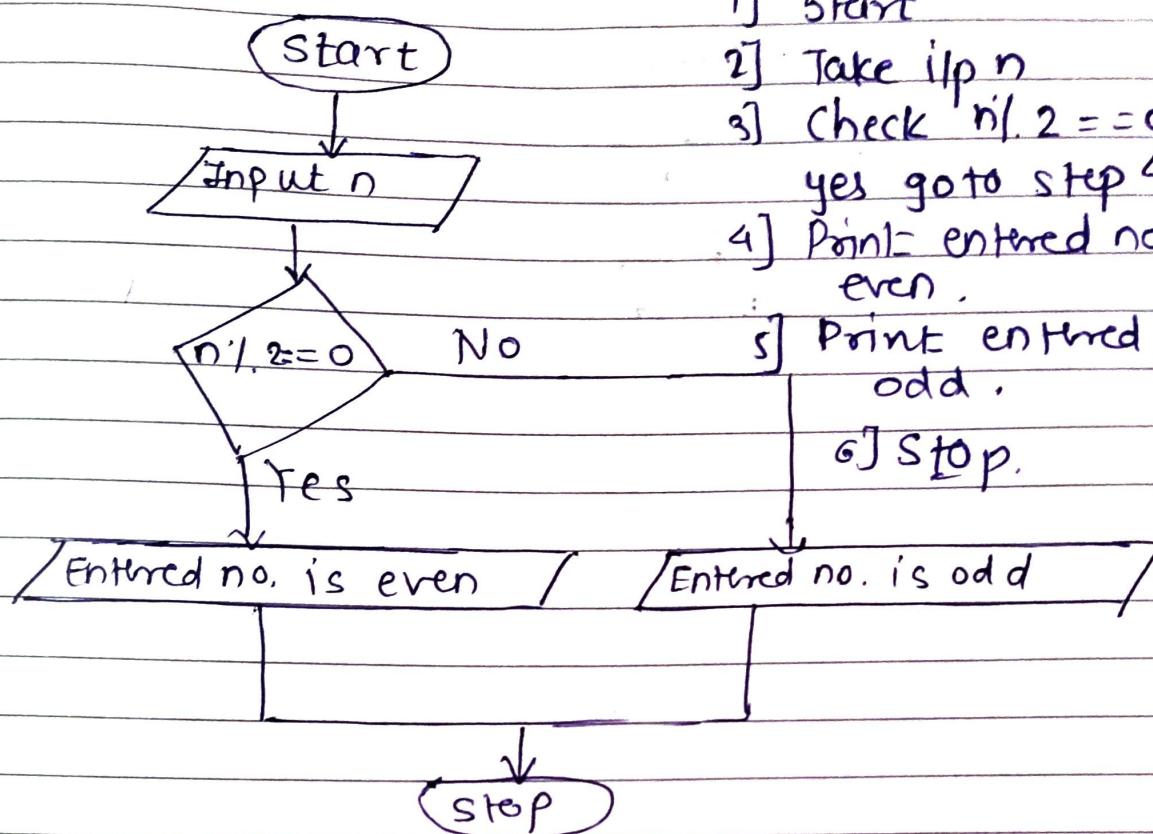
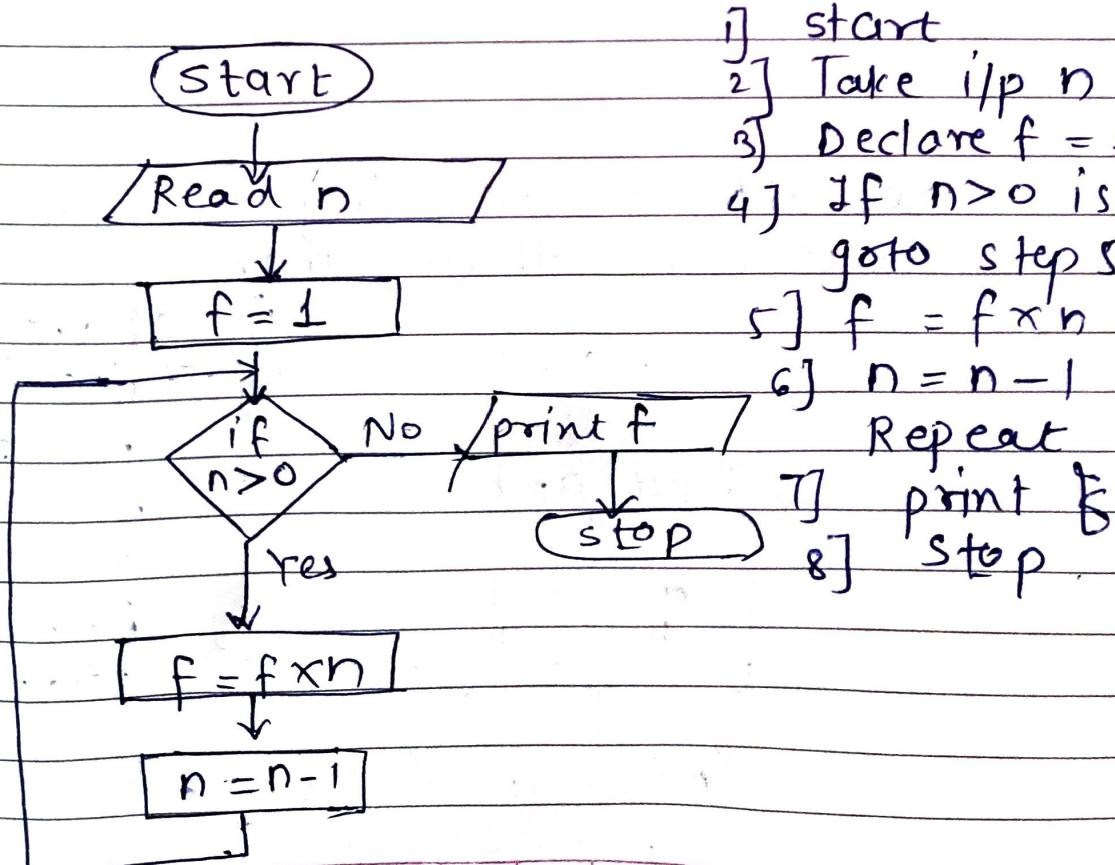




Q1. check if given no. is even or odd.

