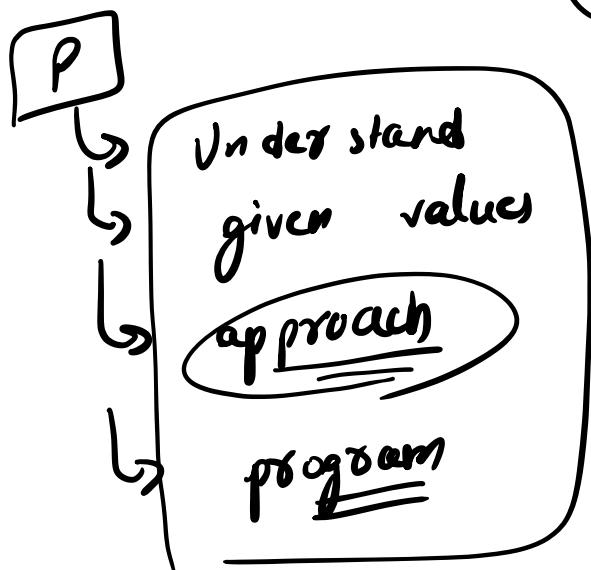
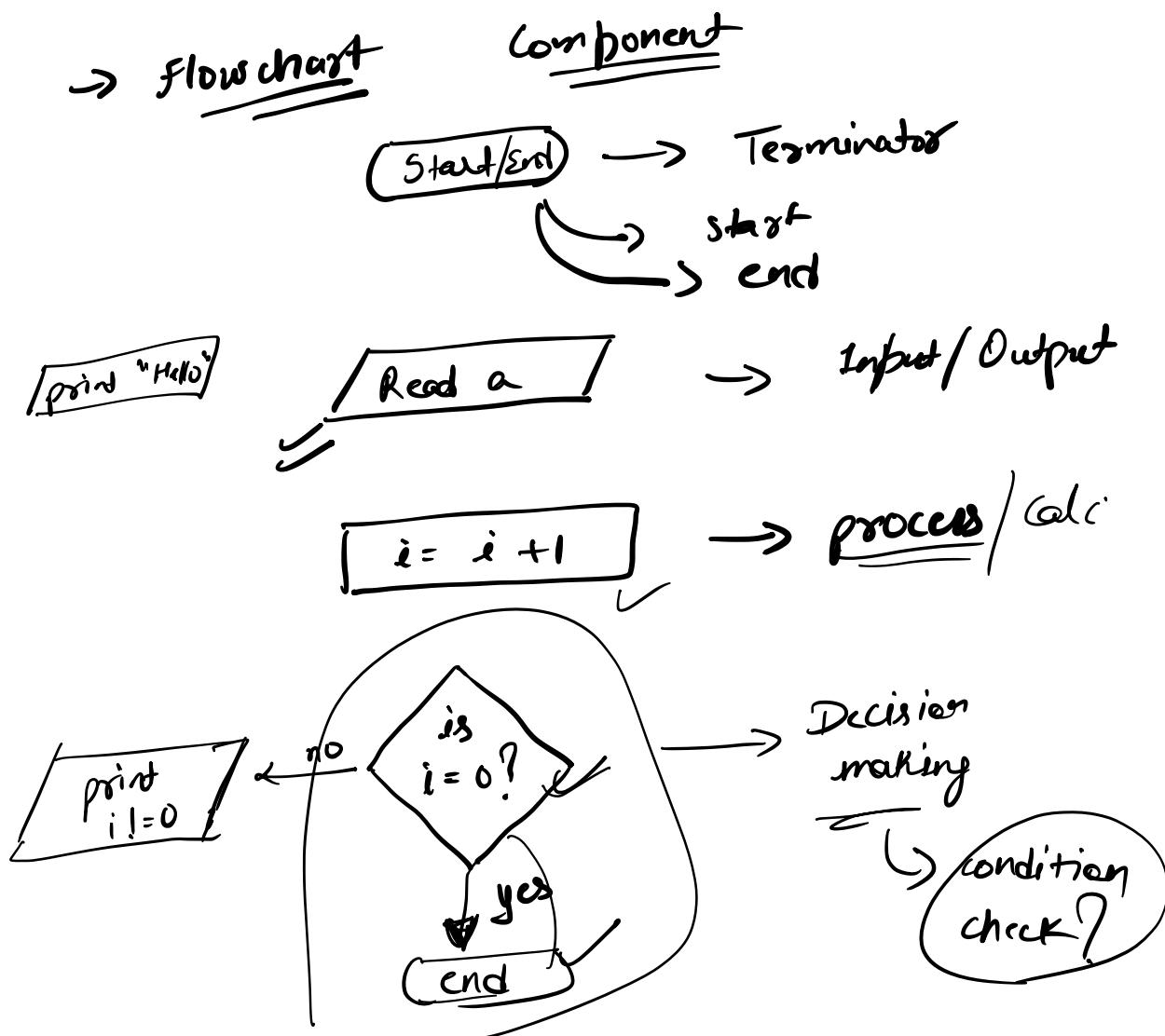
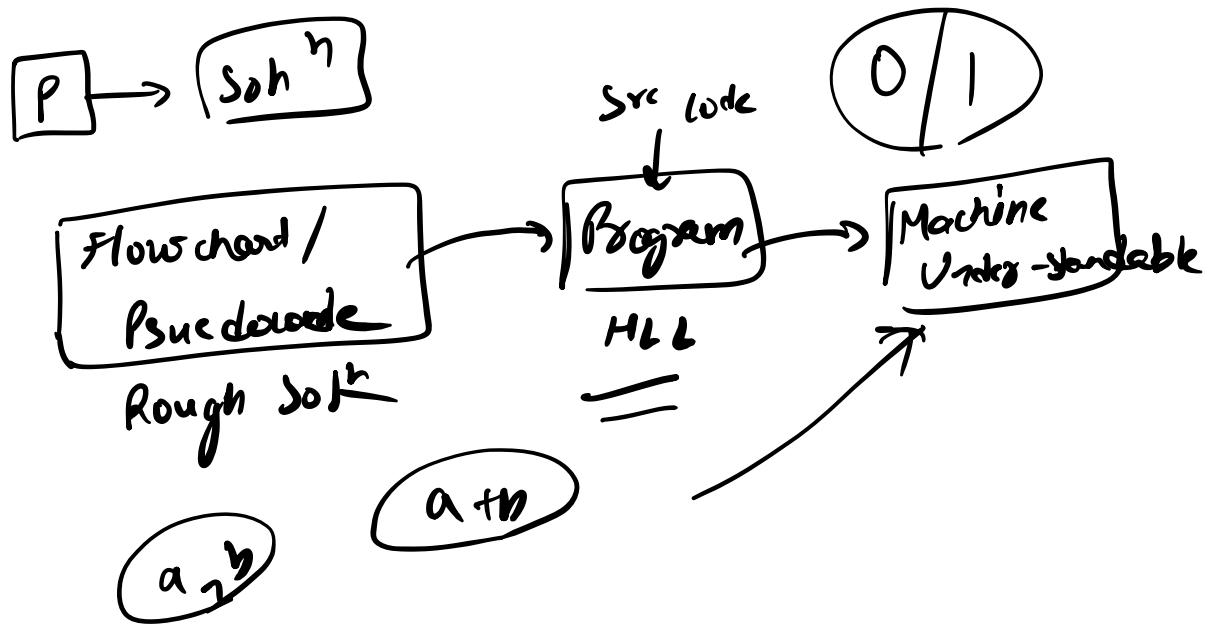


