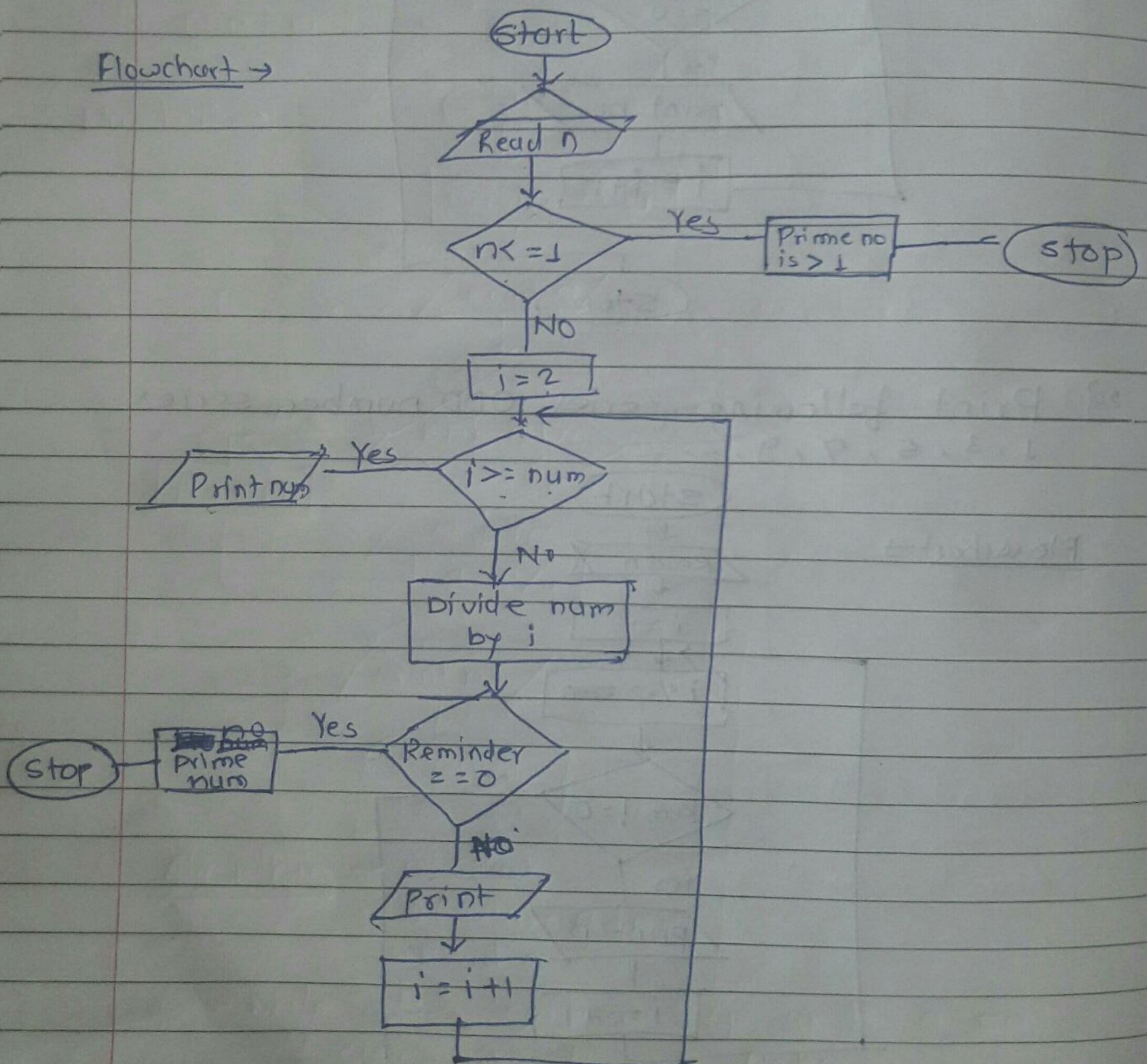


Algorithm →

- 1) start
- 2) Read  $n(i)$
- 3) set  $i = 1$
- 4) check  $i \% 2 \neq 0$  then
- 5) print  $i$
- 6) otherwise stop
- 7) then  $i = i + 1$

18) Print all Prime factor of given number.