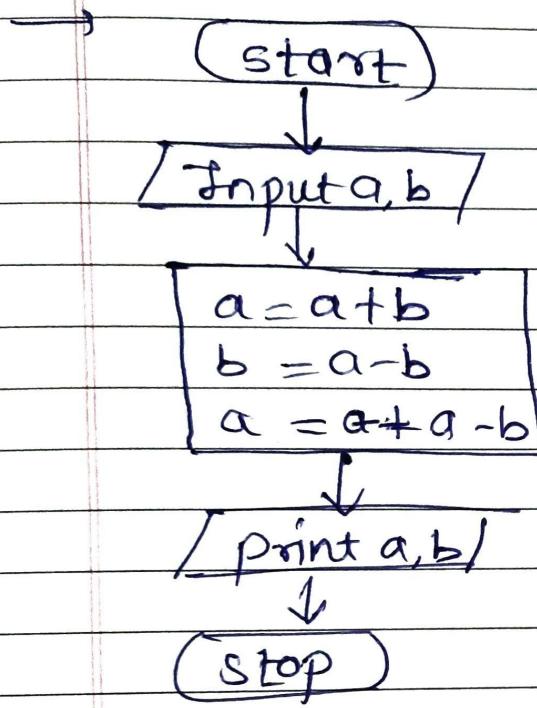


Q2. Flowchart for factorial of a number,



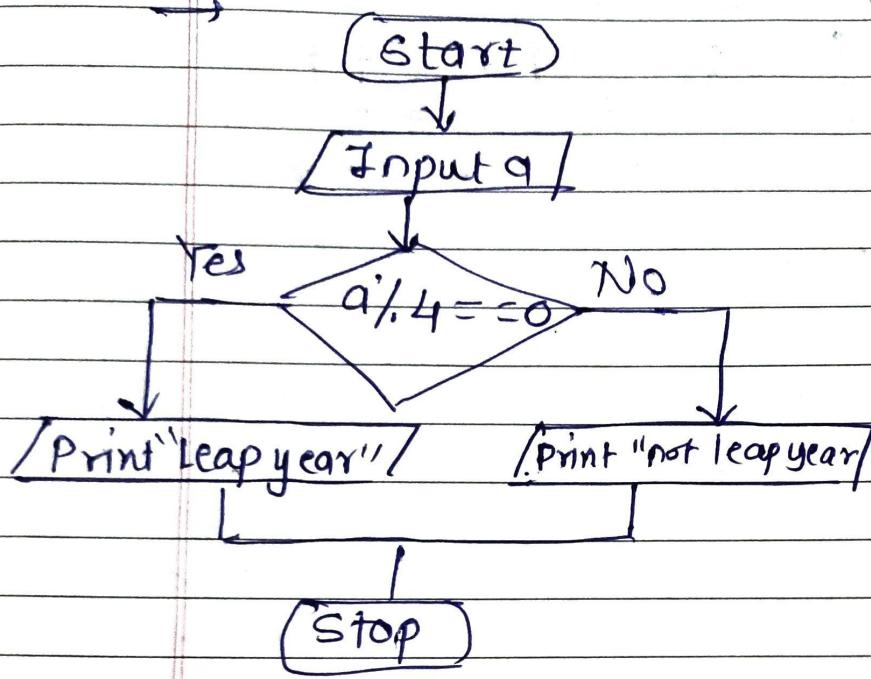
- 1] start
- 2] Take i/p n
- 3] Declare f = 1 .
- 4] If n>0 is true
goto step 5 or 7
- 5] f = f × n
- 6] n = n - 1
- 7] print f
- 8] stop .

④ Factorial for swapping of two diff. numbers without using third variable



- 1] start
- 2] Take i/p a,b
- 3] $a = a+b$
 $b = a-b$
- 4] point a,b
- 5] stop

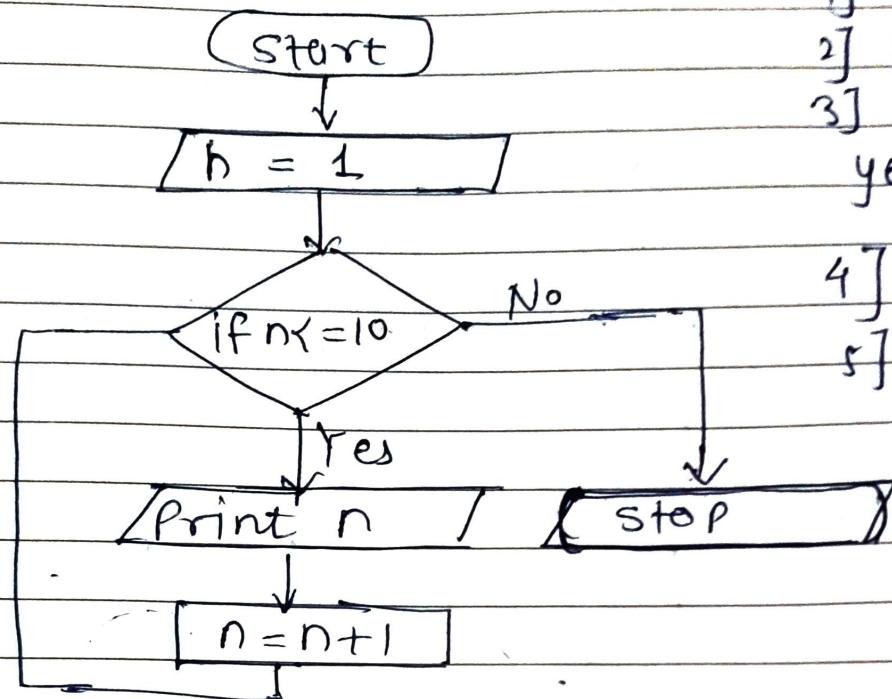
Q 6. Check whether the given no. is leap year or not?



- 1] Start
- 2] Input year 'a'
- 3] check if
 $a \% 4 == 0$ if yes
go to step 4 or 5
- 4] Point "leap year"
and go to step 6
- 5] Point "not leap
year" if go to step 6
stop.
- 6]

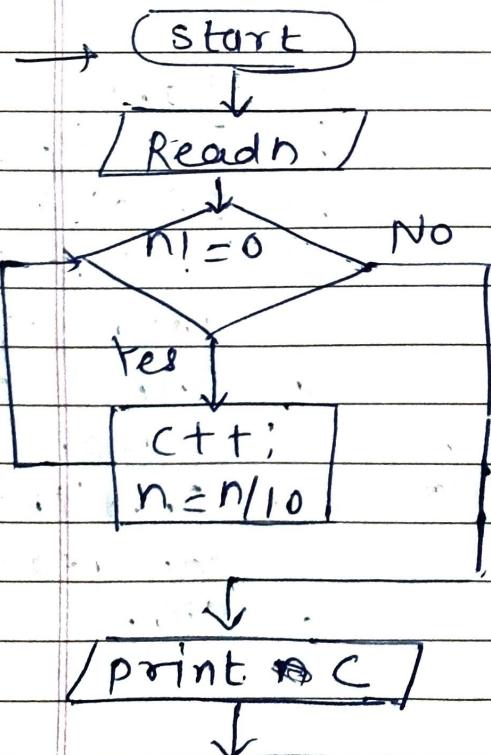
⑦

A flowchart to print nos from 1 to 10 without loop.

