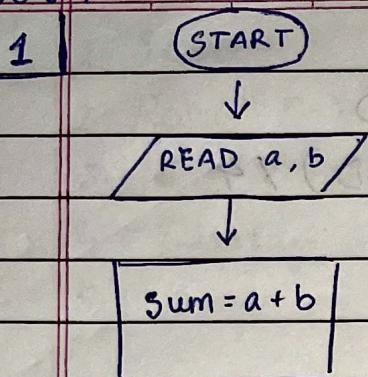


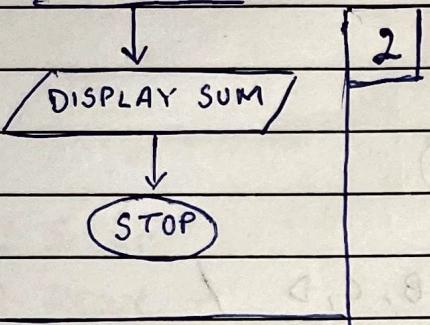
Gaurit Shah  
F-24  
U21CS089

# FCP - Assignment 1 - Algorithms

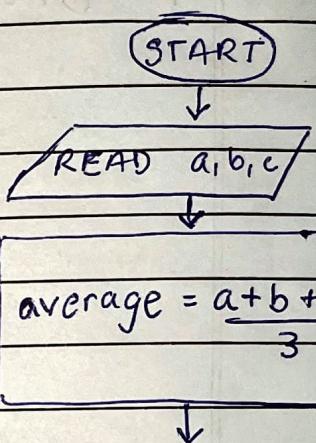
DATE	1/1/2023	FILE NO.	101
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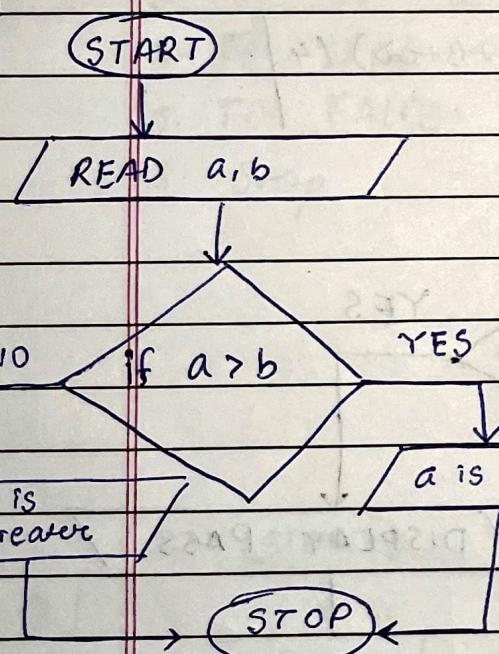
1. Start
2. Read a,b
3.  $\text{Sum} = a+b$
4. Display sum
5. Stop



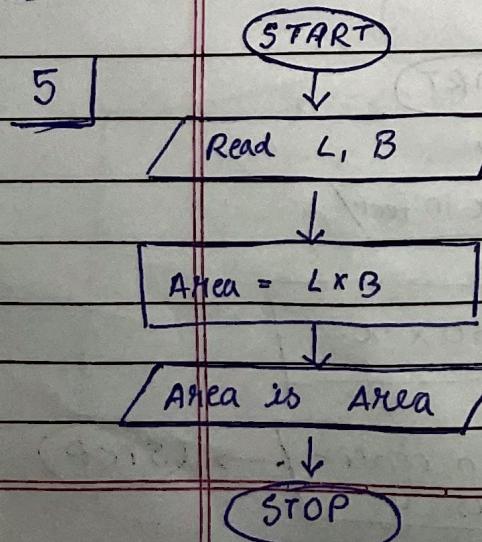
1. Start
2. Read a,b,c
3.  $\text{average} = \frac{a+b+c}{3}$