DSA Busted

→ getting started

Problem
Solving

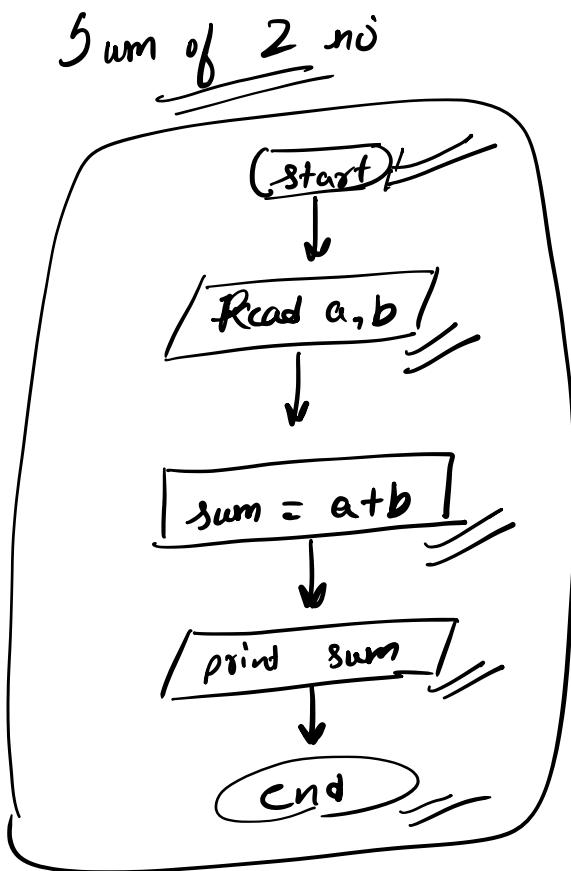






(A)

variables



5 \xrightarrow{a} 10 \xrightarrow{b}

sum \rightarrow 15

5	10
a	b

$$\text{sum} = a + b$$

$$\text{sum} = 5 + 10$$

$$\boxed{\text{sum} = 15}$$

15
Sum

Pseudocode generic
→ way of representing logic

→ Sum of 2 no'

→ read 2 no , a & b
→ sum = a + b
→ print sum

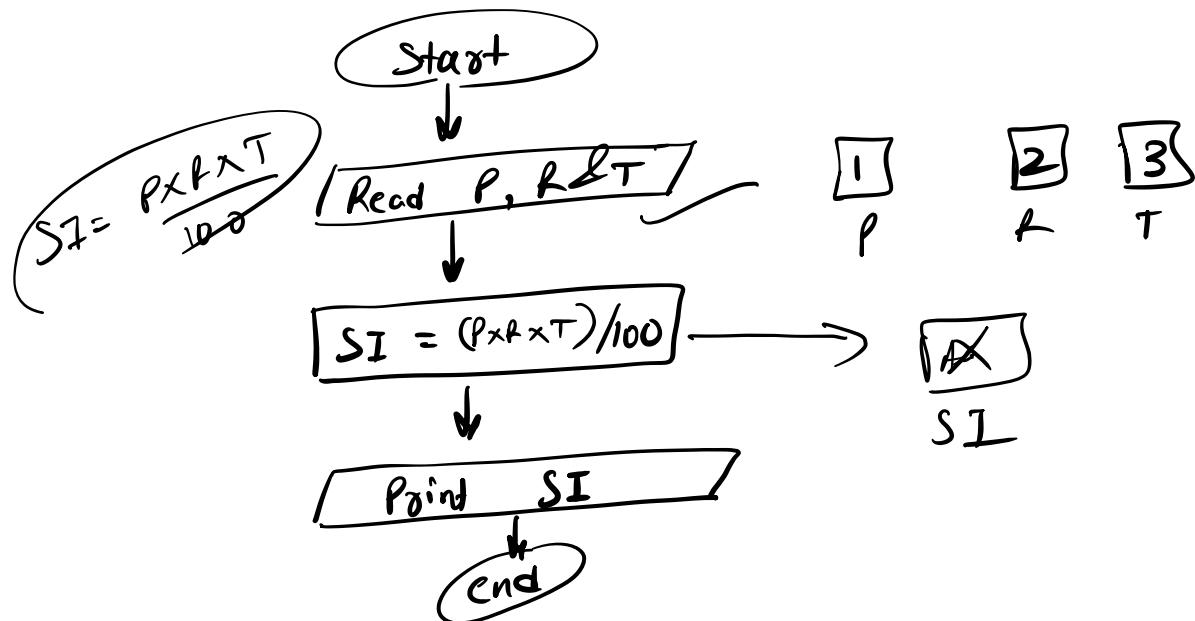
✓

→ read a
→ read b
→ Let sum = 0
→ sum = a + b
→ print sum

→

5.1

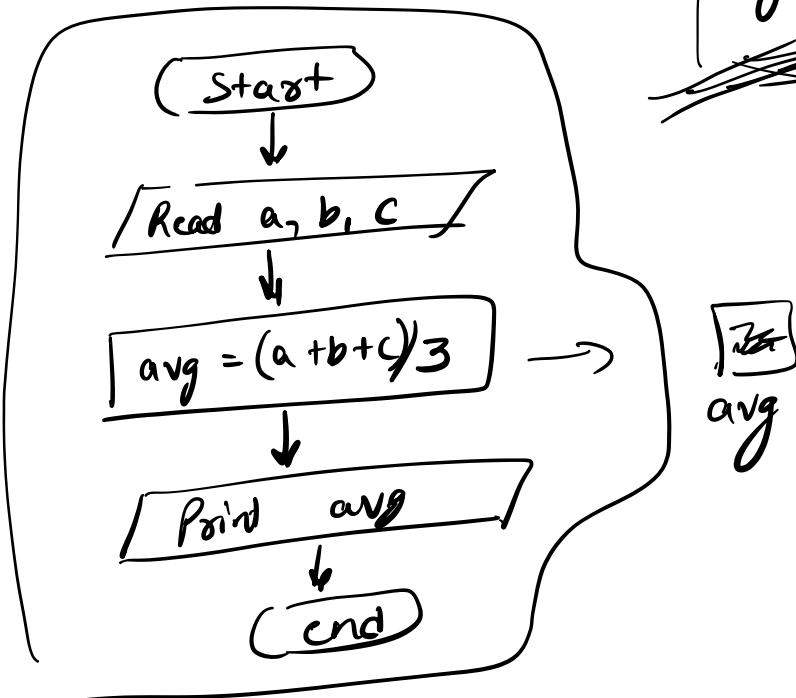
$$S.I = \frac{P \times R \times T}{100}$$