Flowchart →





Algorithm  $\rightarrow$  1) start

2) Read  $n$

3)  $n \leq 1$  then stop

4) set  $i = 2$

5)  $i \geq n$  then print number

6) Otherwise  $n = n/2$

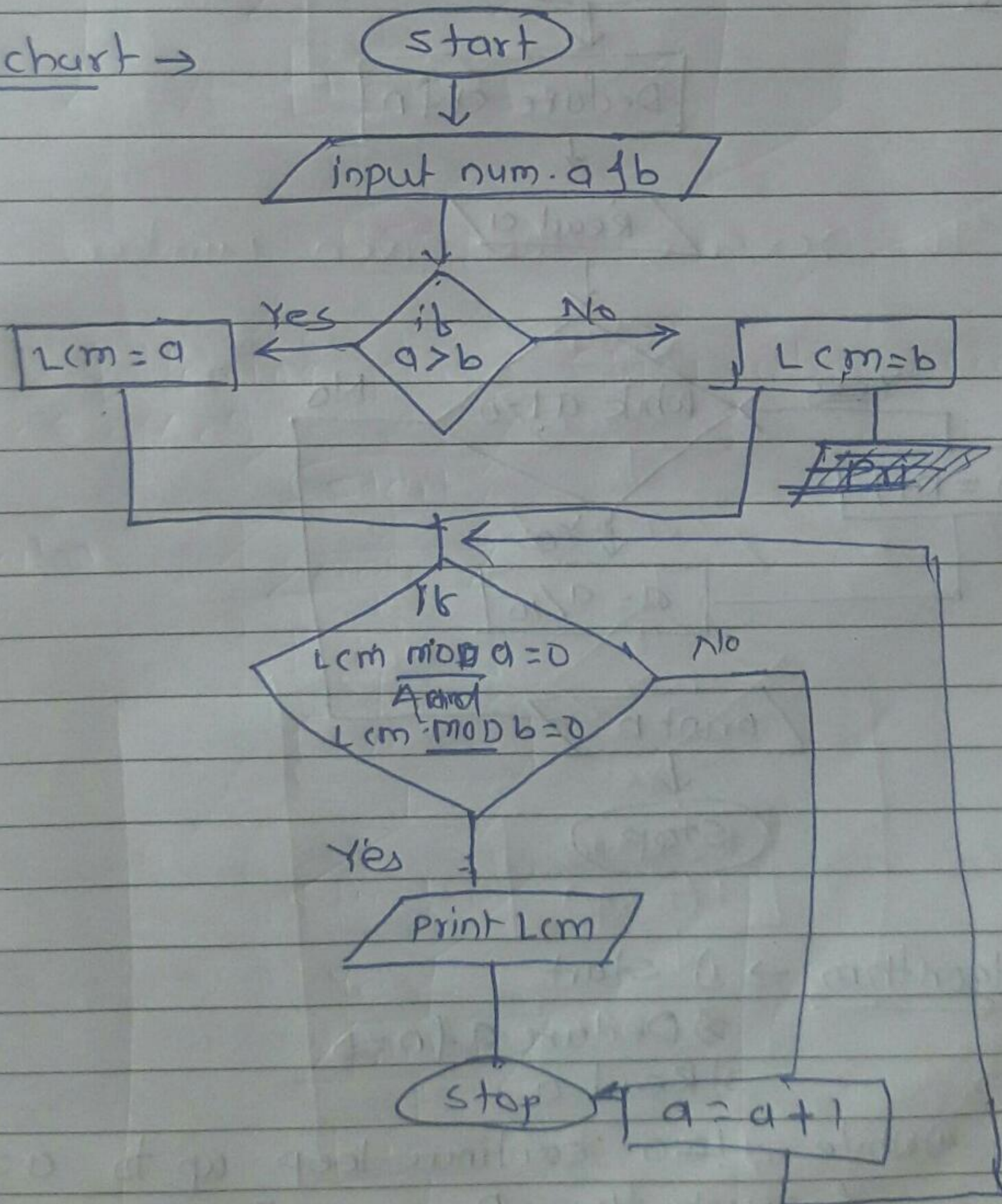
7) Remainder  $\neq 0$  then stop

8) Otherwise print num

9) then  $i = i + 1$

15] Program to Lcm of two given number.