4. Display average
5. Stop

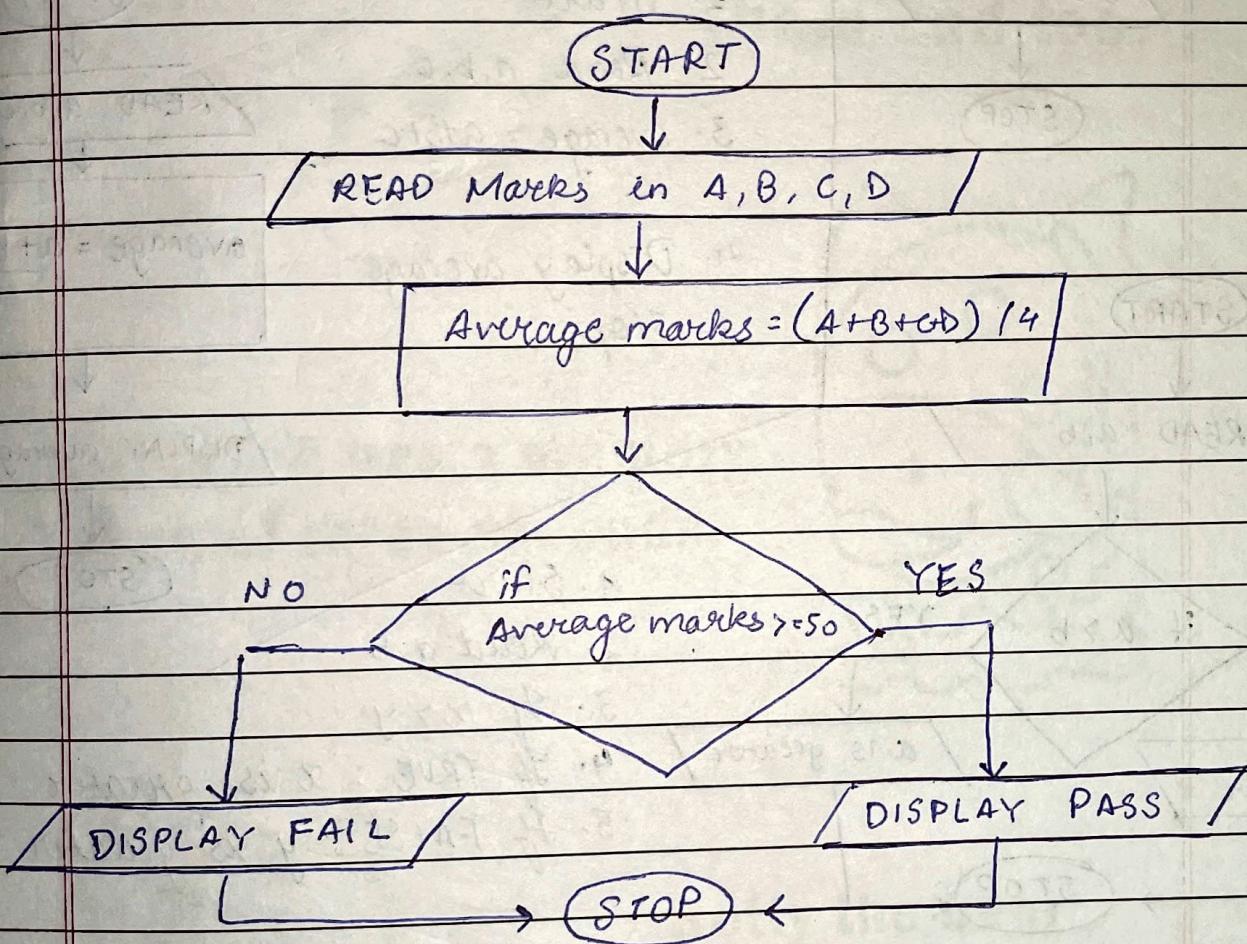


1. Start
2. Read a,b
3. If  $x > y$
4. If TRUE : x is greater
5. If FALSE : y is greater

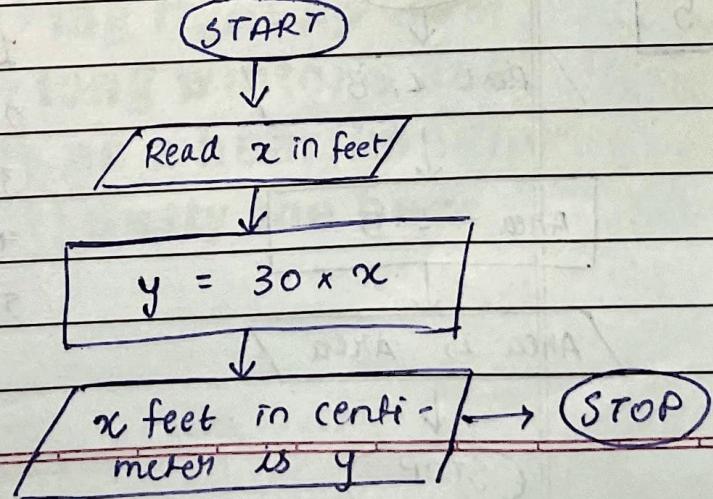


1. Start
2. Read L,B
3.  $\text{Area} = L \times B$
4. Area of rectangle is Area
5. Stop

- 4) 1. Start  
 2. Read marks in A, B, C, D  
 3. Average marks =  $(A+B+C+D)/4$   
 4. If Average marks  $\geq 50$   
 5. For True : Display PASS  
 6. For False : Display FAIL  
 7. STOP

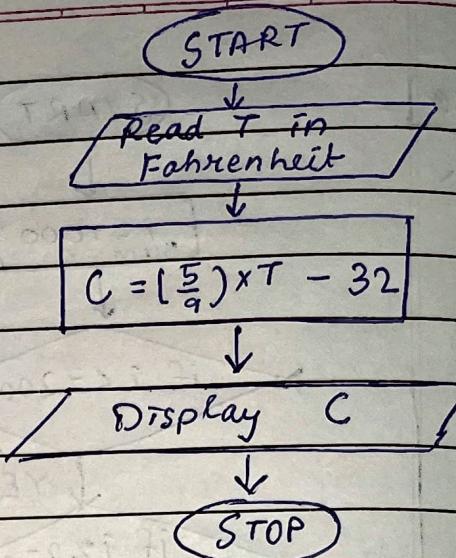


- 5) 1. Start  
 2. Read x  
 3.  $y = 30 \times x$   
 4. x feet in centimeter  
 is y  
 5. Stop