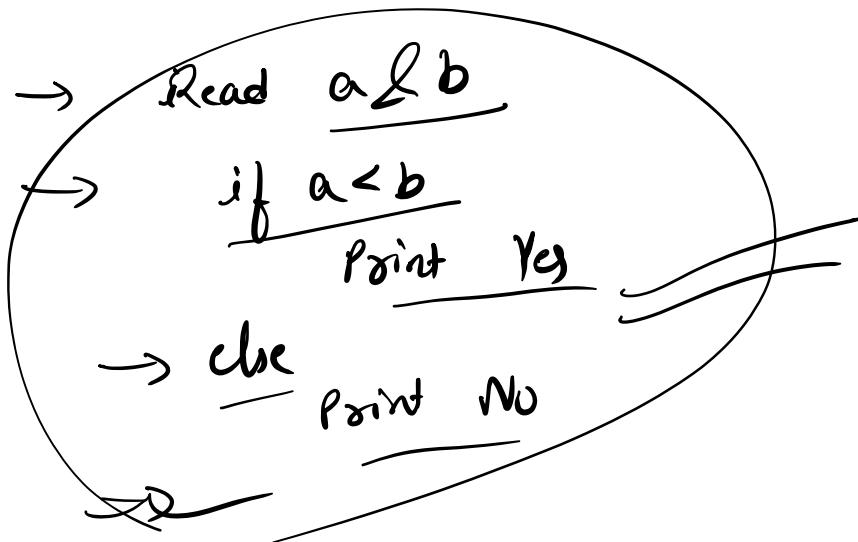
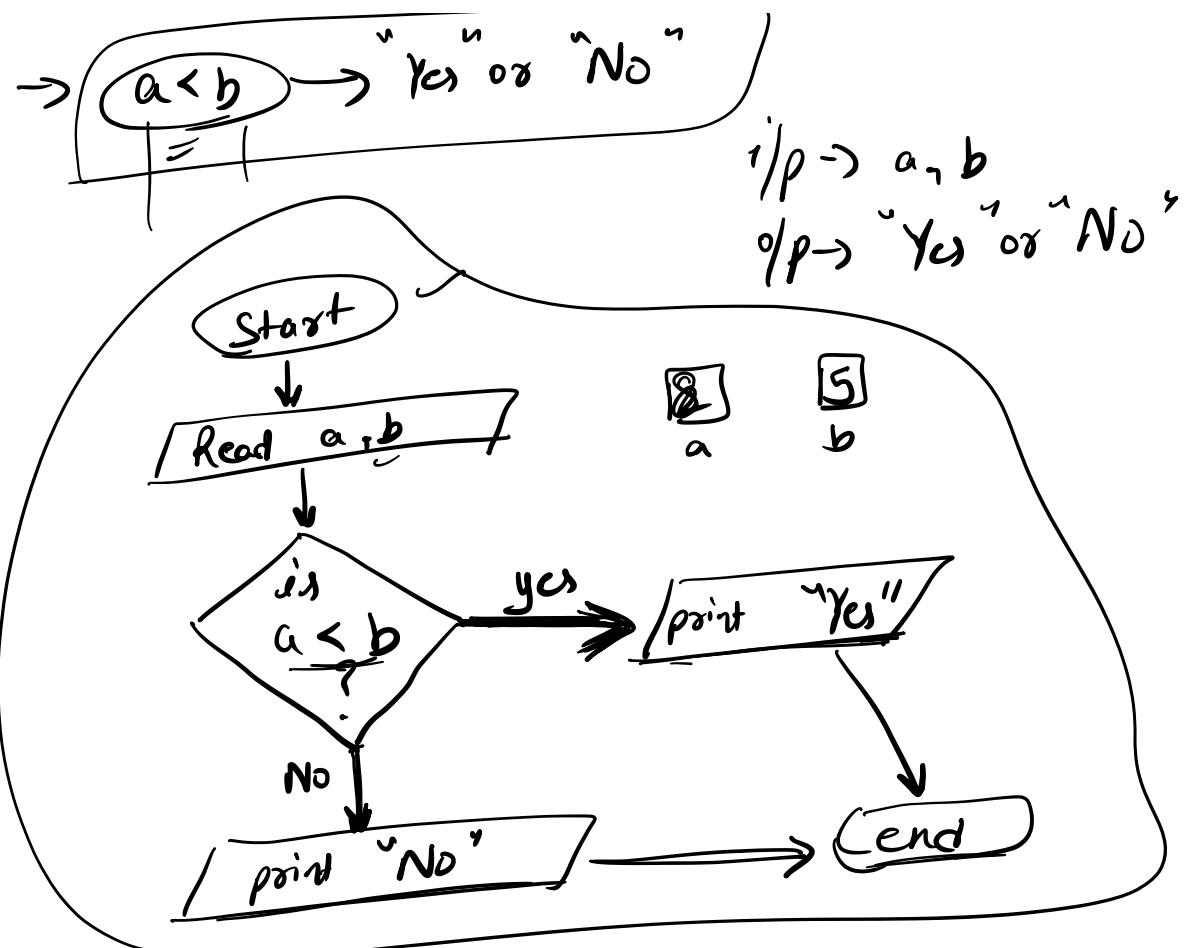


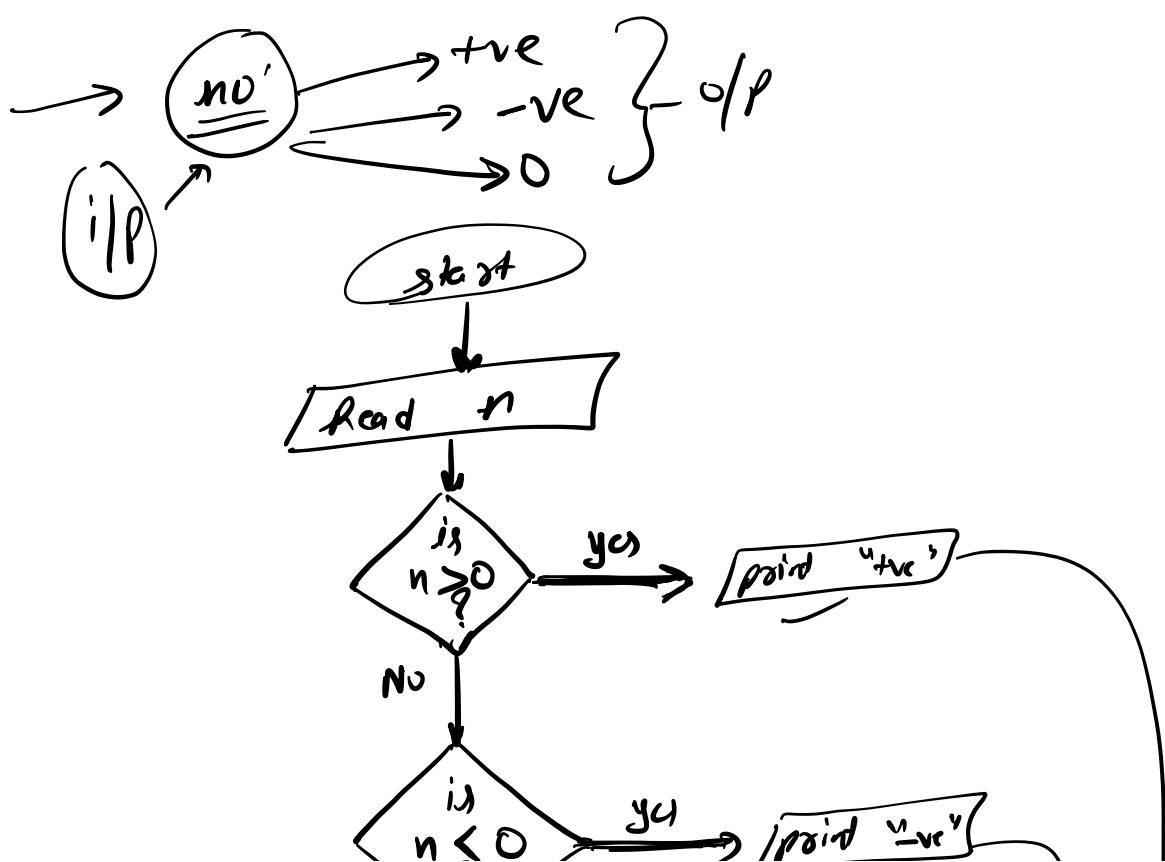
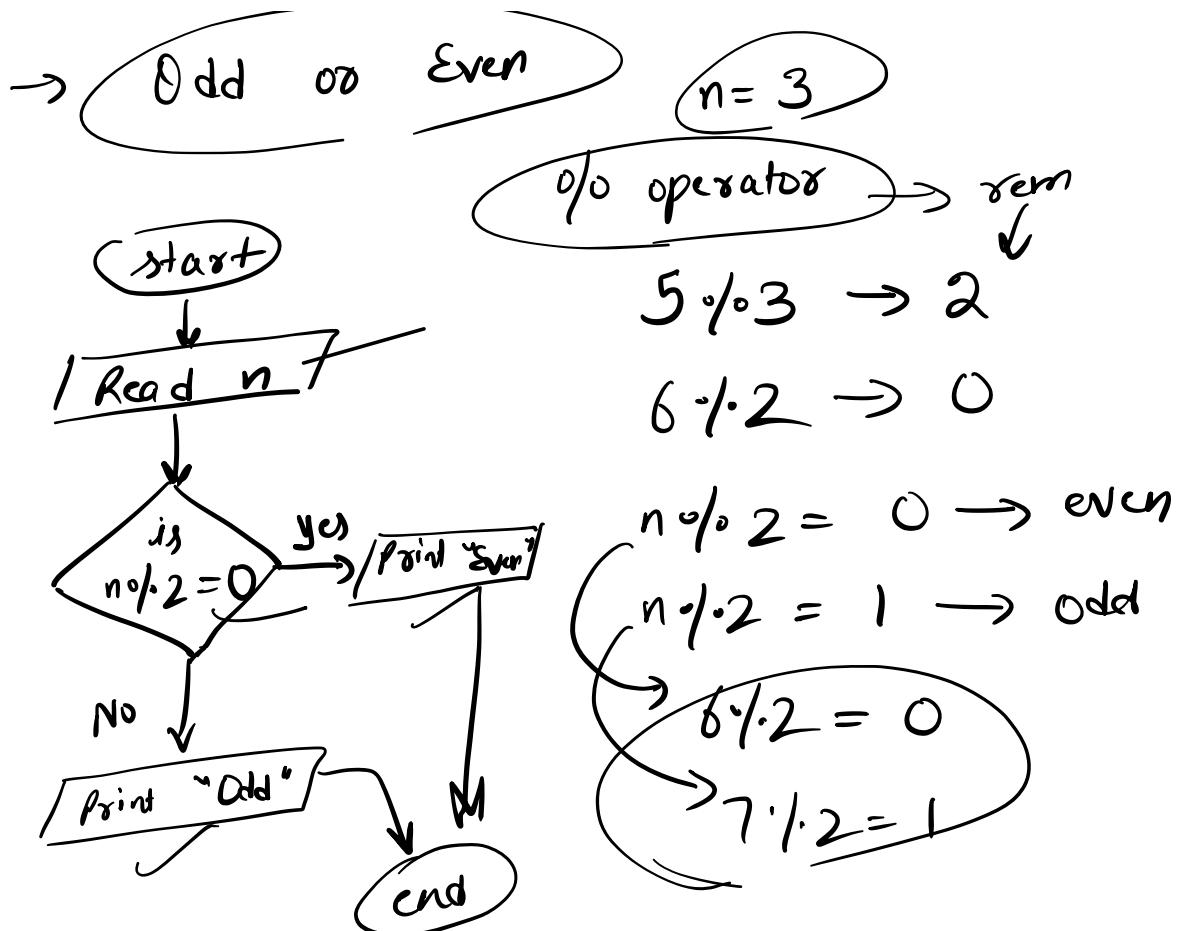
Avg of 3 no'