Flowchart  $\rightarrow$

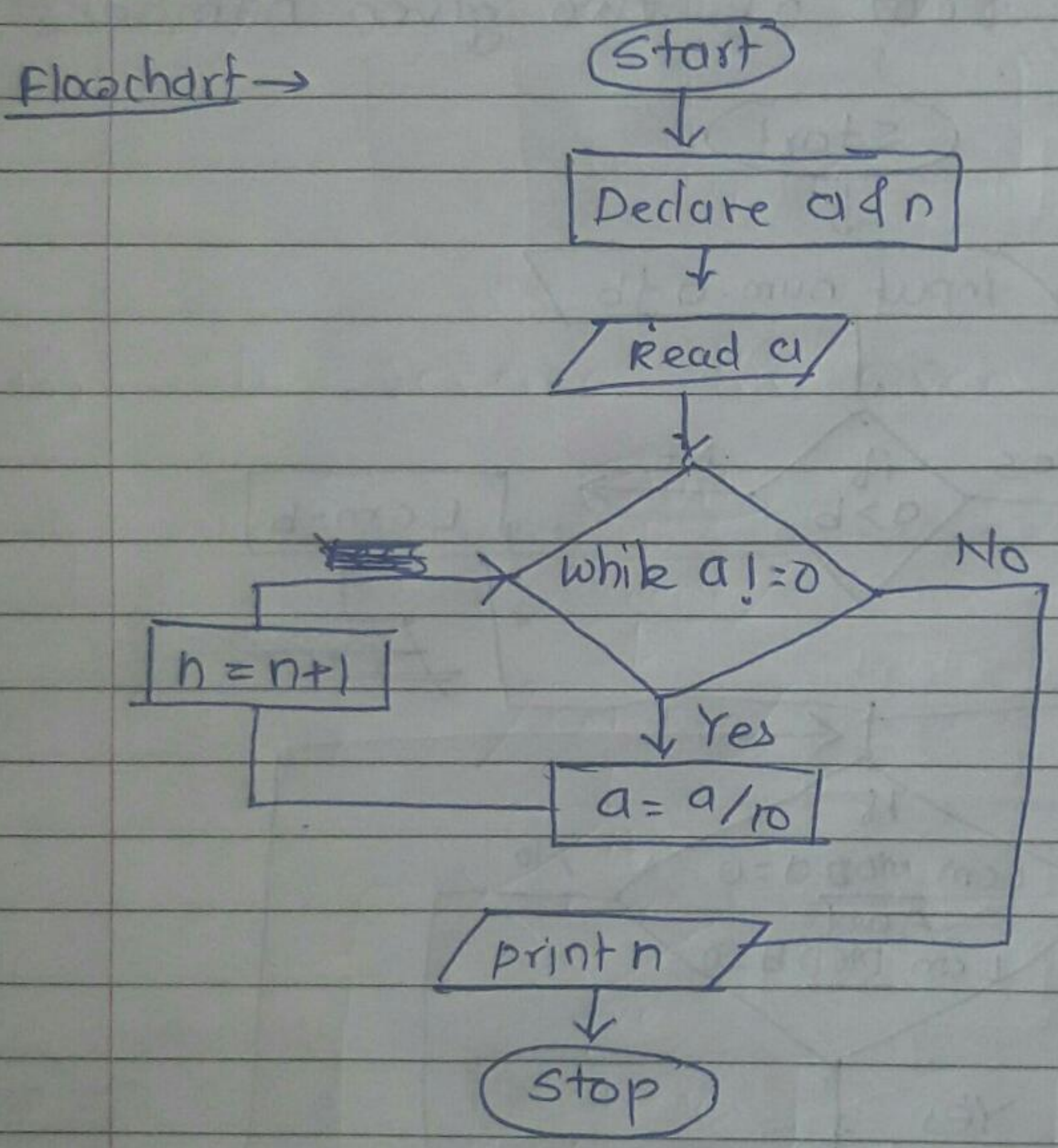




Algorithm →

- 1) start
- 2) Read  $n$
- 3) If  $a > b$  then  $a$  is Lcm otherwise  $b$  is Lcm
- 4) if  $Lcm \bmod a = 0$  &  $Lcm \bmod b = 0$  then print
- 5) otherwise stop