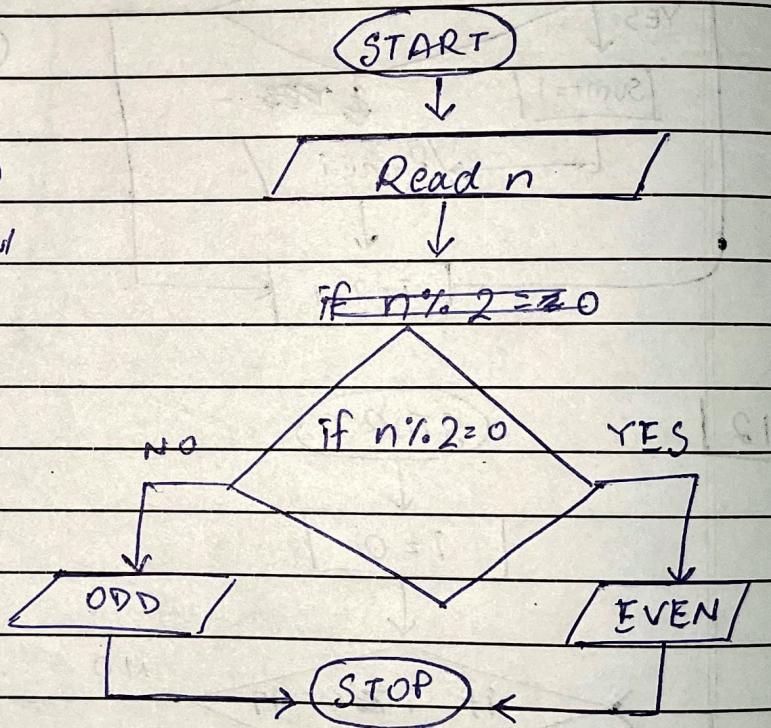
7

1. Start
2. Read  $T$  in Fahrenheit
3.  $C = \left(\frac{5}{9}\right)T - 32$
4. Display  $C$
5. Stop

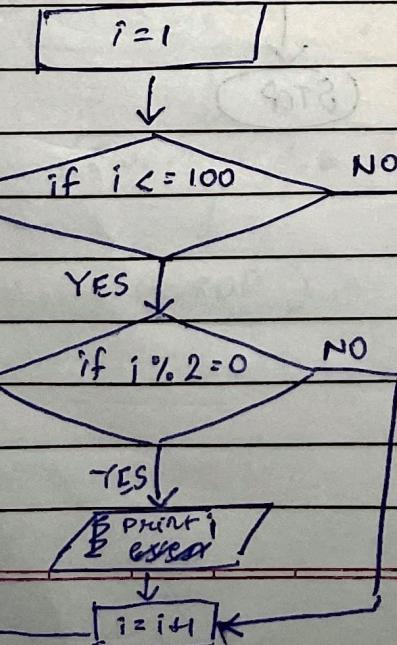


8

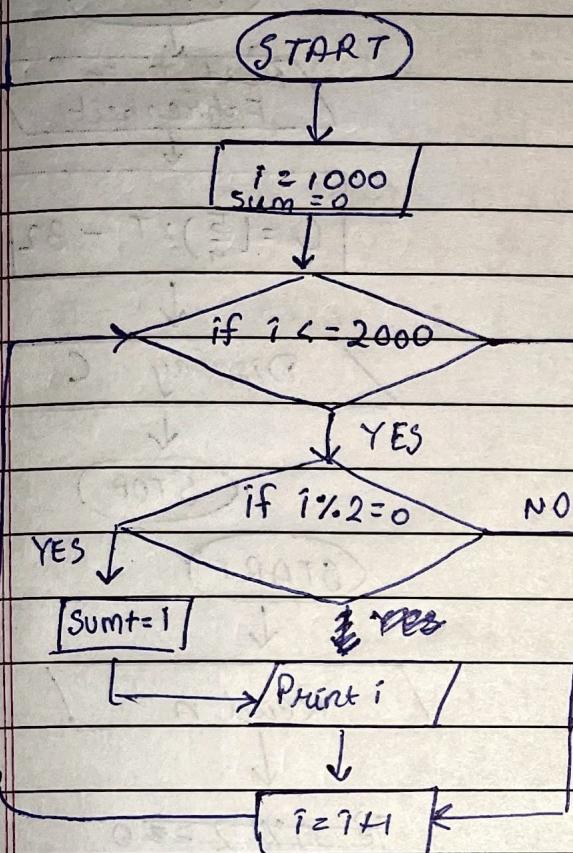
1. Start
2. Read  $n$