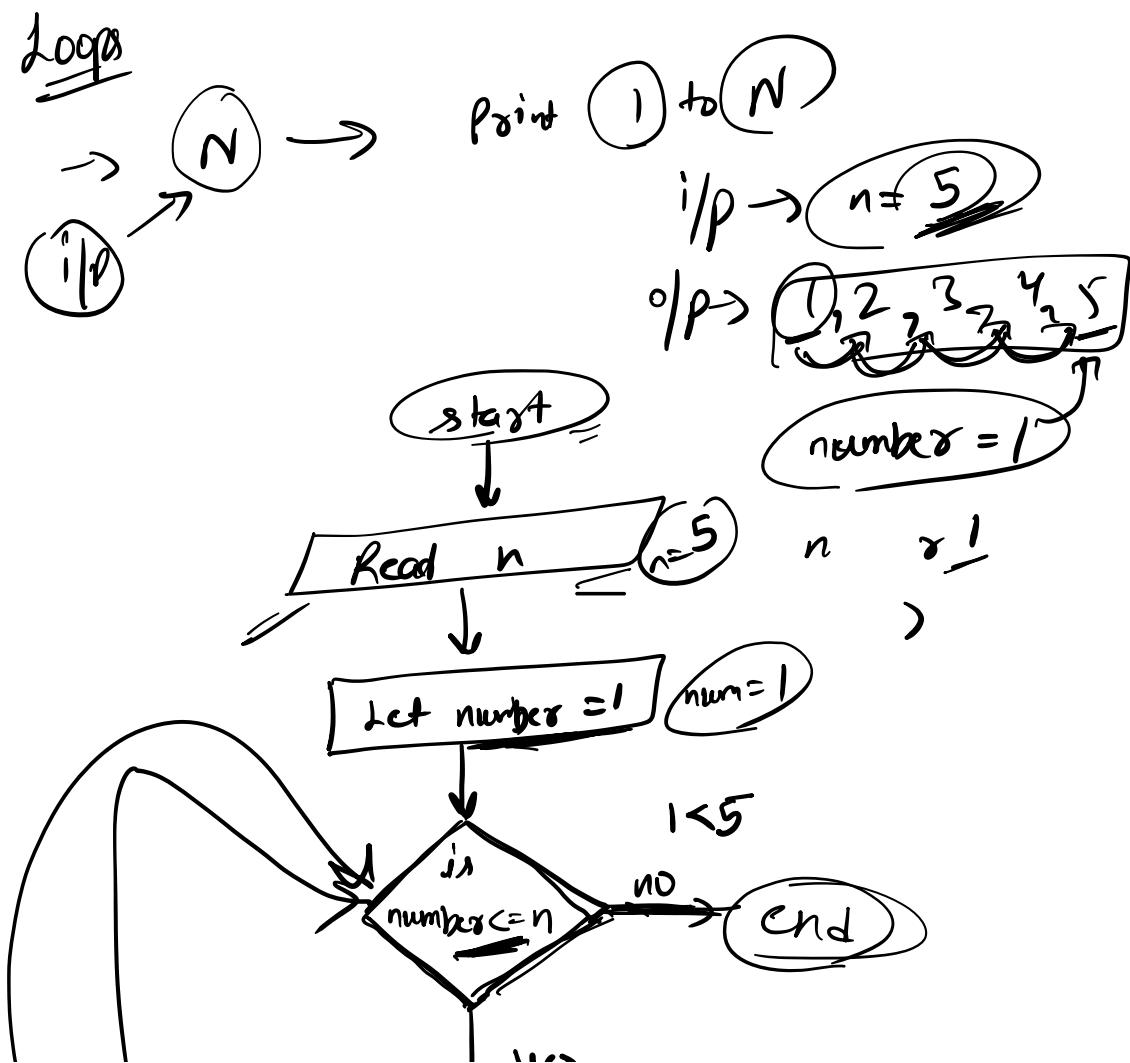
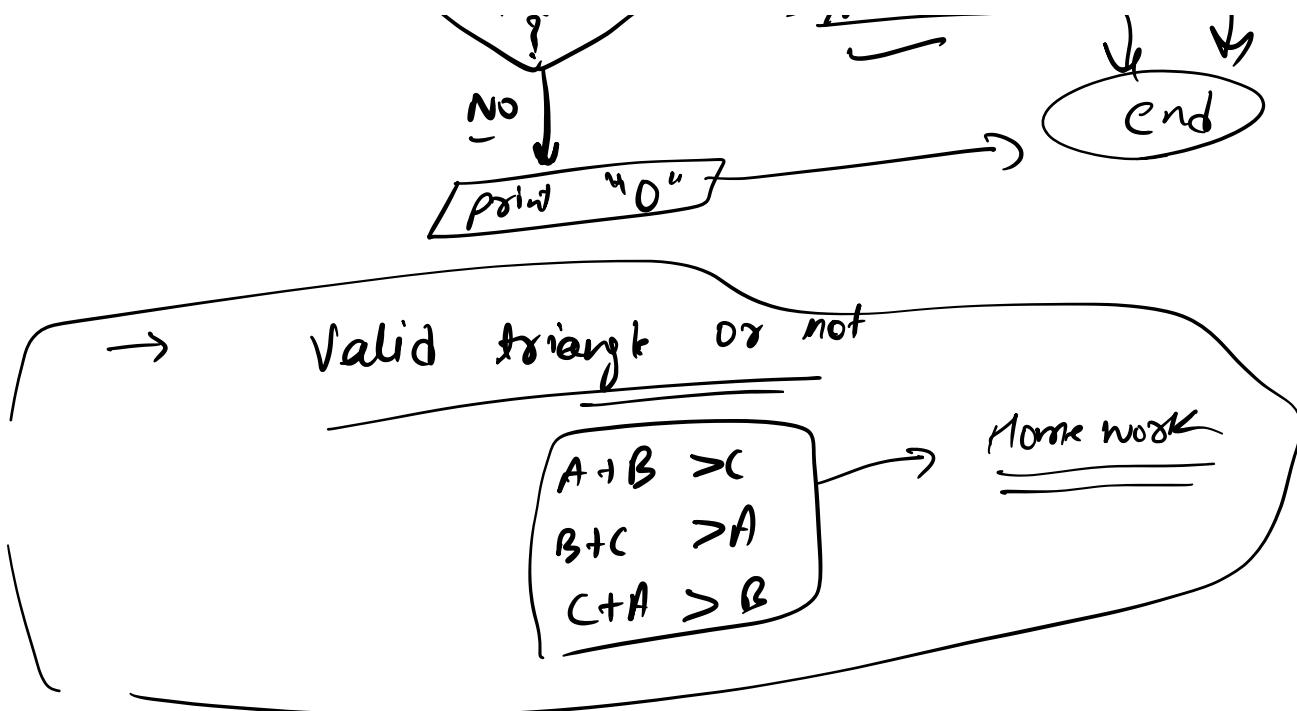
~~a, b, c~~