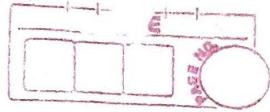


- 1] start
- 2] n = 1
- 3] If n <= 10 is
yes then goto
step 4 or 5
- 4] print = n
- 5] n = n + 1
goback to 3
- 6] stop

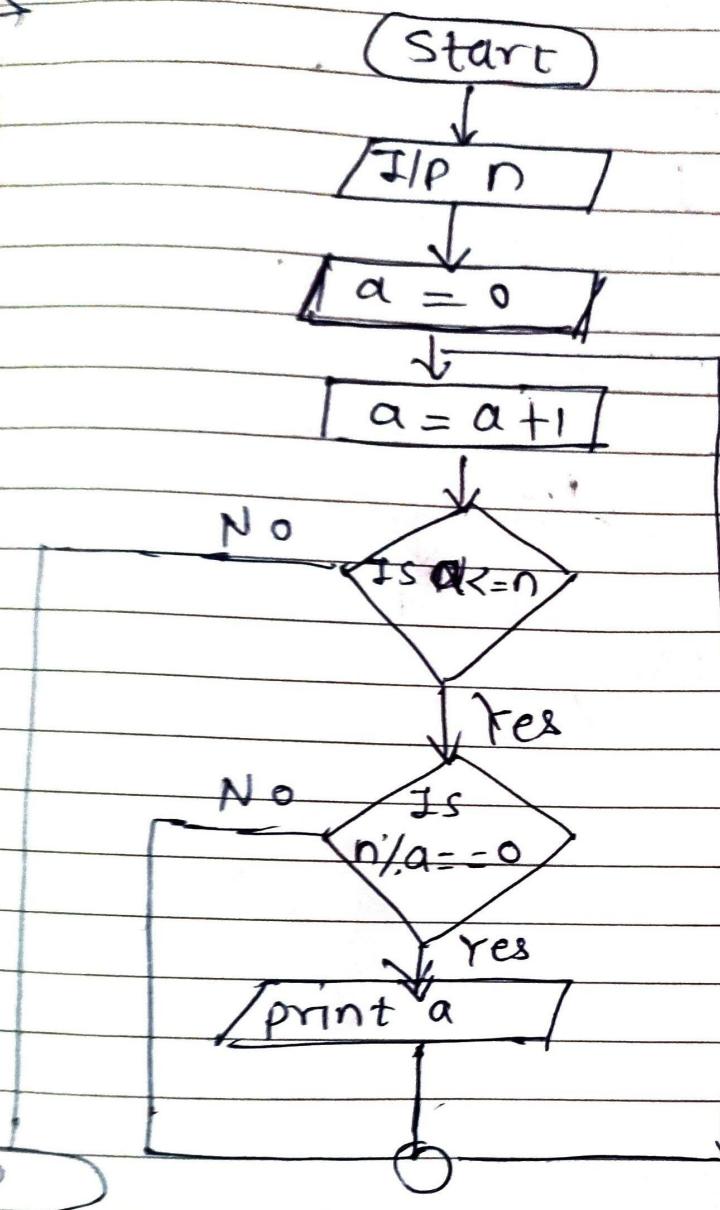
⑧ Flowchart to print the digits of a given number.



- 1] start
- 2] Take i/p n
- 3] check if n != 0 if
yes goto step 4 or 7
- 4] c++ and
n = n / 10 Repeat
- 5] Point c
- 6] Stop

