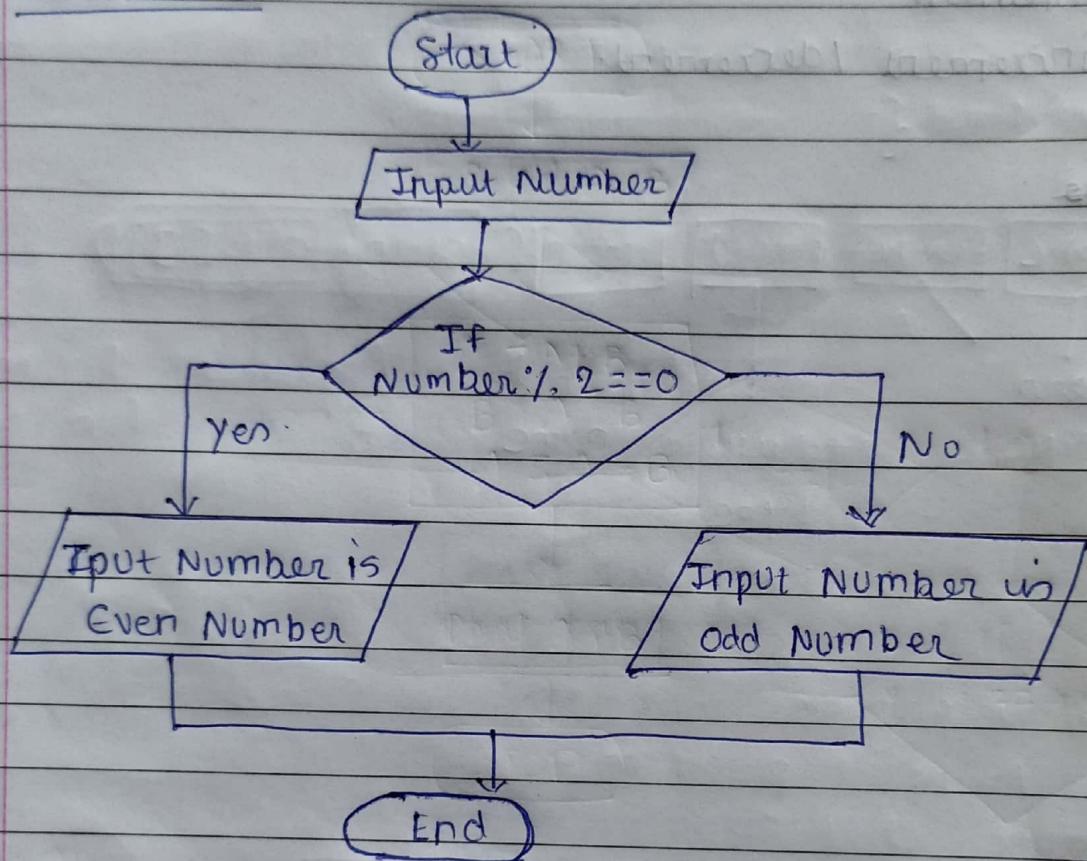


Q1 check if the given number is Even or odd.

flowchart



Algorithm:

Step1 : START

Step2 : Input Number

Step3 : if $n \% 2 == 0$ then number is even

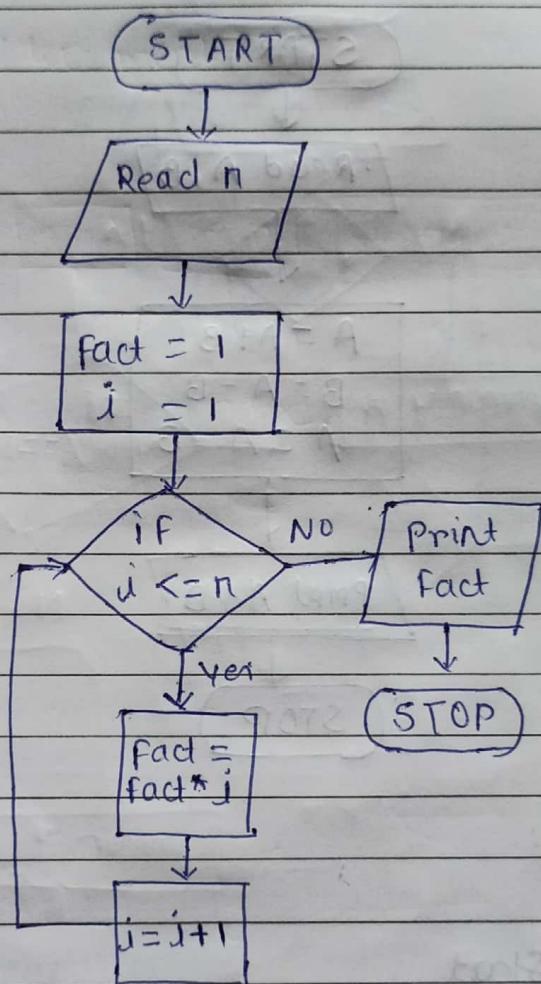
Step4 : else Number is odd .

Step5 : display the output

Step6 : STOP.