3. If  $n \% 2 == 0$
4. For TRUE : EVEN
5. For FALSE : ODD
6. Stop



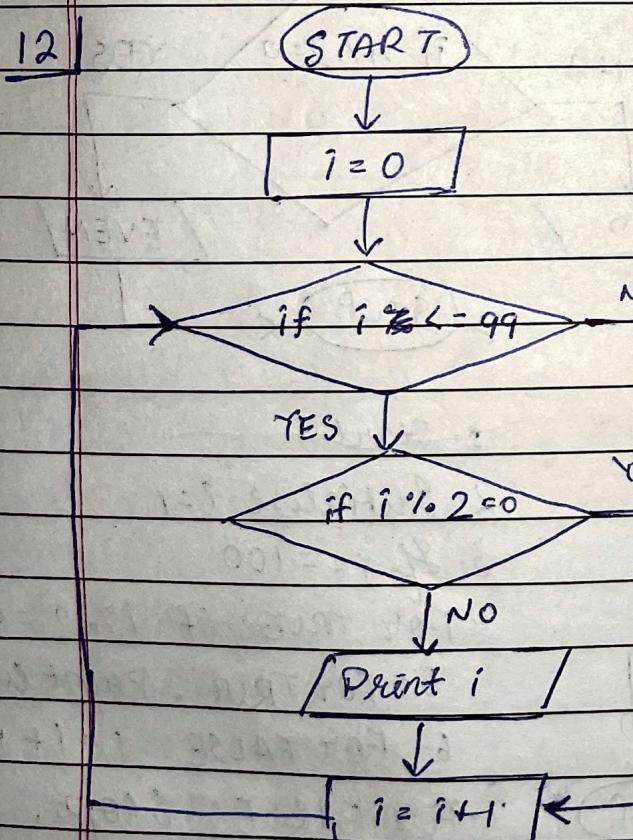
9



1. Start
2. Initialise  $i=1$
3. If  $i <= 100$
4. For TRUE : if  $i \% 2 == 0$
5. For TRUE : Print even
6. For FALSE :  $i = i + 1$
7. For FALSE : Stop.