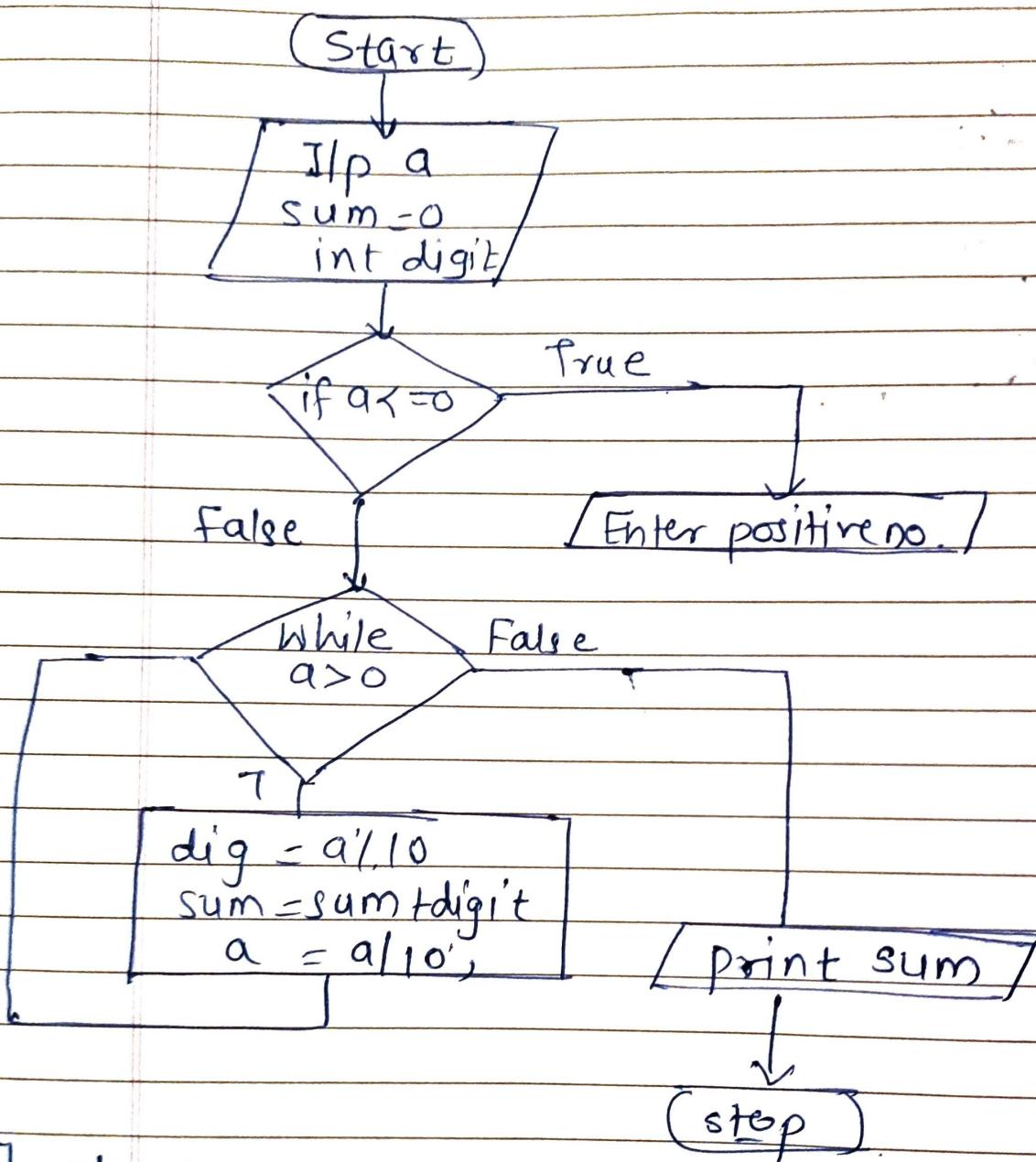


⑨ Flowchart to print all factors of a number.



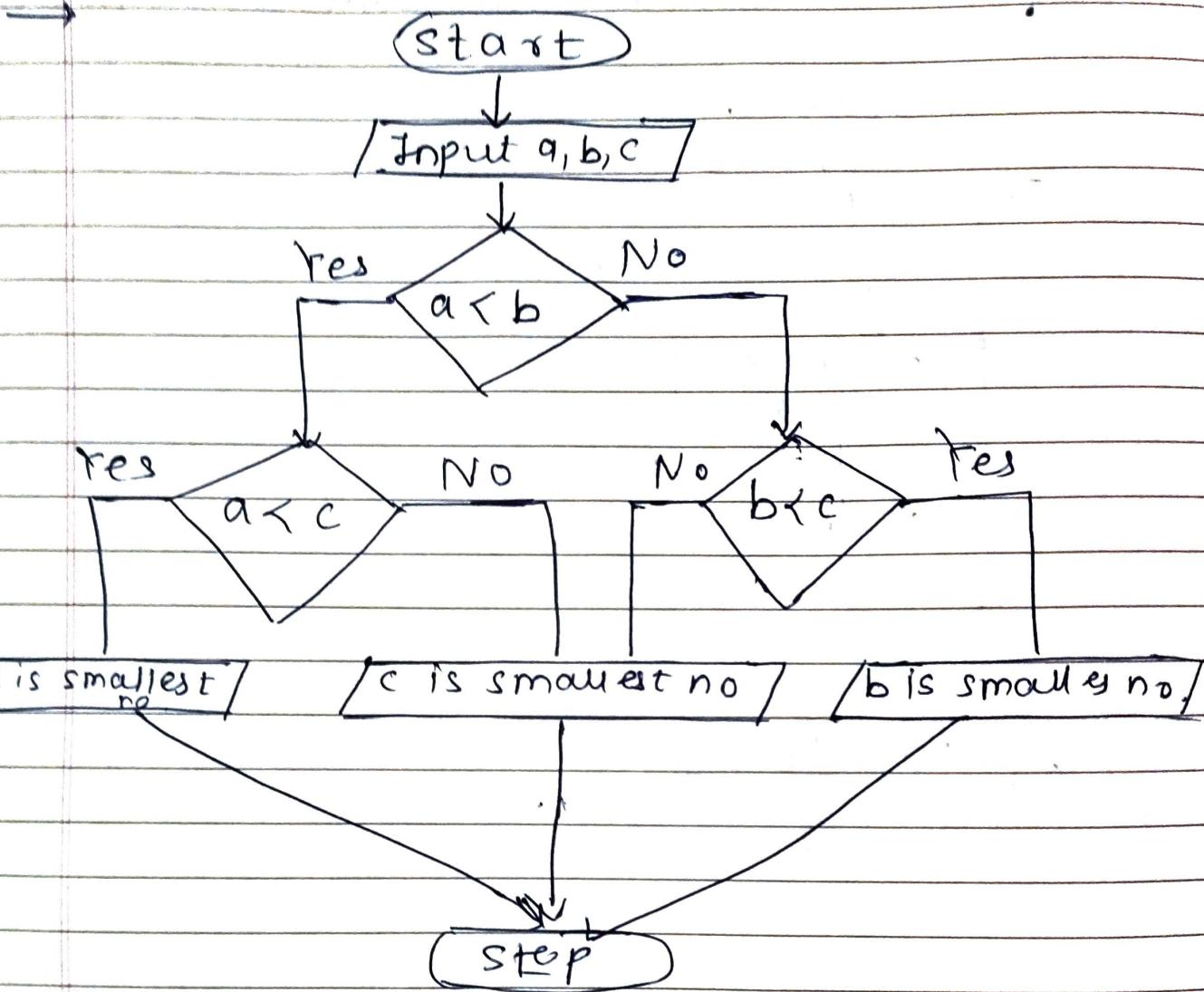
- 1] Start
- 2] Take i/p n
- 3] a = 0
- 4] a = a + 1
- 5] check if $a \leq n$
- 6] If yes then goto 6 or 9
- 7] If $n/a = 0$ if yes goto 7 or 8
- 8] print a
- 9] Go back to step 4.
- 10] stop.

Q10. Find sum of digits of a given no.



- 1] start
- 2] Take i/p a
sum = 0 & define
int digit.
- 3] if $a \leq 0$ is true goto step 4 or step 5.
4] Enter print "Enter positive no."
- 5] while $a > 0$ is true
goto step 6 or
- 6] $dig = a \% 10$
 $sum = sum + digit$
 $a = a / 10$
Repeat
- 7] Print sum
- 8] stop

Q11 Flowchart to find the smallest of 3 numbers.