8] To count the number of digit of digit in number

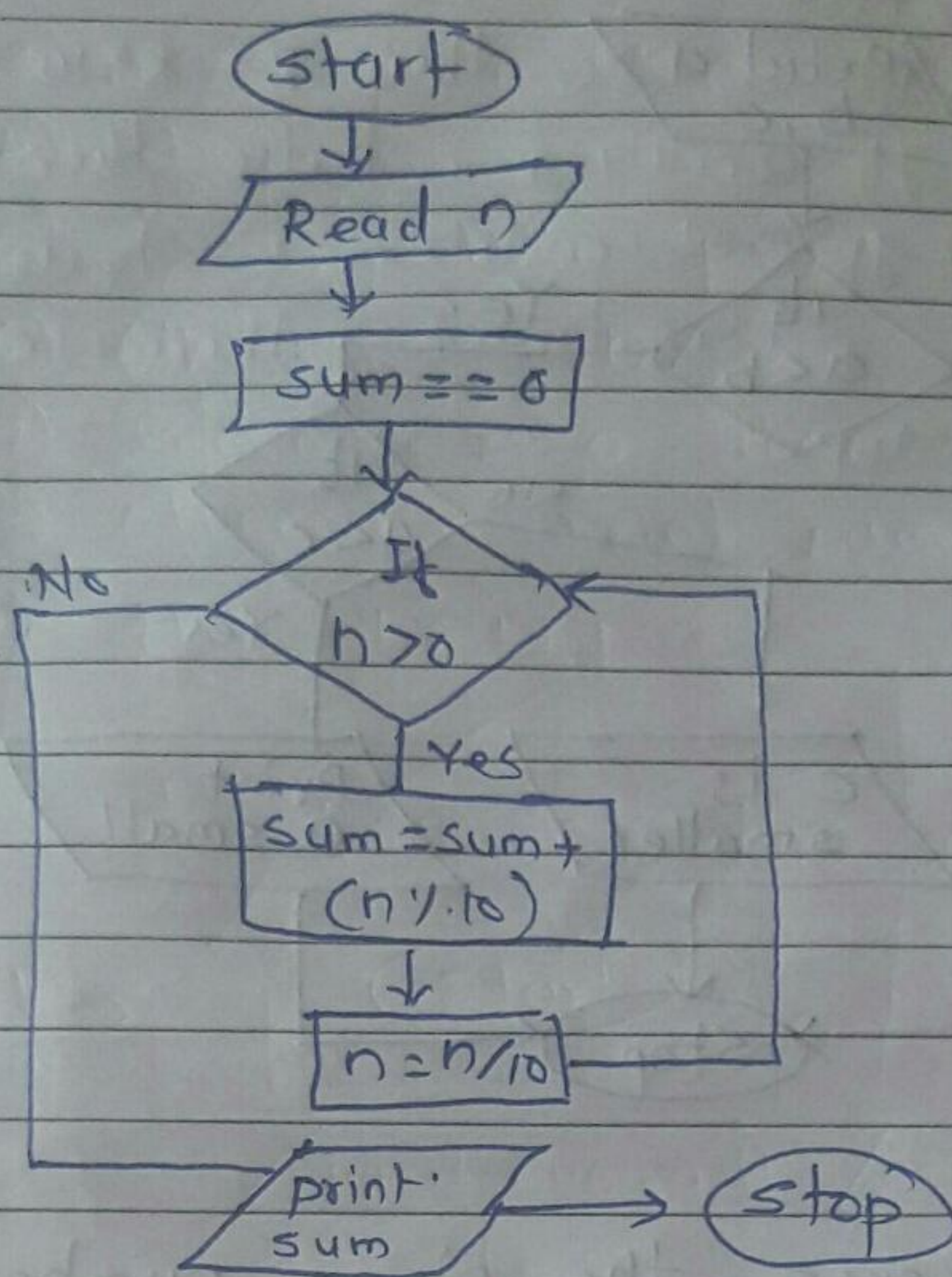


Algorithm →

- 1) start
- 2) Declare  $a$  &  $n = 0$
- 3) Read  $a$
- 4) While  $a \neq 0$  continue loop up to  $a = 0$  & count the  $n$   $n = n + 1$
- 5) If  $a = 0$  then print  $n$
- 6) stop



10) To find the sum of digit of given number.



Algorithm → 1) start

2) Read number n

3) Set sum = 0

4) Compare n if  $n > 0$  then  $sum + (n \% 10)$  &  
 $n = n / 10$  otherwise print sum

5) stop

11) To find smallest no. of given 3 no.