2. To find factorial of Number

flow chart



Algorithm:

Step 1 : Start

Step 2 : Read n

Step 3 : fact = 1 i = 1

Step 4 : ~~while~~ if i <= n

Step 5 : fact = fact * i

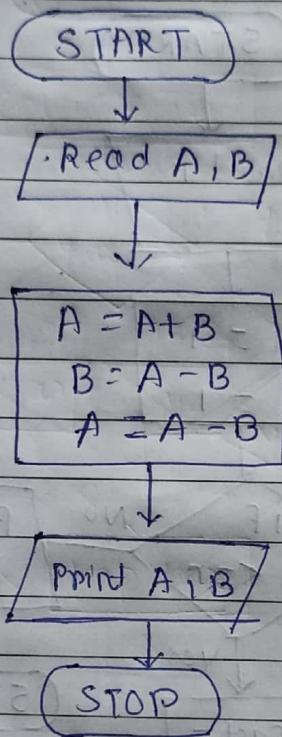
Step 6 : i = i + 1

Step 7 : Print fact

Step 8 : Stop

Q4 Swap of two Number without using 3rd variable

Flowchart



Algorithm:

Step 1: Start

Step 2: Read A & B

Step 3: $A = A + B$

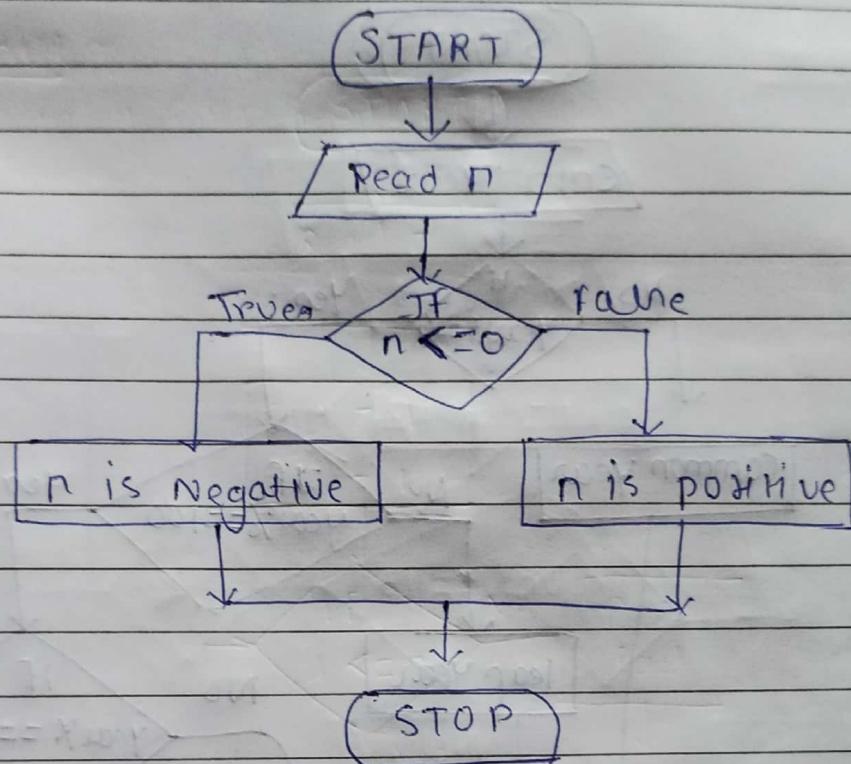
$B = A - B$

$A = A - B$

Step 4: Print A, B

Step 5: STOP

5. Positive or Negative



Algorithm:

Step 1 : START

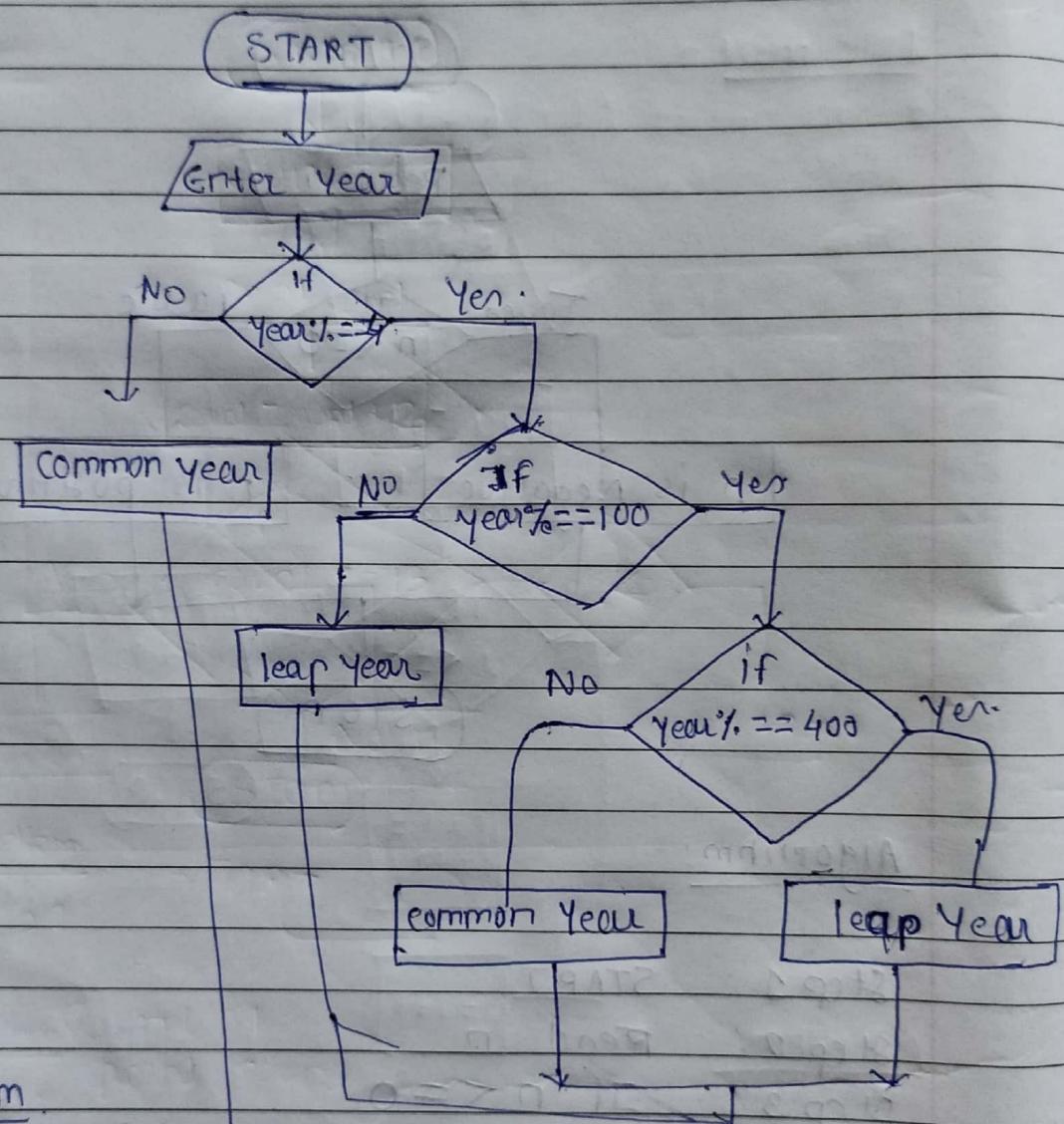
Step 2 : Read n

Step 3 : IF n <= 0

 IF True ; Print n is Negative
 else Number is Positive .

Step 4 : STOP

Q 6. Leap year or Not



Algorithm

Step 1: START

Step 2: Enter Number

(STOP)

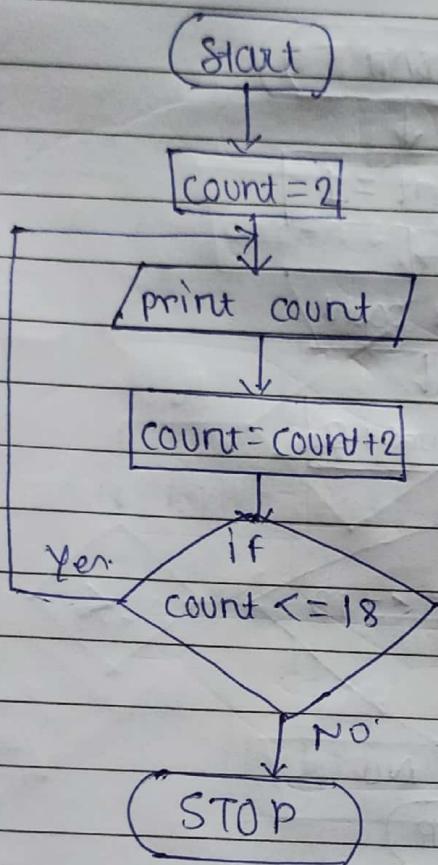
Step 3: if year is divisible 4 but not 100,
Display leap year

Step 4: If year is divisible by 400, Display leap year

Step 5: otherwise Display not leap year

Step 6: STOP

Q.19 To print Even series



Algorithm

Step 1: START

Step 2 :- COUNT = 2

Step 3 : print COUNT

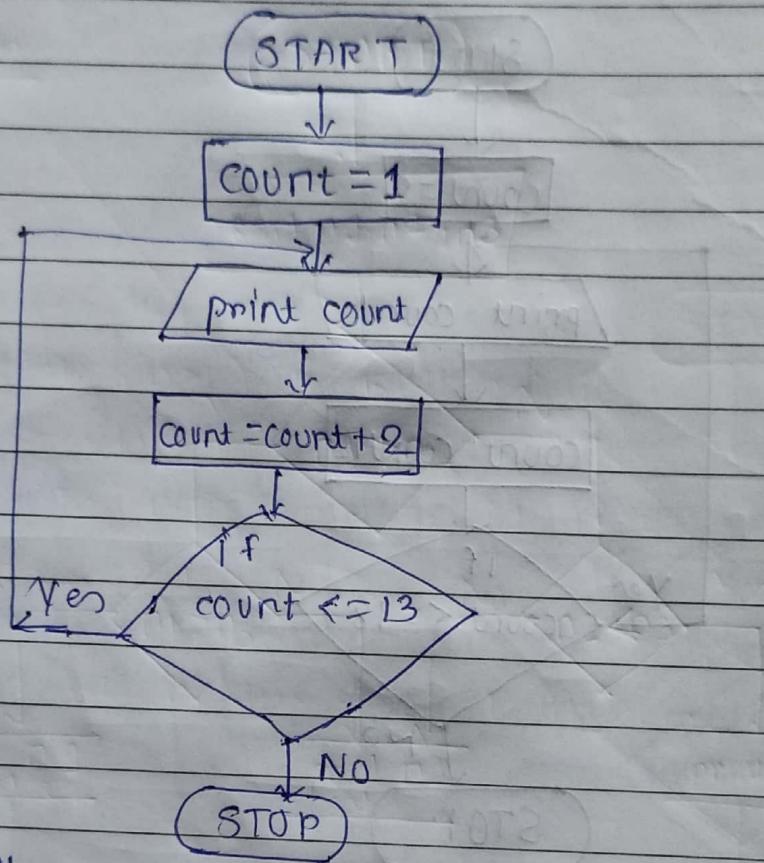
Step 4 :- COUNT = COUNT + 2

Step 5 : IF COUNT <= 18

 IF YES : ~~CONTINUE~~ repeat from step 3.

Step 6 : IF NO , STOP

20: To print even odd series.