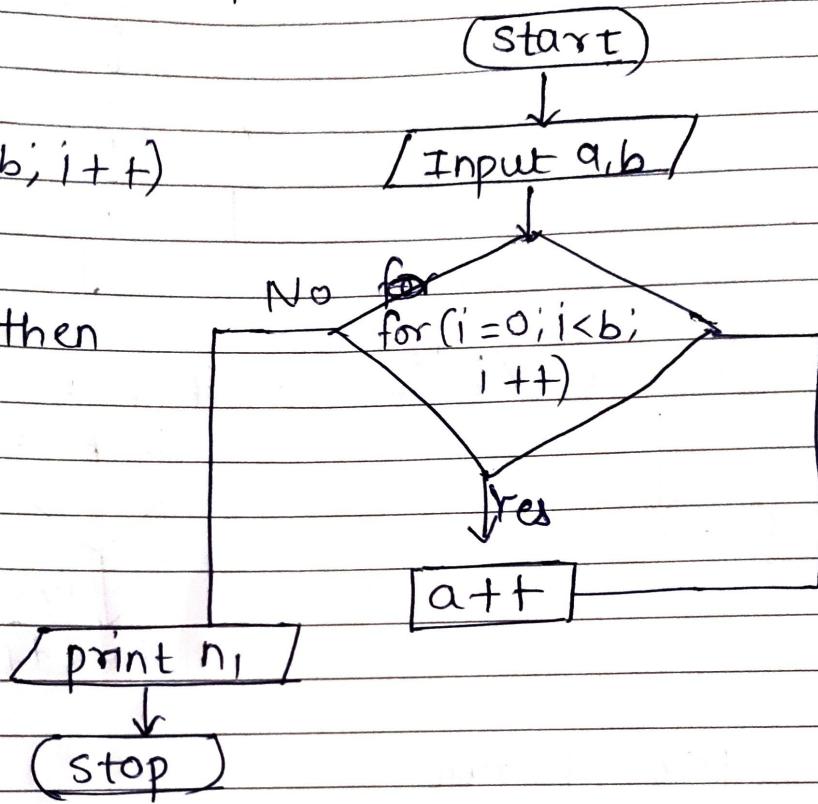


- 1] start
- 2] Take i/p a,b & c
- 3] check if $a < b$ if yes
then goto step 4 or 7
- 4] check if $a < c$ if yes
goto step 8 or 6
- 5] Print a is smallest
- 6] Print c is smallest
- 7] check if $b < c$ if ~~yes~~ No
goto 8 or 9
- 8] Print c is smallest
- 9] Print b is smallest
- 10] STOP



P12. How to add two numbers without using the arithmetic operators in java.

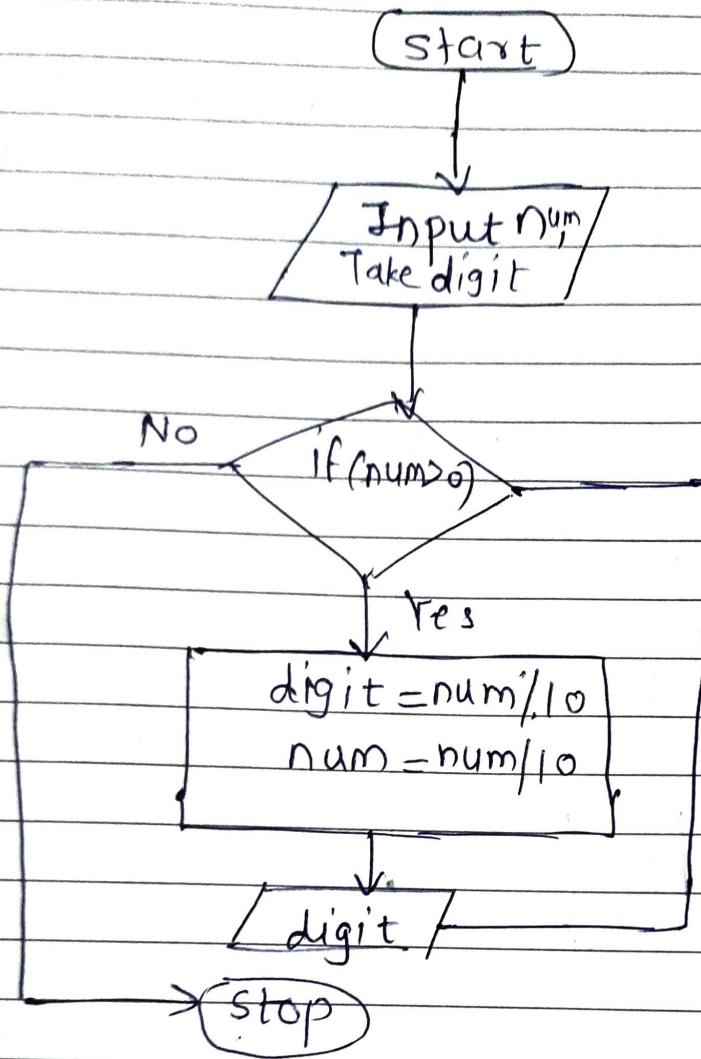
- 1] start
- 2] If p a & b
- 3] if(i=0; i<b; i++)
true then
 a++
- 4] If false then
 print a
- 5] stop



QED

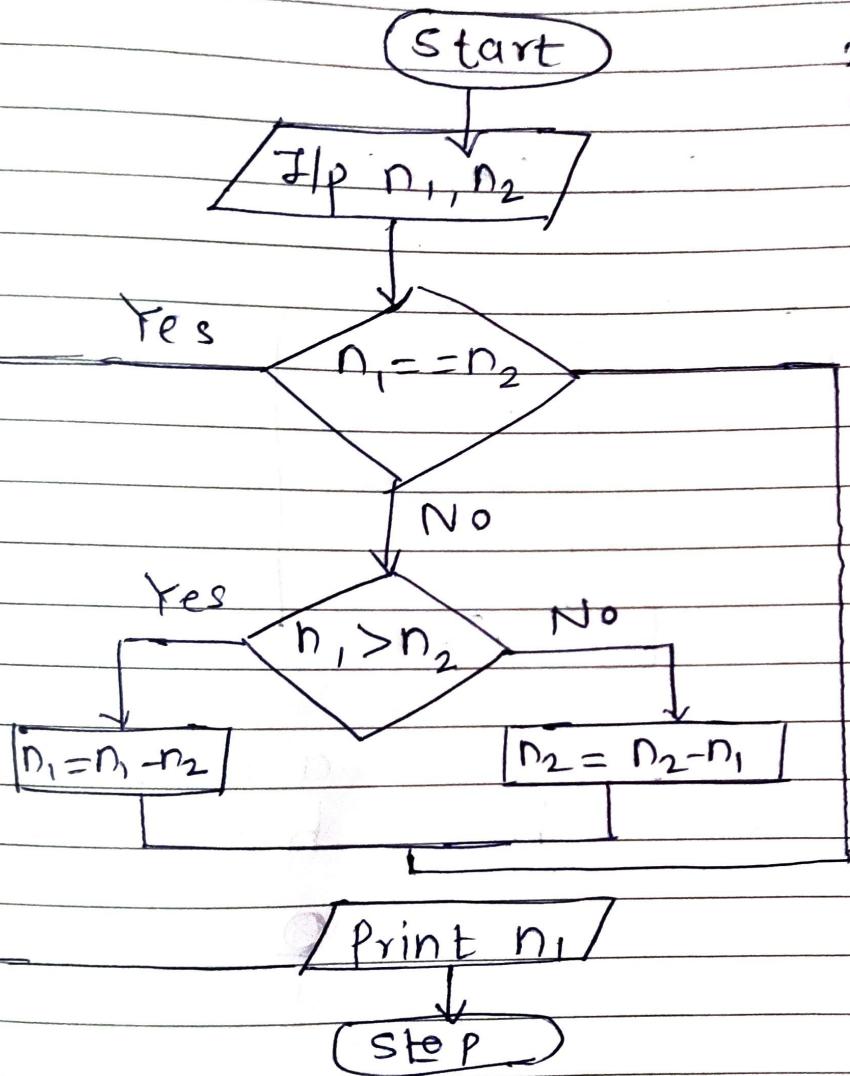
Q13.