Algorithm → 1) start

2) Read a, b, c

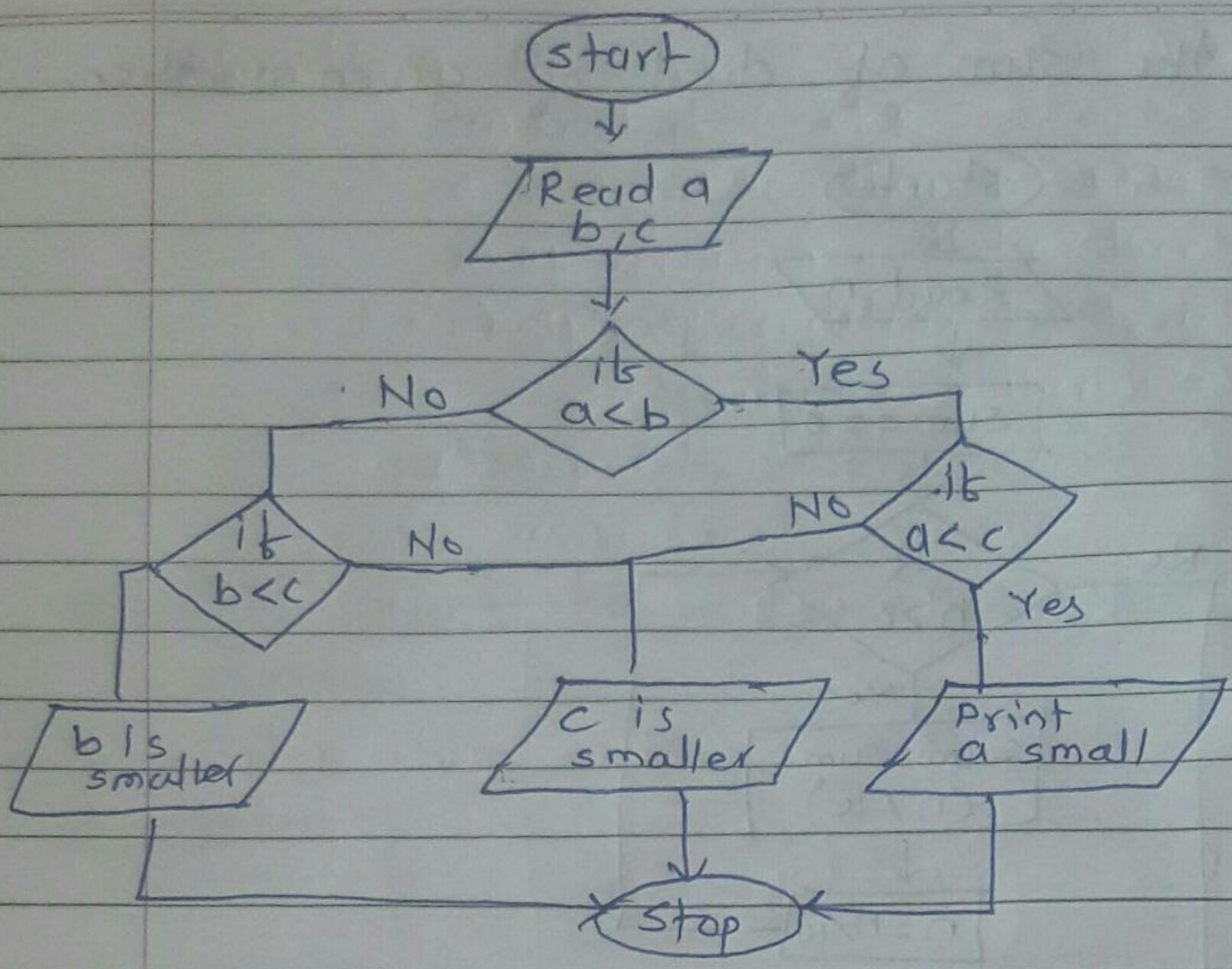
3) compare  $a < b$  &  $a < c$  the a is smallest

4) If a is greater than b then compare  
 $b < c$  if true then b is smallest

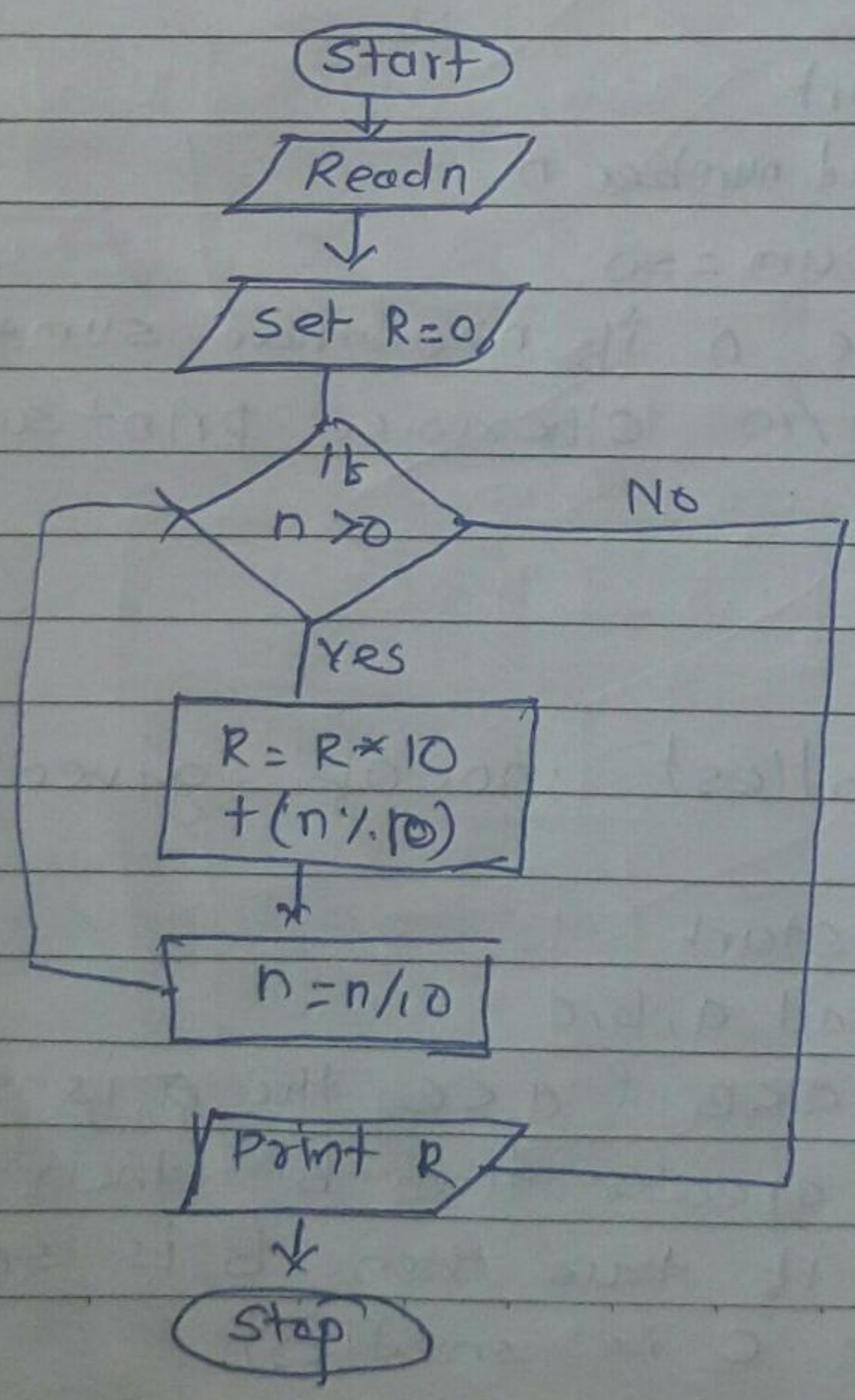
otherwise c is smallest.