Algorithm

Step 1: START

Step 2: Count=1

Step 3: print count

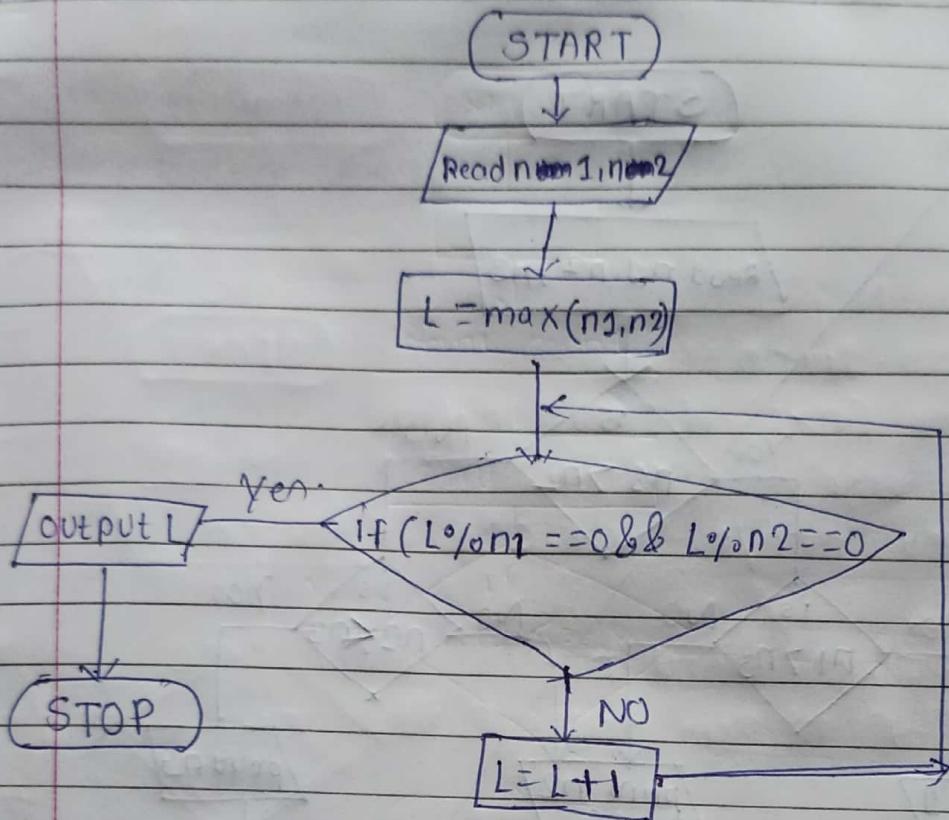
Step 4: Count = Count + 2

Step 5: If Count <= 13

If Yes repeat from step 3.

Step 6: If No, STOP.

Q. 15



Algorithm:-

Step 1: Start

Step 2: Read n_1, n_2

Step 3: $L = \max(n_1, n_2)$

Step 4:

Q.17

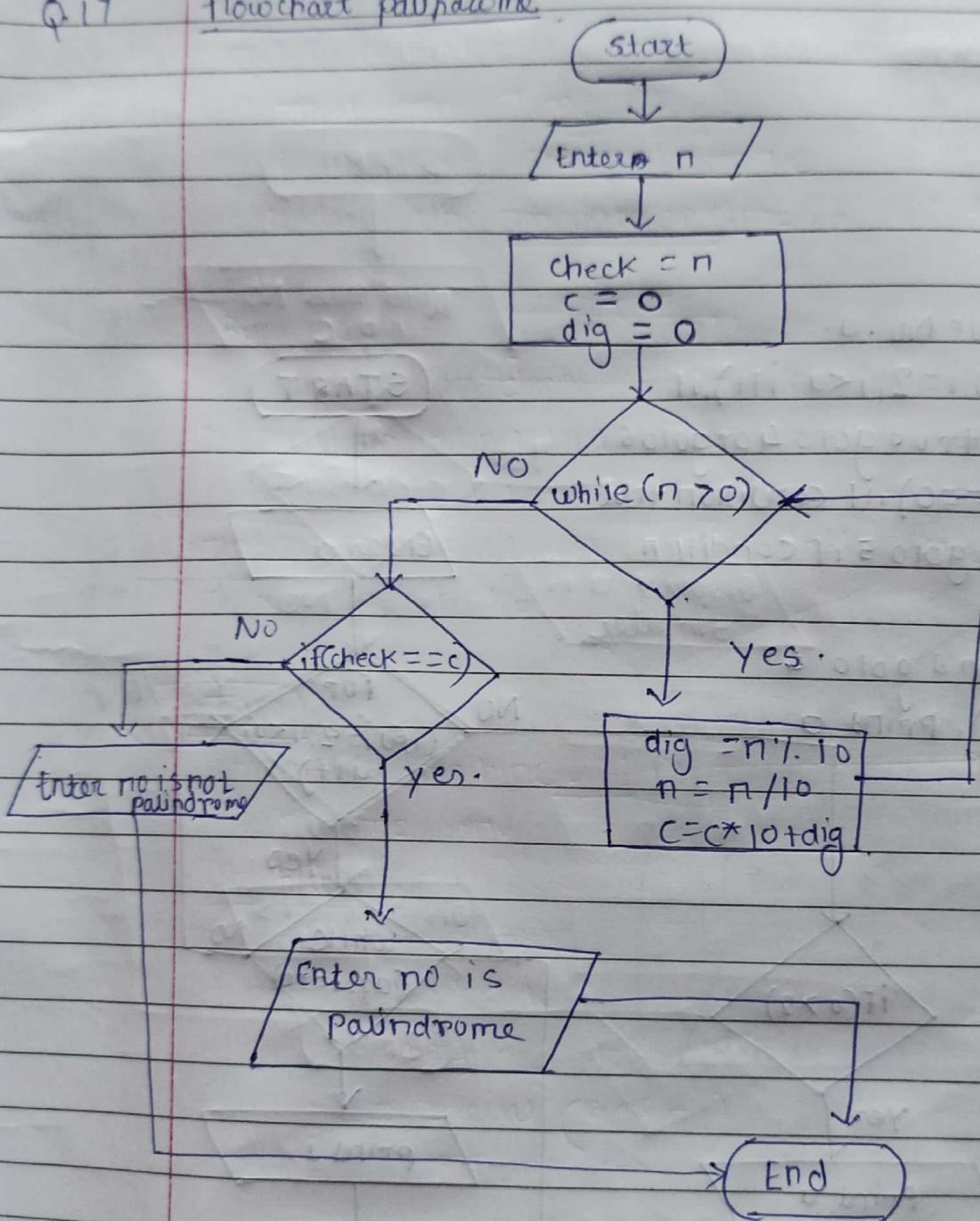
check No. for palindrome

Algorithm

1. Start
2. Enter n
3. check = n, c = 0, dig = 0
4. Enter while ($n \geq 0$), if condition true
 goto 5 or else goto 6.
5. $dig = n \% 10$; $n = n / 10$; $c = c * 10 + dig$
 goto 4.
6. if (check == c); Print no. is palindrome
7. else Print no. is not palindrome.