Reverse of a given number.



- 1] start
- 2] Take i/p num & variable digit
- 3] if num > 0
- 4] If true
 digit = num/10
 num = num/10
- Repeat
- 5] If False
- 6] stop.

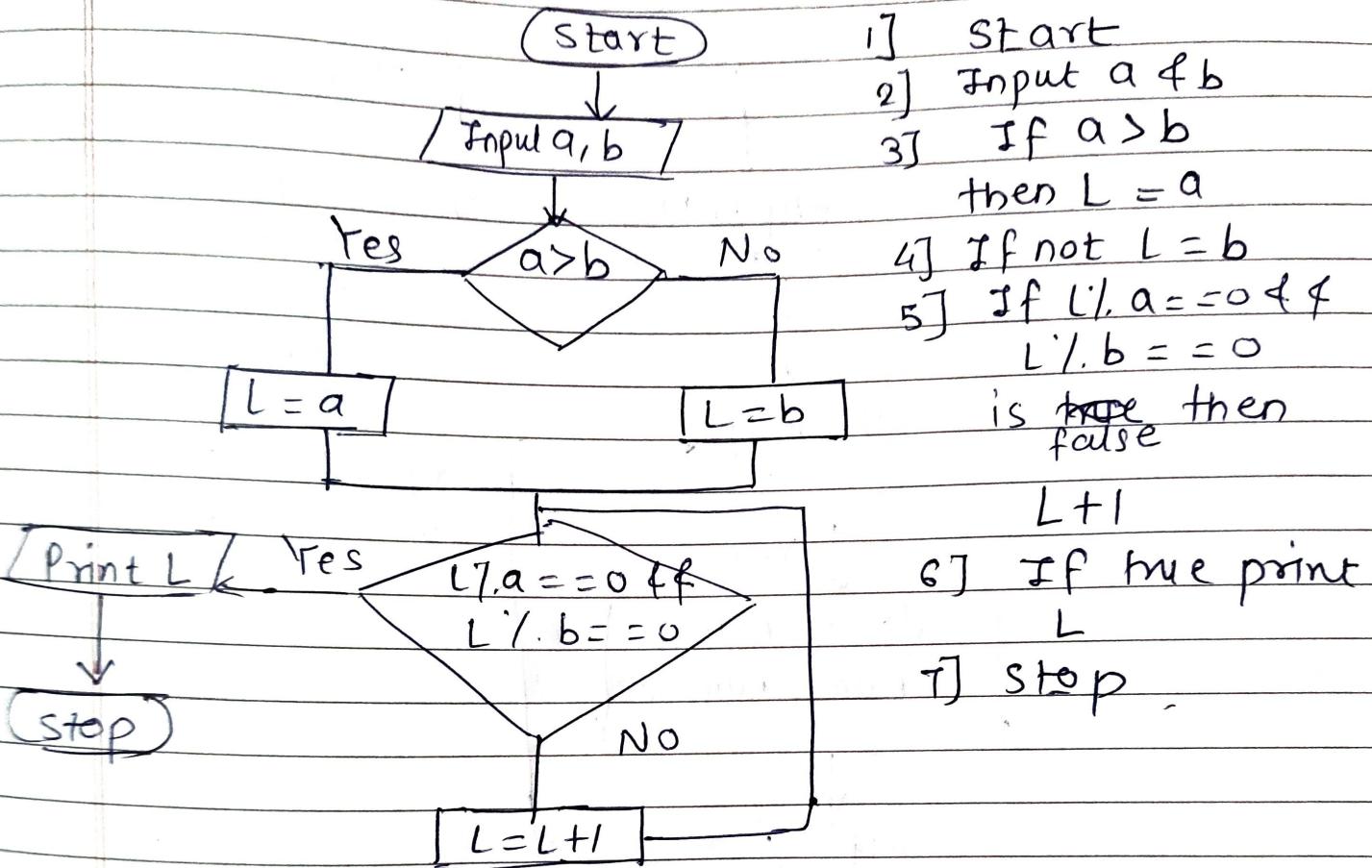
Q14. Flowchart & algorithm to find GCD of two given numbers.