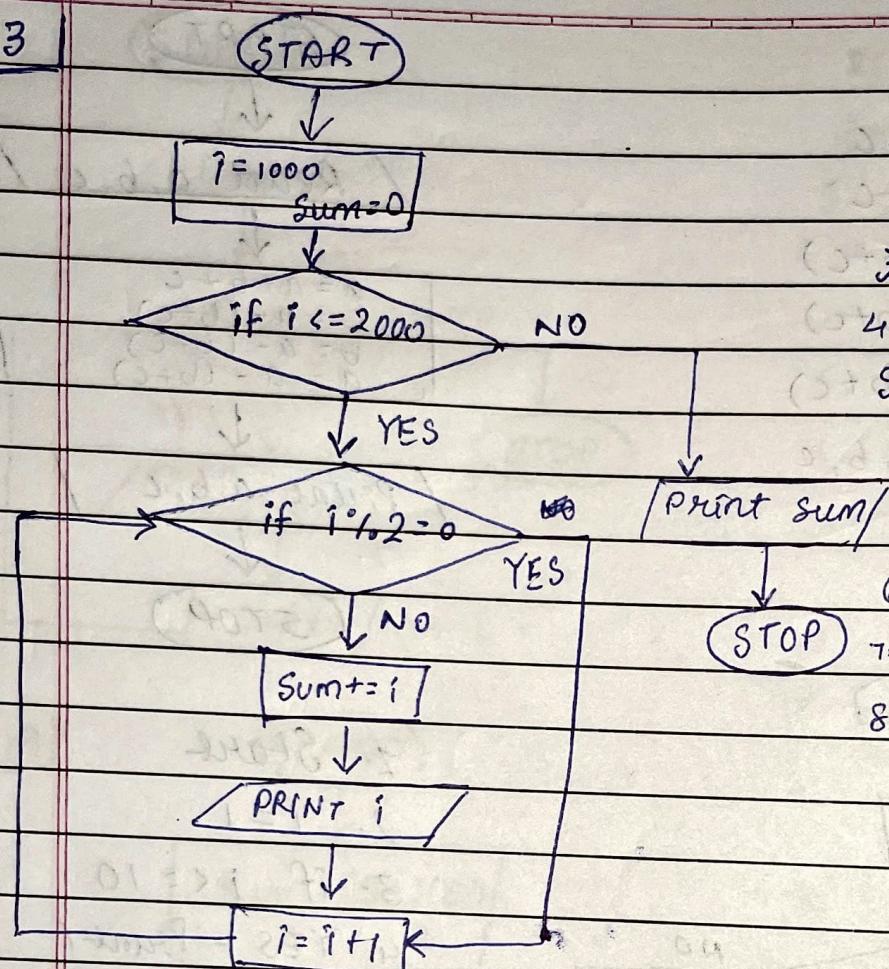


1. Start  
 2.  $i = 1000$   
 $sum = 0$   
 3. if  $i \leq 2000$   
 YES - if  $i \% 2 = 0$   
 YES -  $sum += i$   
 Print  $i$   
 NO -  $i = i + 1$   
 4. NO - STOP



1. Start  
 2.  $i = 0$   
 3. if  $i \leq 99$   
 YES - if  $i \% 2 = 0$   
 NO - Print  $i$   
 YES -  $i = i + 1$   
 4. NO - STOP