Q17

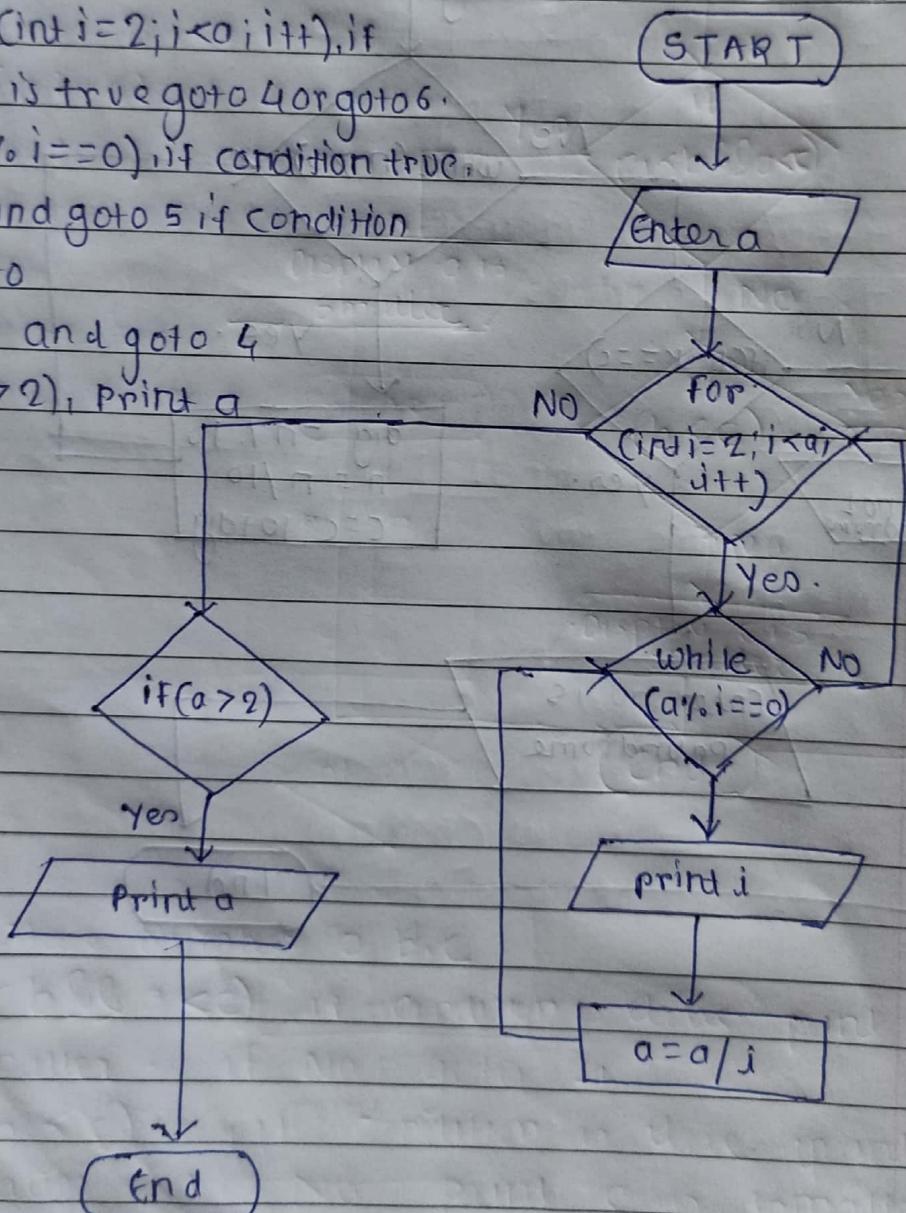
flowchart palindrome



Q.18 Prime factors

Algorithm

1. Start
2. Enter positive No. a.
3. Enter for (int i=2; i<a; i++) ; if condition is true goto 4 or goto 6.
4. while ($a \% i == 0$) ; if condition true, print i, and goto 5 if condition false goto 6
5. $a = a/i$ and goto 4
6. if ($a > 2$), Print a
7. End