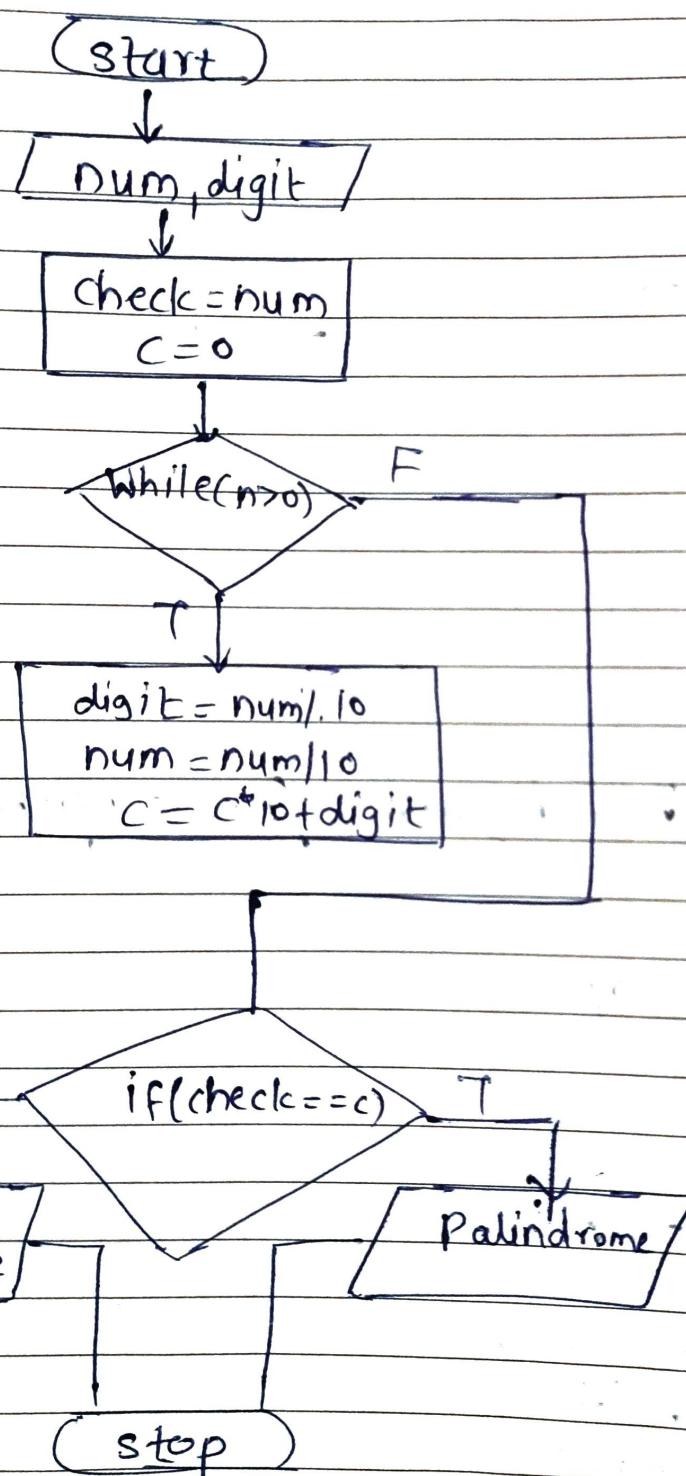
- 1] Start
- 2] Read n₁ & n₂
- 3] If n₁ == n₂
print n₁
- 4] If n₁ != n₂
- 5] check if n₁ > n₂
- 6] If n₁ > n₂ print
 $n_1 = n_1 - n_2$
goto step 3
- 7] If n₂ > n₁
 $n_2 = n_2 - n_1$
goto step 3
- 7] stop.

Q15 LCM of two numbers

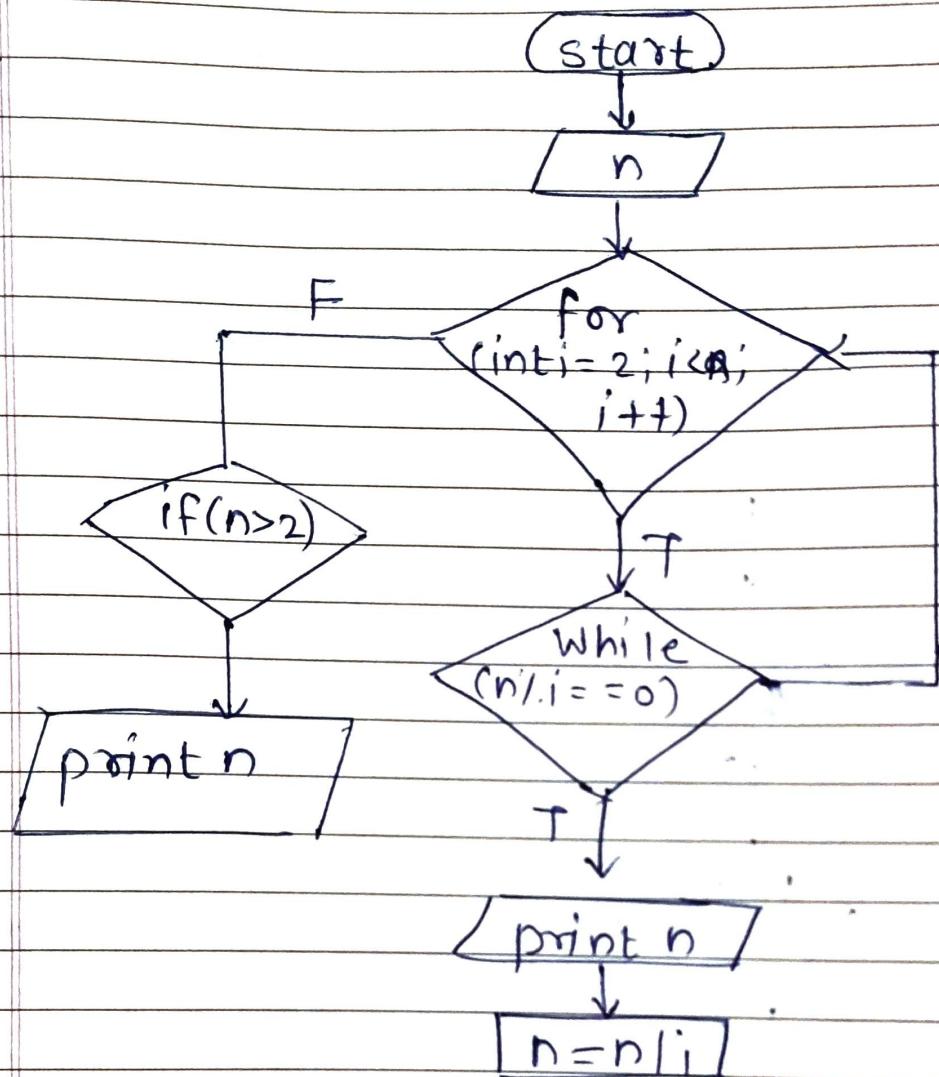
Algorithm



Q17. check whether the given no. is palindrome or NOT.