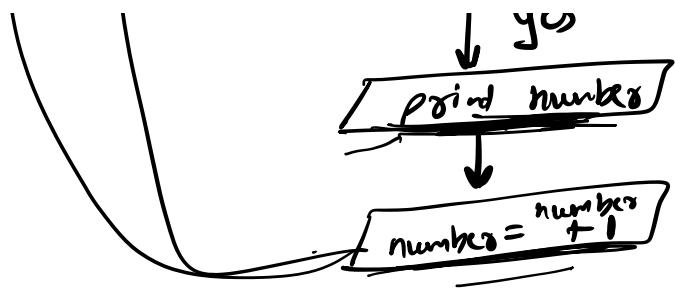
$$\text{avg} = \frac{a+b+c}{3}$$





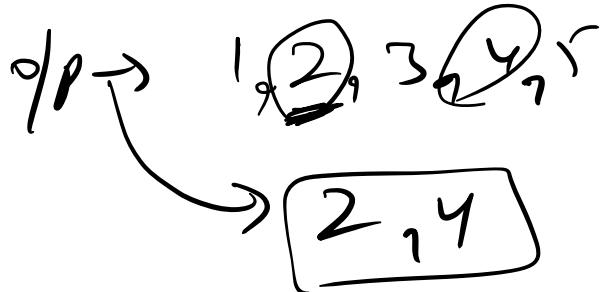




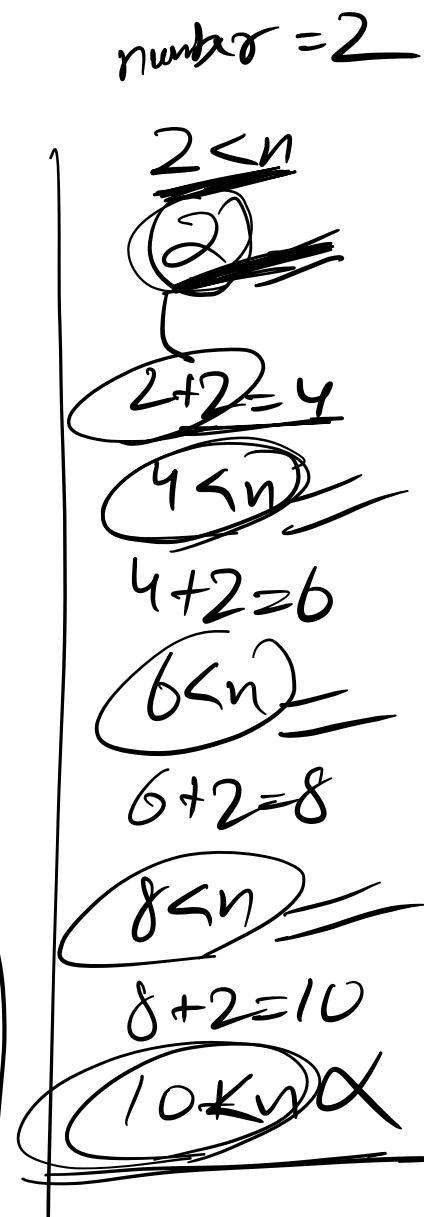
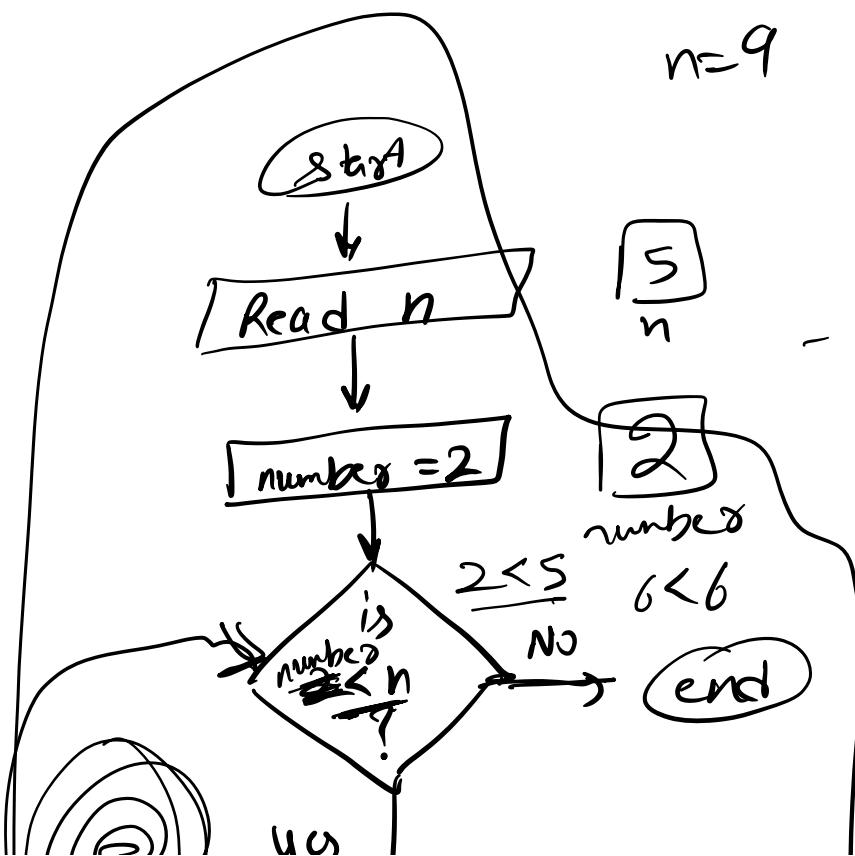