13



1. Start

2.  $i=1000$

$sum=0$

3. if  $i \leq 2000$

4. TRUE - if  $i \% 2 = 0$

5. FALSE -  $sum \neq i$

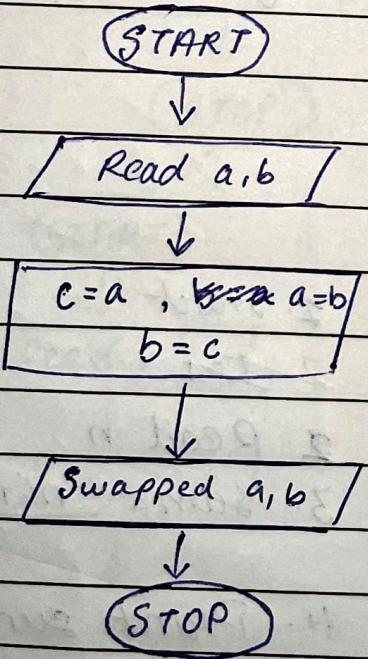
Print  $i$   
 $i = i + 1$

6. TRUE  $i = i + 1$

7. FALSE - Print sum

8. STOP

14.



1. Start

2. Read  $a, b$

3.  $c=a$

$a=b$

$b=c$

4. Display  $a, b$

5. Stop.

15. 1. Start

2. Read a, b, c

$$3. \quad a = a + b + c$$

$$c = a - (b + c)$$

$$b = a - (b + c)$$

$$a = a - (b + c)$$

4. Print a, b, c

START

Read a, b, c

$$a = a + b + c$$

$$c = a - (b + c)$$

$$b = a - (b + c)$$

$$a = a - (b + c)$$

Print a, b, c

STOP

16. START



i = 1



If i <= 10



YES



Print i



i = i + 1

NO

STOP

1. Start

2.  $i = 1$

3. If  $i \leq 10$

4. YES - Print i

-  $i = i + 1$

5. NO - STOP

17.

START



~~i = 1~~



Read n



$$\text{Sum} = \frac{n(n+1)}{2}$$



Print sum



STOP

1. Start

2.  $i = 1$

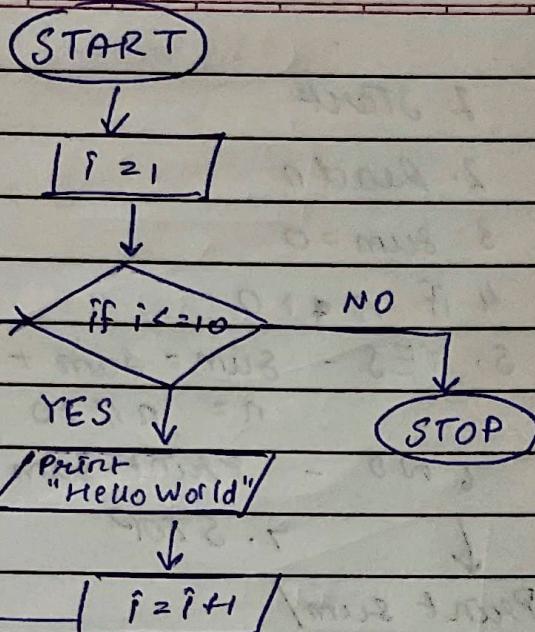
3. Read n

$$3. \quad \text{Sum} = \frac{n(n+1)}{2}$$

4. Print sum

5. Stop.

18)



1. Start

2.  $i = 1$

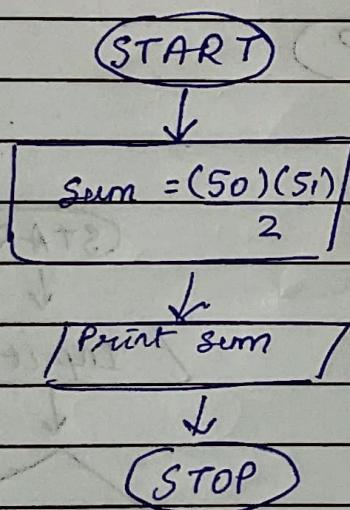
3. if  $i \leq 10$

4. TRUE - Print "Hello World"

5.  $i = i + 1$

6. FALSE - STOP

19)