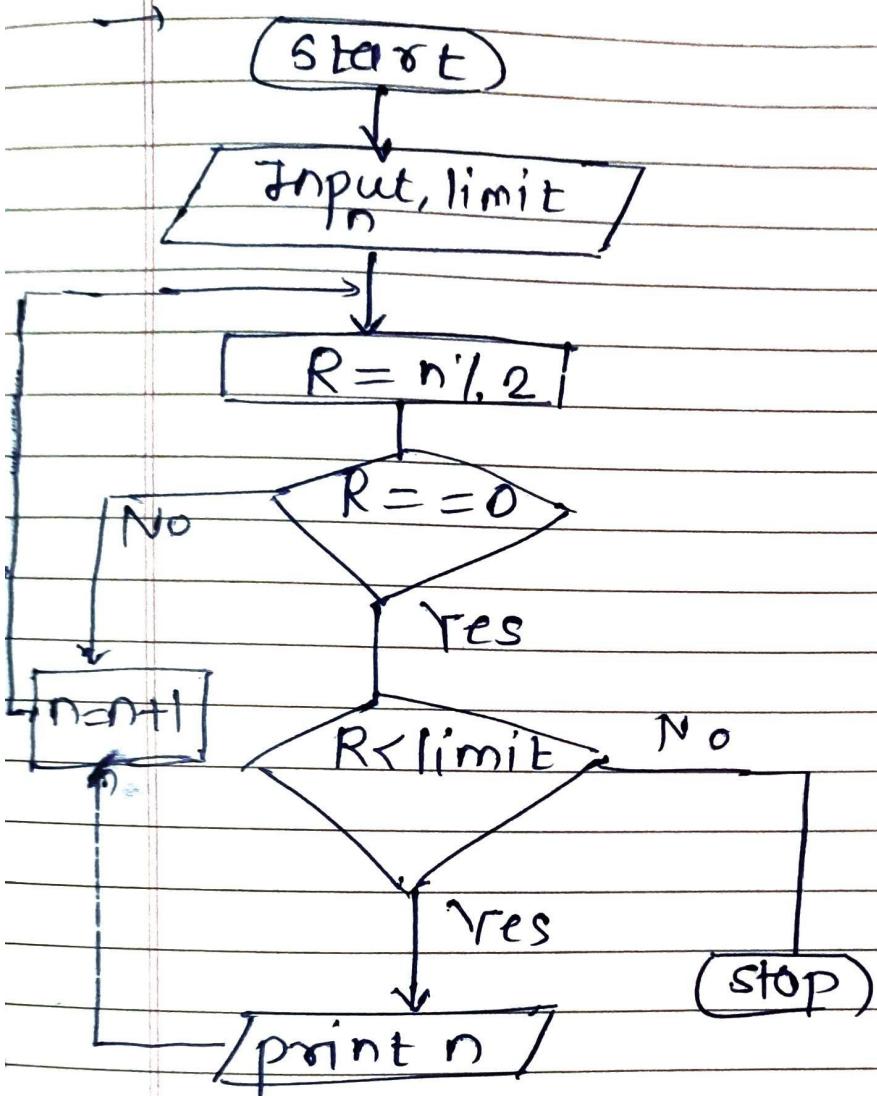


Q18. Prime factor of a given no.



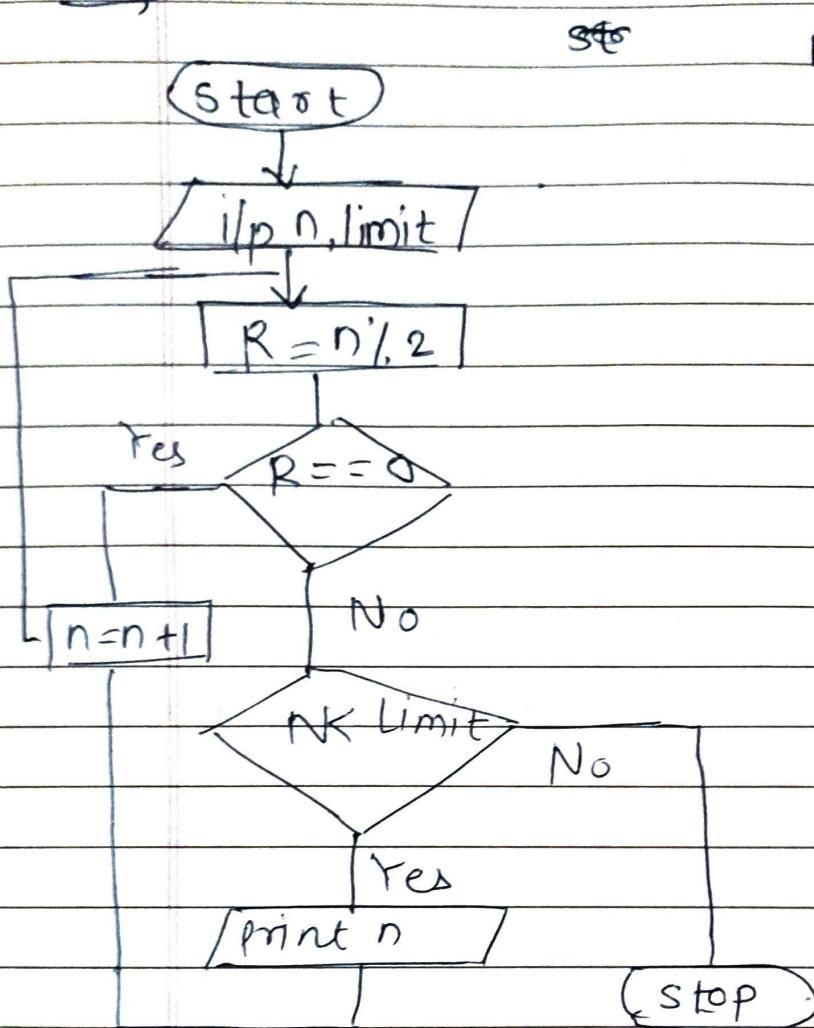
- Step 1: start
- 2: - Read n
- 3: `for (int i = 2; i < n; i++)`
- 4: if condⁿ is true goto step 4.
- 4: `while (n % i == 0)`
if condⁿ is false
goto Step 3.
- 5: If yes ($n > 2$) then
print n .
- 6: stop.

Q19. Print the Even no. series 2, 4, 6, 8, ...



- 1] start
- 2] Take input n and limit
- 3] $R = n / 2$
- 4] check $R == 0$ if
yes goto step 5.
no if yes goto step 6
- 5] $n = n + 1$ & go back to 3
- 6] check if $R < \text{limit}$
if yes goto step 7 or 8
- 7] print n and go
back to step 5
- 8] stop.

Q20. Print the odd no. series.



- 1] start
2] I/p n & limit
3] $R = n / 2$
4] If $R == 0$ is false then
5] check if $n < \text{limit}$
if yes print n
6] $n = n + 1$
7] Repeat
8] If $\text{N} < \text{limit}$ is false then stop
9] If $R == 0$ is true then
 $n = n + 1$
10] Repeat till $N < \text{limit}$ is false.