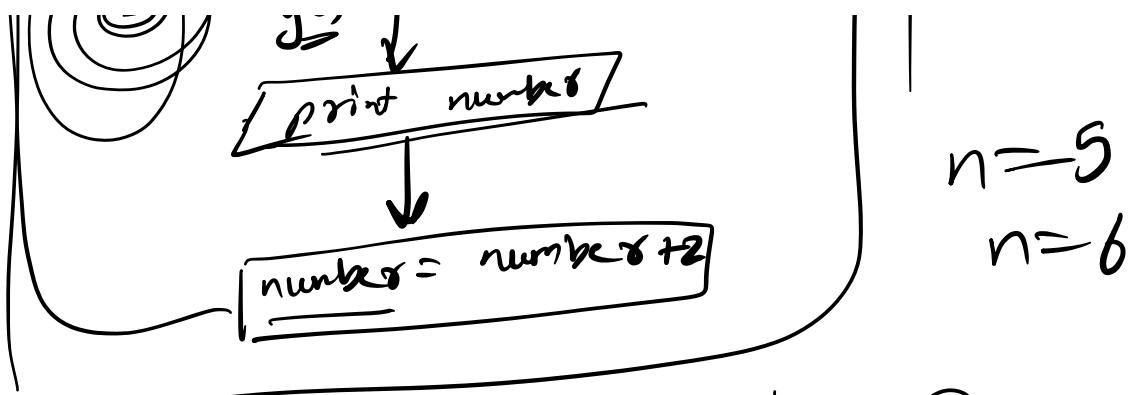
→ 1 to n each no point

$$i/p \rightarrow n \rightarrow 5$$

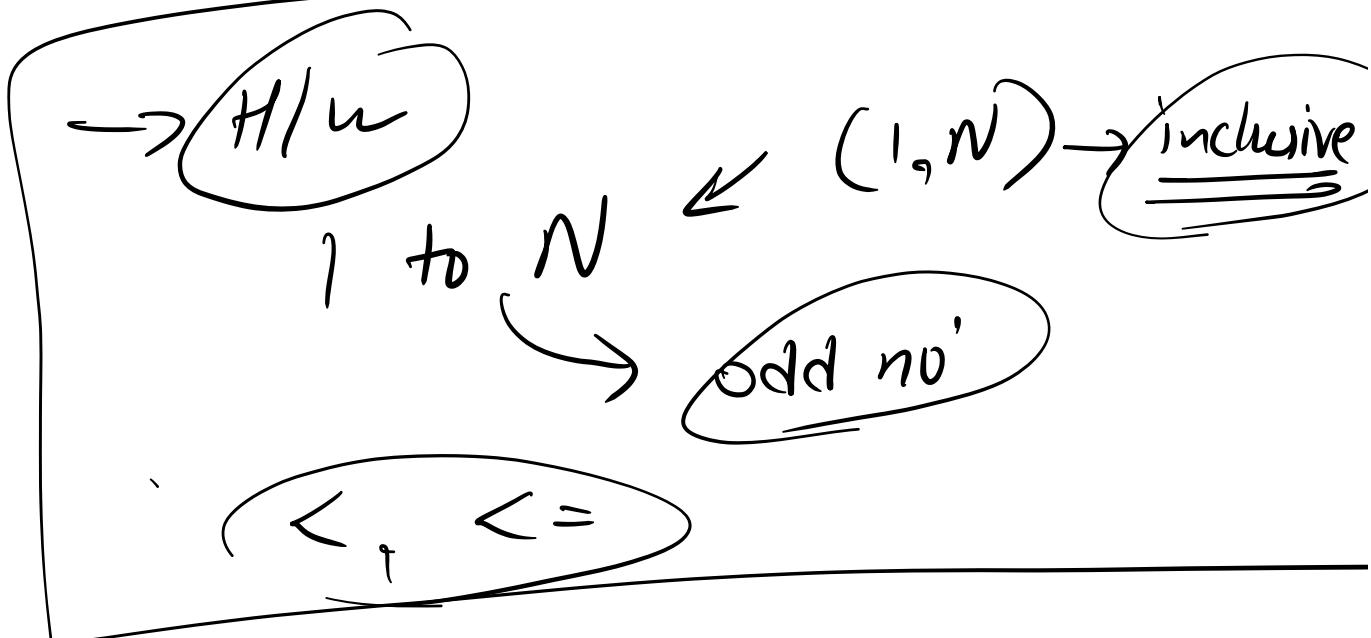


$$n=9$$

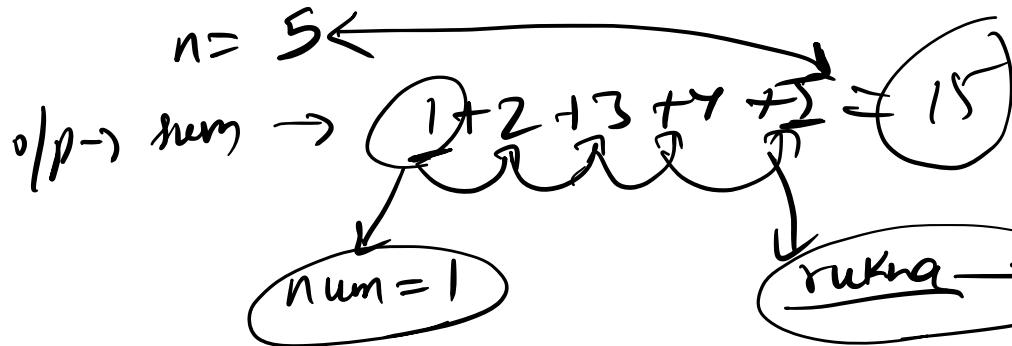




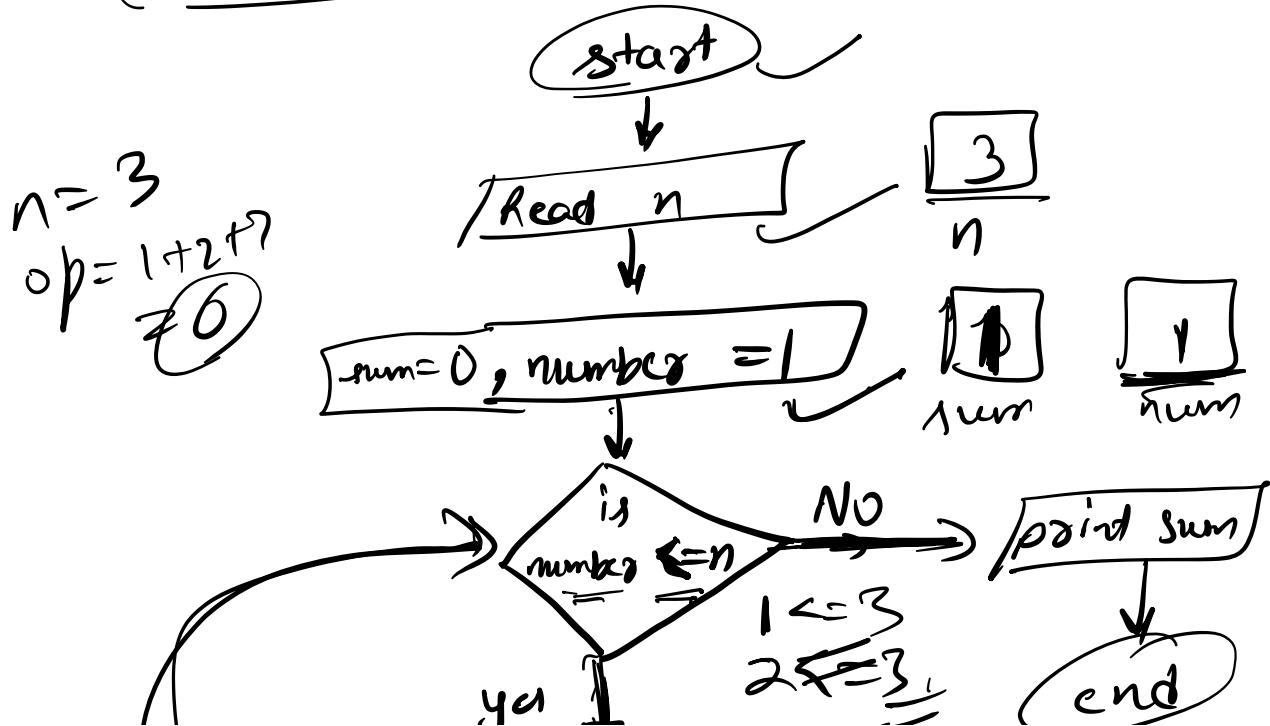
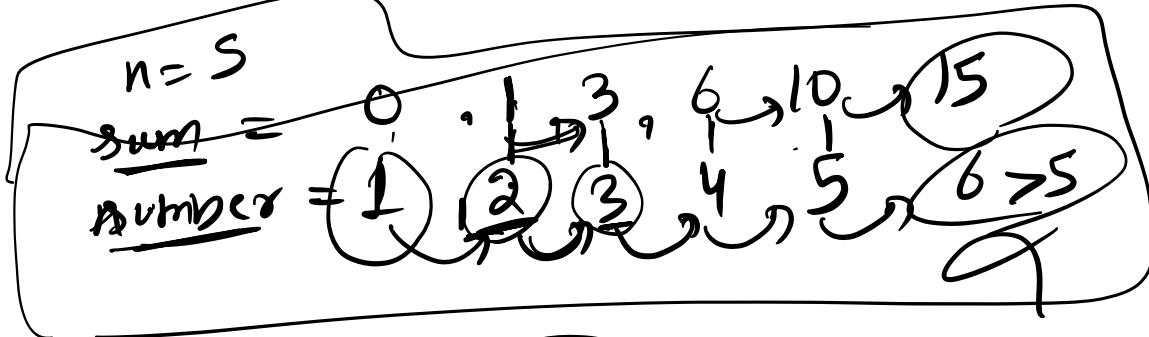
$$0/\emptyset \rightarrow 2$$

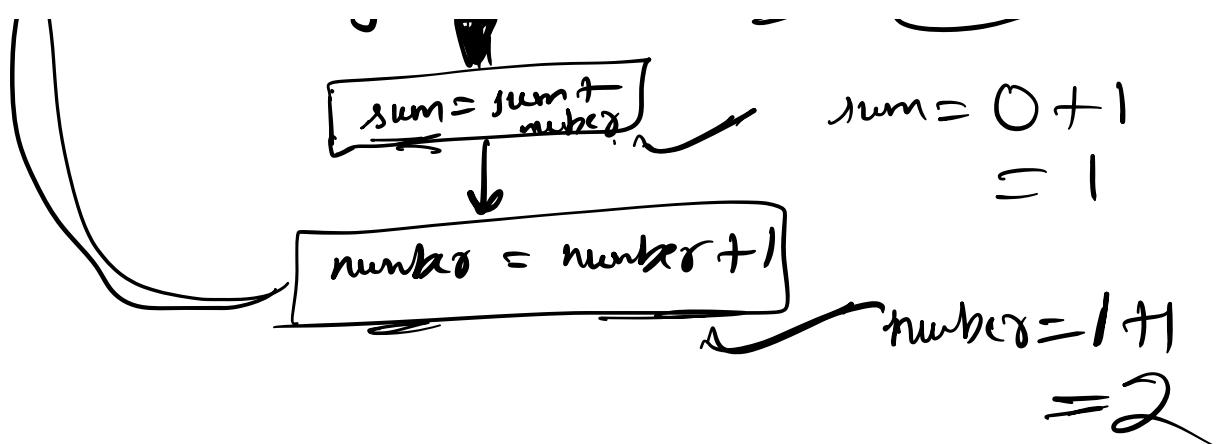


→ find sum $(1 \text{ to } \underline{\underline{N}})$ (inclusive)



$$\begin{array}{l} n = 5 \\ \text{number} = 1 \\ \text{sum} = 0 \end{array} \quad \begin{array}{l} \text{sum} = 0 + 1 = 1 \\ \text{number} = 2 \end{array} \quad \begin{array}{l} \text{sum} = 1 + 2 \\ \text{number} = 3 \end{array}$$





→ Homework

find factorial of n

Input $\rightarrow n$

$$5! = 5 \times 4 \times 3 \times 2 \times 1$$

or

$$= 1 \times 2 \times 3 \times 4 \times 5$$

$O/P = 120$

→ check prime or not

i/p $\rightarrow n$

o/p \rightarrow prime or not

ex:- $i/p \rightarrow 7$
prime or not

prime $\rightarrow 2, 3, 5, 7,$
 $11, 13, 17$



$n \rightarrow f \text{ or } N$

$1 \dots n$

table me nhi aga rabiye

Rem = 0 \times

$n \rightarrow \text{prime}$

$2 \dots (n-1) \rightarrow 0! = 0$

$n = 5 \rightarrow \text{prime}$

2, 3, 4

$$\boxed{\begin{aligned} 5 \cdot 1 \cdot 2 &= 1 \\ 5 \cdot 1 \cdot 3 &= 2 \\ 5 \cdot 1 \cdot 4 &= 1 \end{aligned}} \quad 0 \times$$