5) stop.





13) To reverse the given number.





Algorithm → 1) start

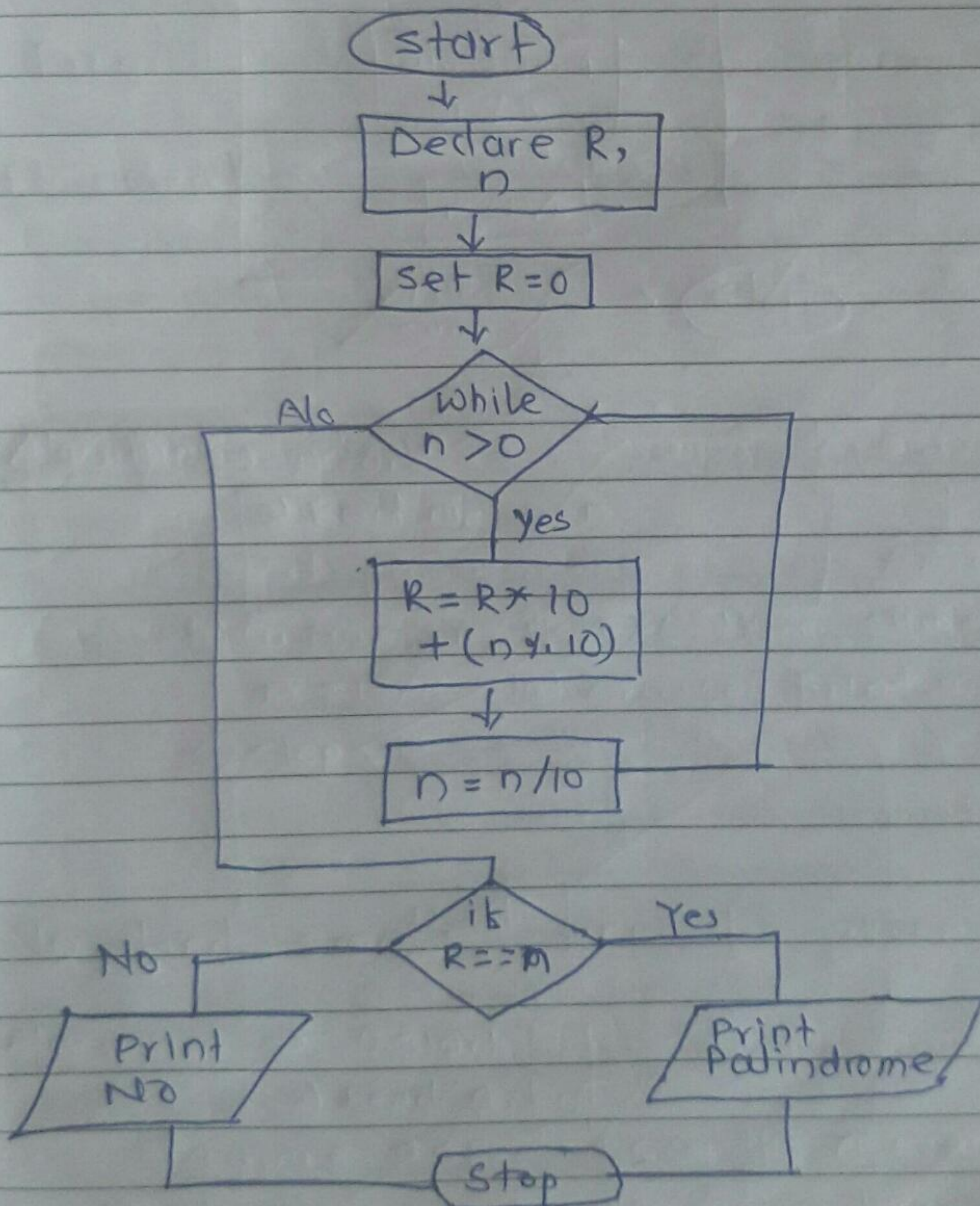
2) Read  $n$  & set  $R=0$

3) while  $n > 0$  then  $R = R \times 10 + (n \% 10)$  &  $n = n / 10$

4) If condition false then print  $R$  value

5) stop.

17) To find out the number is palindrome or not.