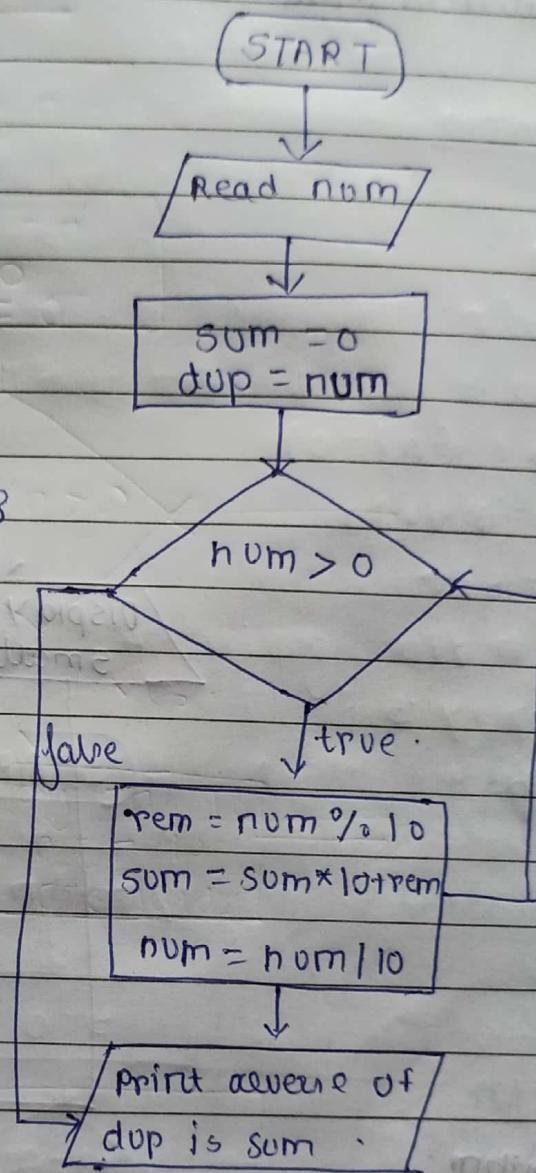


Q13 Reverse the Number

Algorithm

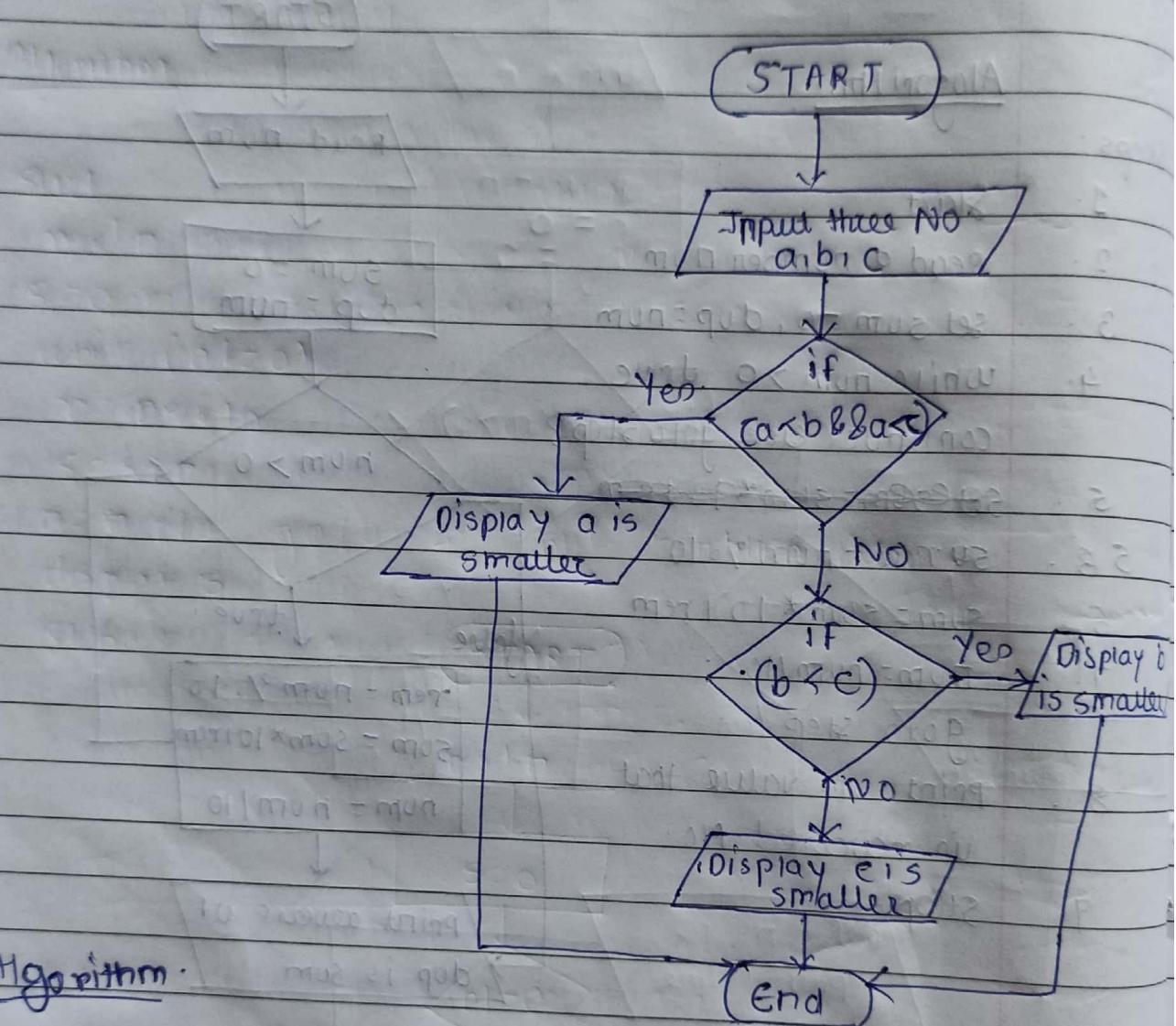
Steps:

1. Start
2. Read a number num
3. Set sum = 0, dup = num
4. While num > 0 do
 - Continue else goto step 8
5. ~~sum = sum * 10 + rem~~
6. ~~rem = num % 10~~
7. ~~sum = sum * 10 + rem~~
8. ~~num = num / 10~~
9. Goto step 4.
10. Print sum value that is reversed No.
11. Stop