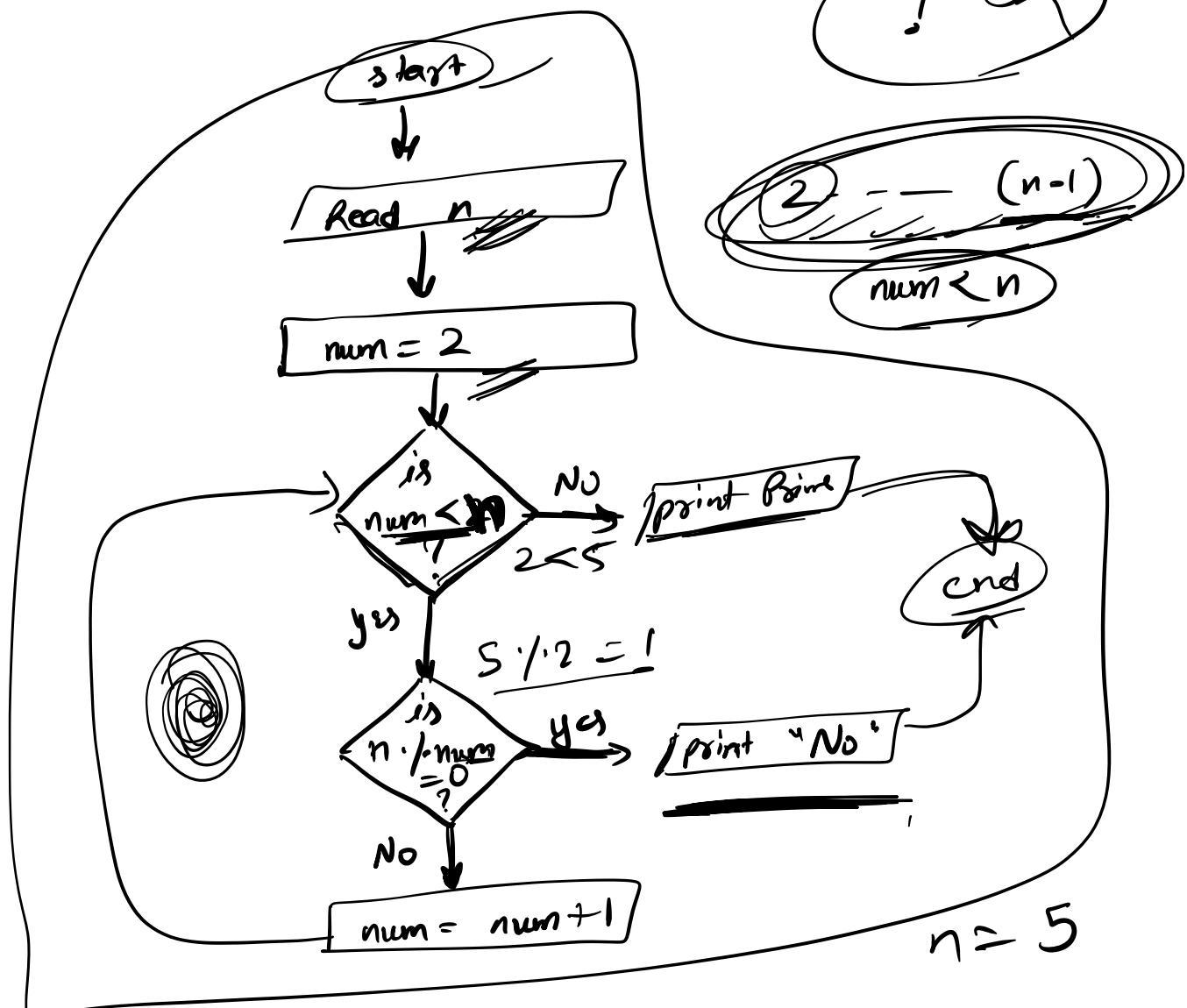
$$n \rightarrow (2 \dots (n-1))$$

divide

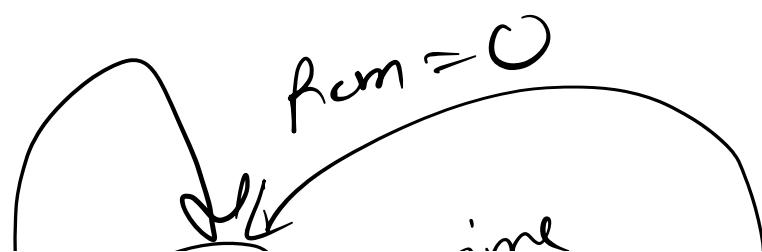
from

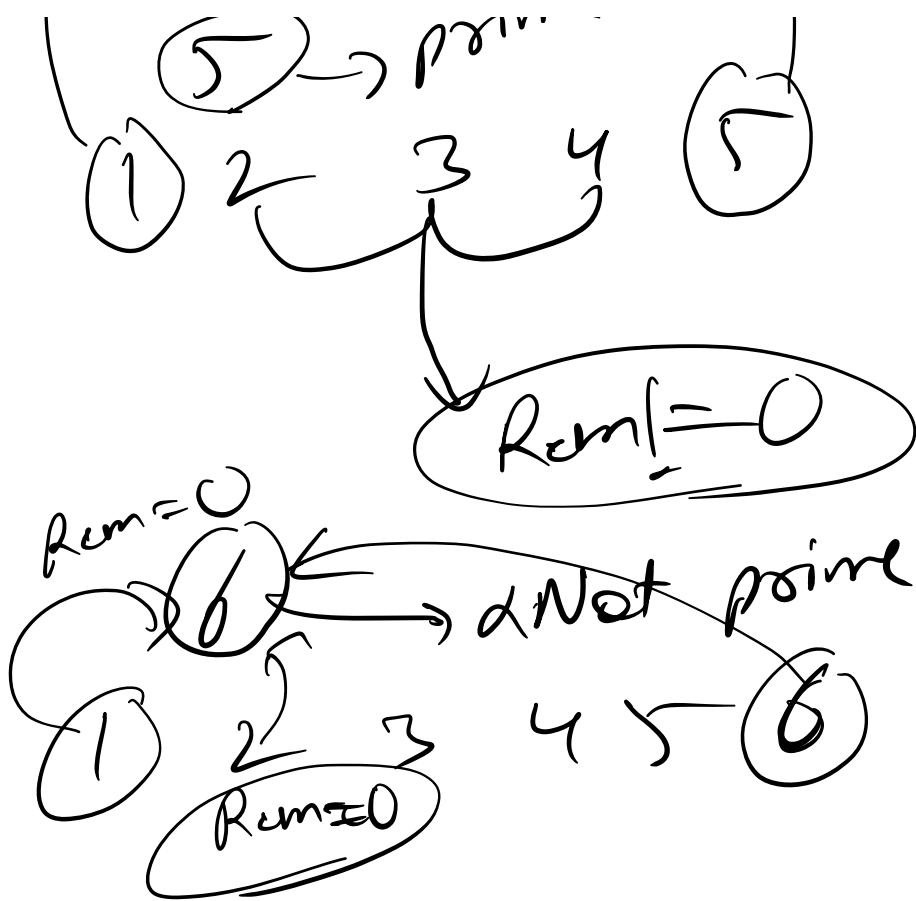
~~from~~

$$1 = 0$$



$$n = 5$$





Home work

flow chart

graph TD
no initialise

Pseudocode

Code h

looping

i/p
o/p

process

Programming Languages

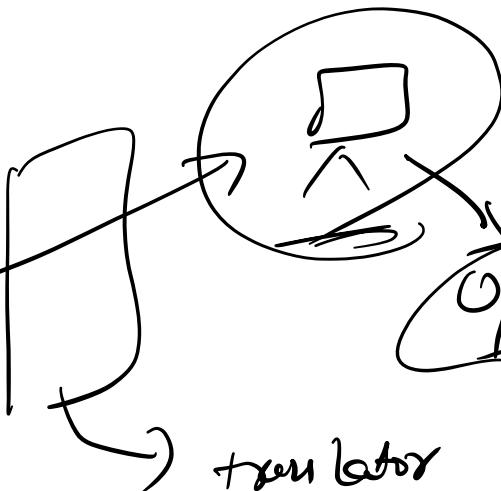
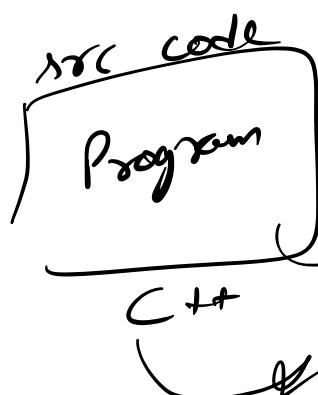
what?

why?

2 min

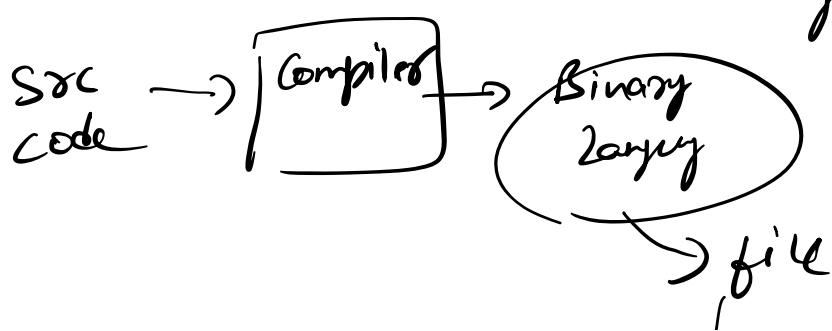
PL

→ semantic or syntax



translator
interpreter
magic box

Binary
language



flow
Pr
H/w