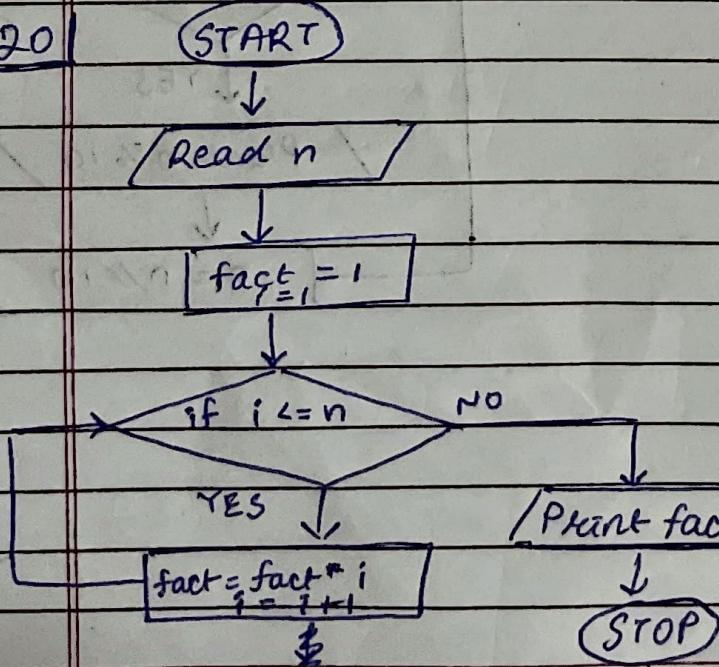
1. Start

2.  $sum = (50)(51)/2$

3. Print "Sum of 1st 50 numbers is" sum

4. Stop

20)



1. Start

2. Read n

3. fact = 1  
 $i = 1$

3. if  $i \leq n$

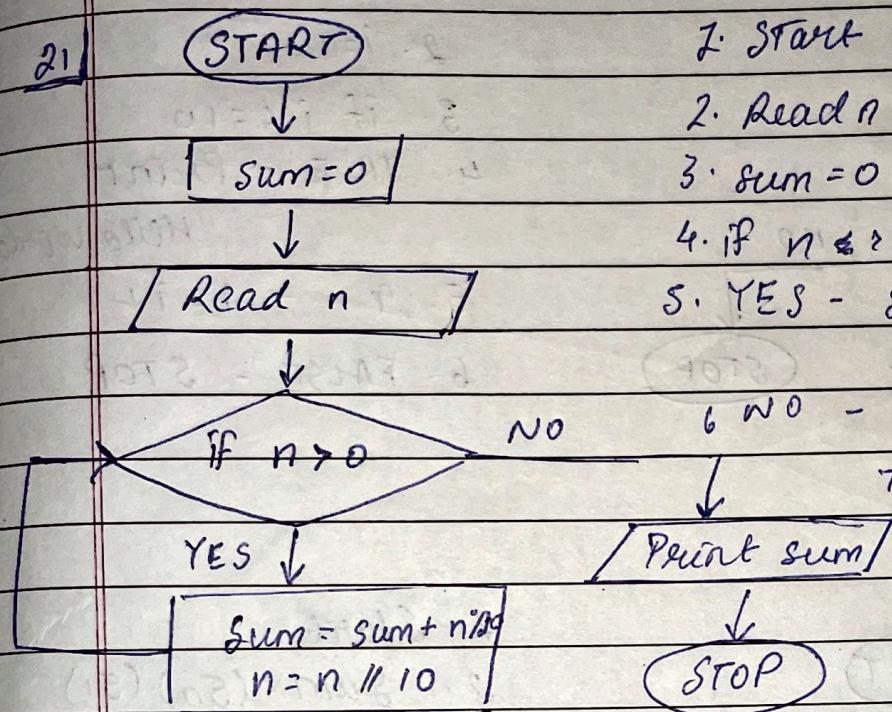
YES -  $fact = fact * i$

$i = i + 1$

4. NO - Print fact

5. Stop

21



J. Start

## 2. Read n

$$3 \cdot \text{sum} = 0$$

4. If  $n \geq 0$

5. YES -  $\text{sum} = \text{sum} + n \% 10$

$$n = n/10$$

6 WO - Print sum

## 7. STOP

STOP

22 | z. Start

## 2. Read n

3: If  $n > 0$

NO - STOP

YES - Print n% 10

$$n = n / 10$$

### Step 3