Q11

Smallest Number

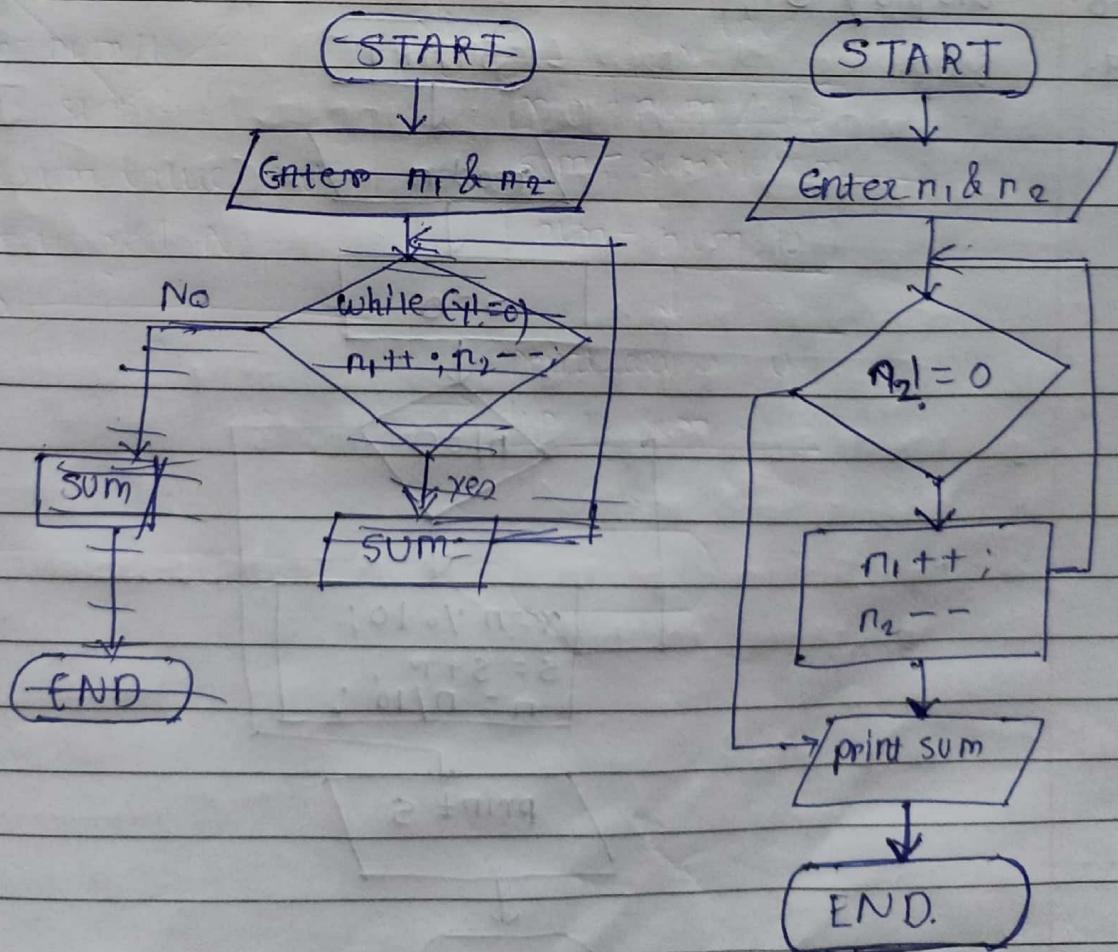
Algorithm

1. Start
2. Input three Number a,b,c
3. if ($a < b \&\& a < c$), if condition is true print a is smaller . if NO goto 4
4. if ($b < c$) , if condition is true print b is smaller , if NO print c is smaller .
5. Stop.

Q. 12 Sum of two Numbers without using Arithmetic operator.

Algorithm

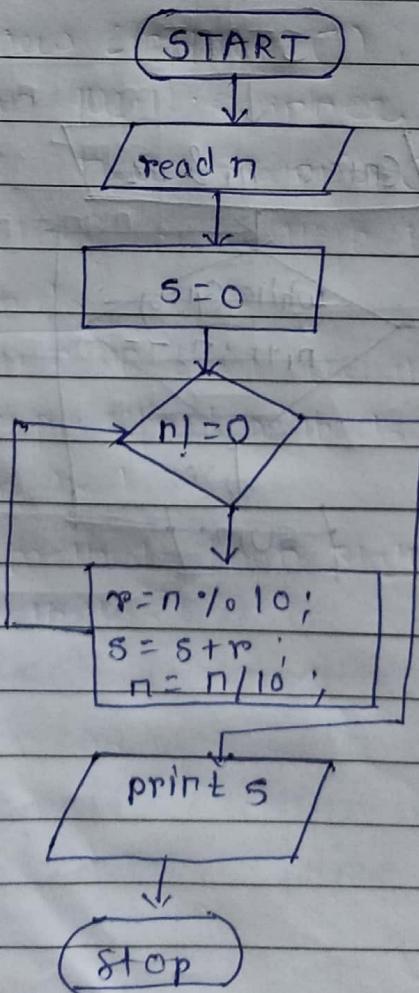
1. Start
2. Enter two number n_1 & n_2
3. while ($y \neq 0$)
4. ~~++~~ n_1 ++
5. ~~--~~ n_2 --
6. repeat step 4 & 5 until y becomes 0.
7. STOP.



Q10 sum of Digits of Number

Algorithm

1. Start
2. read n;
3. $s=0$
4. while ($n \neq 0$)
5. $r = n \% 10$
6. $s = s + r$
7. $n = n / 10$, goto 4 until condition false.
8. display s.;
9. Stop