Algorithm → 1) start

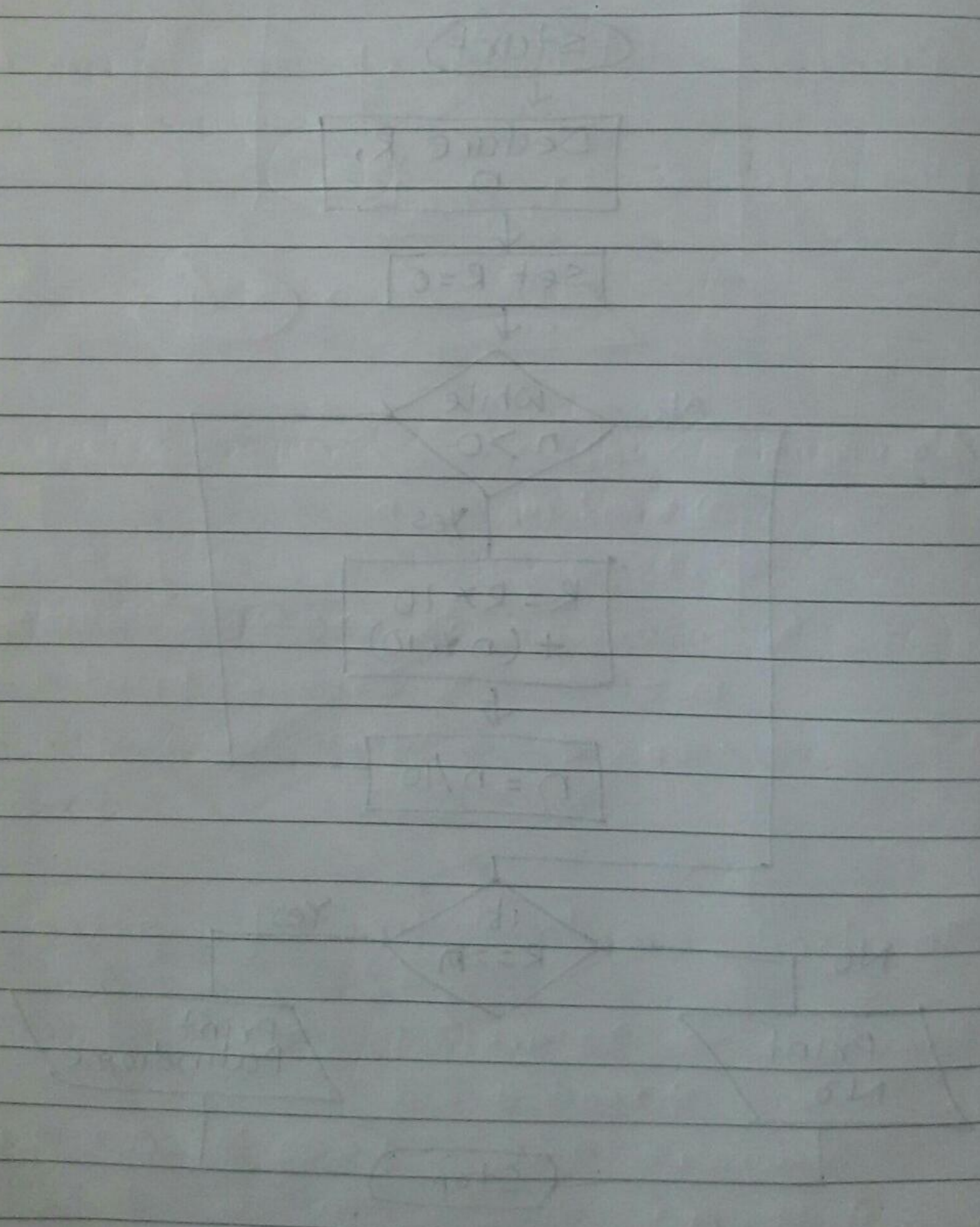
2) Read  $n$  & set  $R$

3) while  $n > 0$  then  $R = R \times 10 + (n \% 10)$  &  $n = n / 10$

4) If condition is false then check  $R == n$

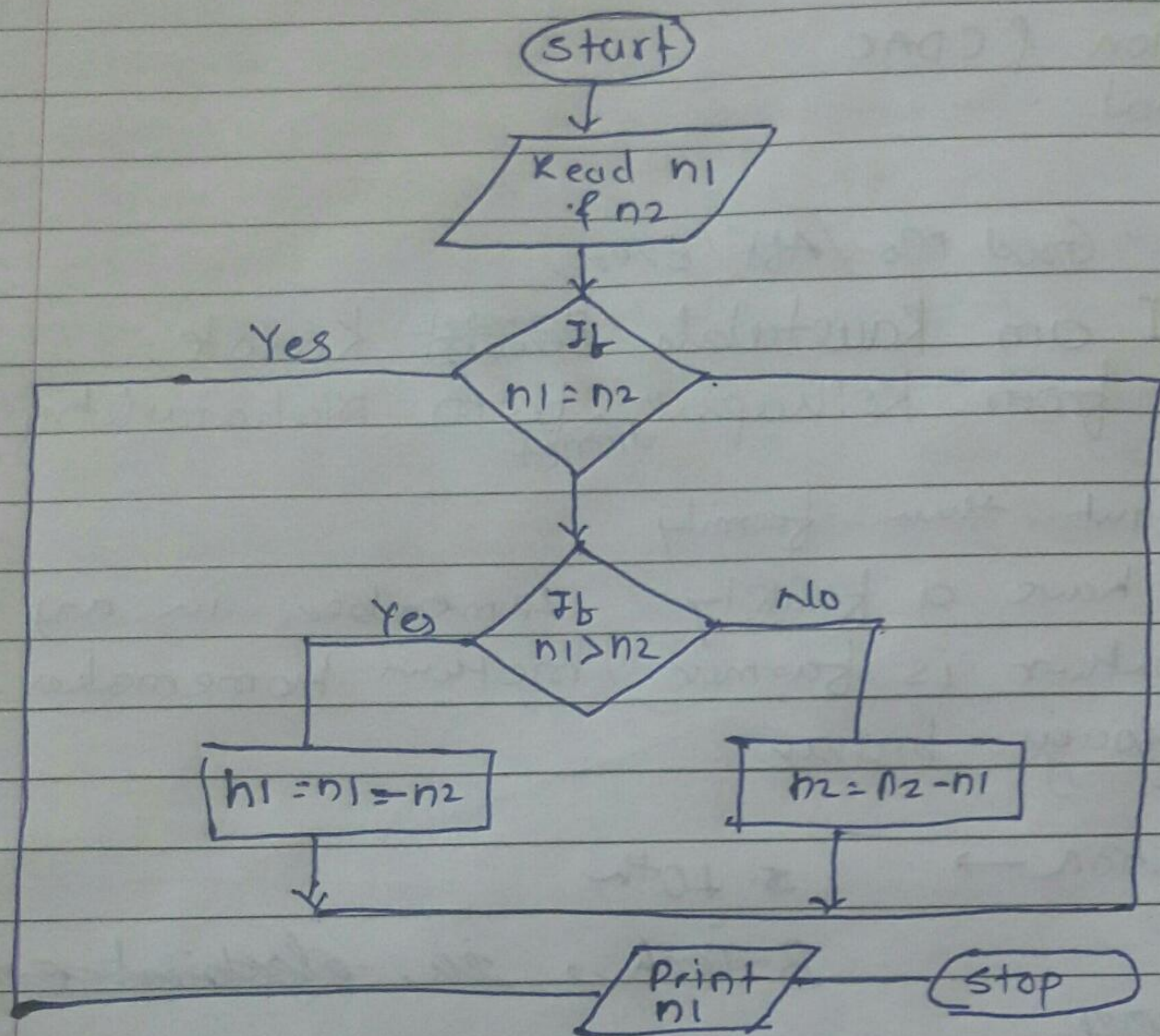
5) If 2nd condition is true then no. is palindrome otherwise no.

6) stop.





14) To find out GCD of given two number



- ① start
- ② Read n1 & n2
- ③ Check upto  $n1 = n2$  if it is true print n1 & if it is false then check code 4
- ④ Compare  $n1 > n2$  if it is true the  $n1 = n1 - n2$  otherwise  $n2 = n2 - n1$  continue loop
- ⑤ stop