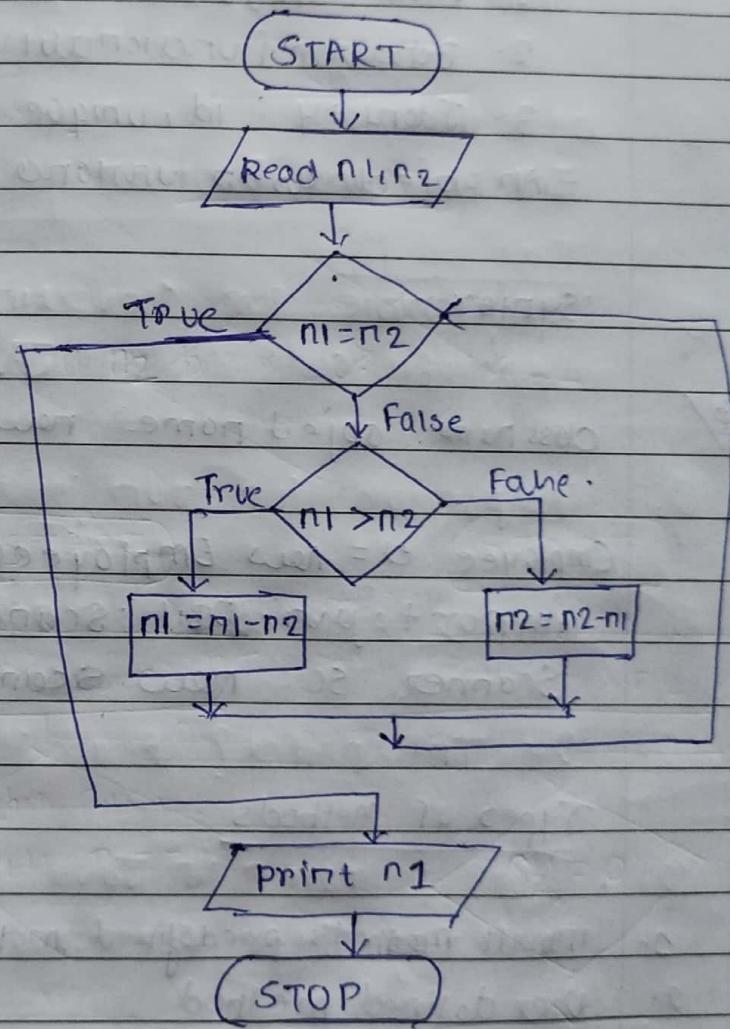


Q14 GCD of two Numbers.

Algorithm

steps

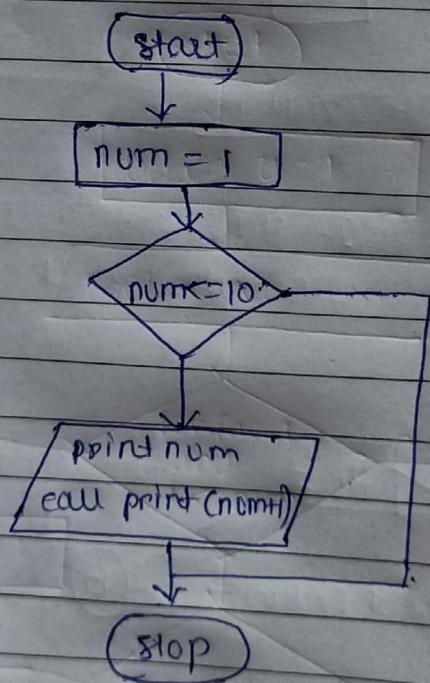
1. Read n_1, n_2
2. if ($n_1 = n_2$)
Then Go to step 4
3. if ($n_1 > n_2$)
 $n_1 \leftarrow n_1 - n_2$
Go to step 2.
- Else
 $n_2 \leftarrow n_2 - n_1$
Go to step 2.
4. Print n_1
5. Exit



Q7. Print 1. to 10 without loop

Algorithm

1. Start
2. call print method
3. Define a meth print
 - a. check num <= 10 if true print and recursively call print method with num+1 else exit
4. Stop

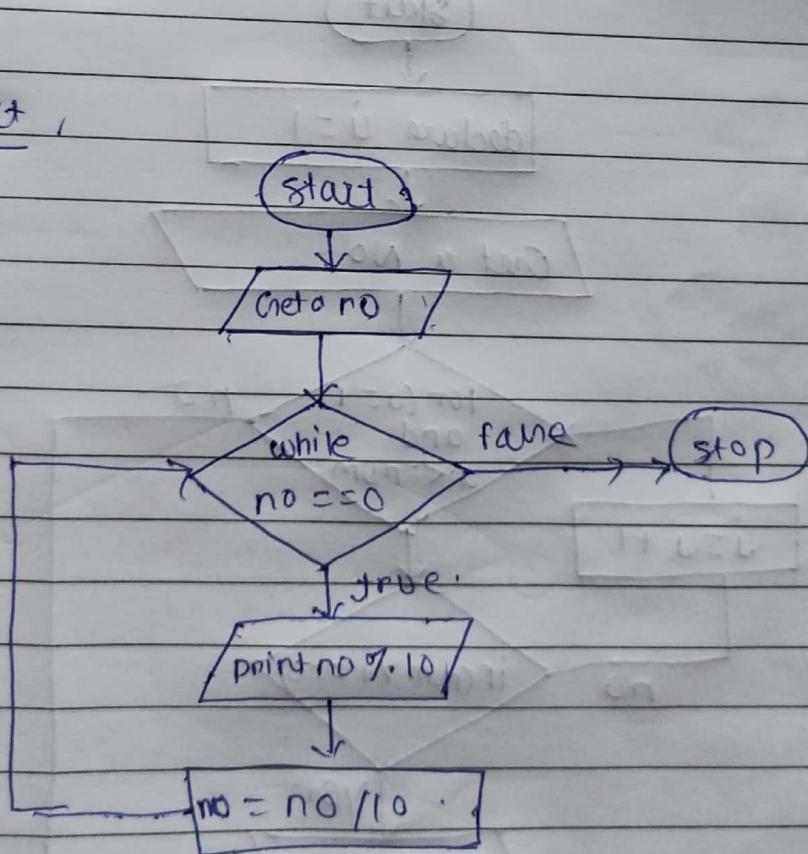


Q.8 To print digit of given number

Algorithm:

- 1) Start
- 2) Get a number
- 3) Print value of $No \% 10$
- 4) $No = No / 10$
- 5) Repeat step 3 to 4 until number is not equal to zero
- 6) Stop.

Flowchart,



Q.9. Factor of a given number

Algorithm

- 1) Start
- 2) Get a No
- 3) Declare $i=1$
- 4) check $No \div i = 0$ if true print i and increment the value of i
- 5) Repeat step 4 until $i \leq No$
- 6) Stop

