

20/08/23

# Data Structure

## Insertion Sort

2	3	5	10		
<del>3</del>	<del>5</del>	<del>10</del>	<del>7</del>	75	80
0	1	2	3	4	5

3	5				
<del>3</del>	<del>5</del>	10	2	75	80
0	1	2	3	4	5

temp = 10

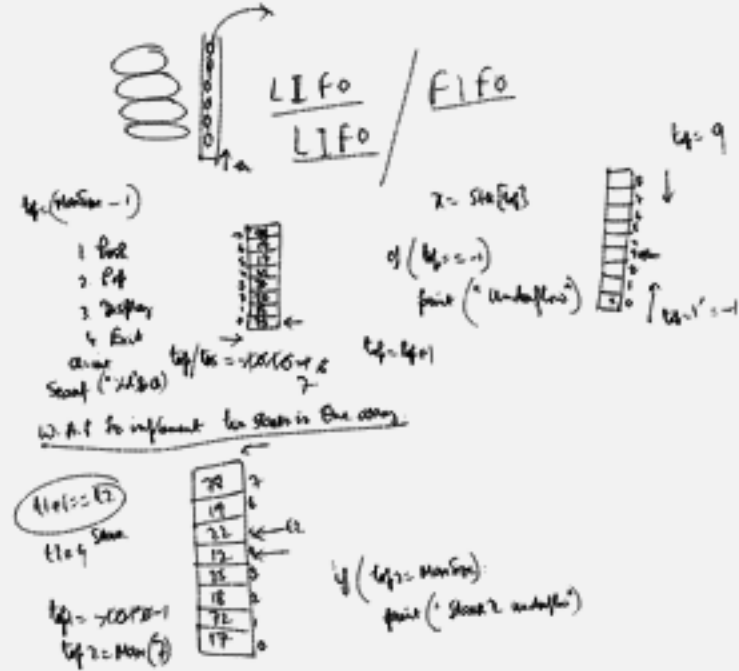
			7	10	
2	3	5	<del>10</del>	<del>7</del>	4
0	1	2	3	4	5

temp = 7

		4	5	7	10
2	3	<del>5</del>	<del>7</del>	<del>10</del>	4
0	1	2	3	4	5

temp = 4

2	3	4	5	7	10
0	1	2	3	4	5



$a + b \rightarrow$  infix expansion  
 $+ ab \rightarrow$  prefix  
 $ab + \rightarrow$  postfix

$a * b / c$

$(a + b) * (c / d) / e$   
 $[ab+] * [cd/] / e$   
 $[ab+cd/] / e$   
 $ab+cd/ * e /$

$\lambda \rightarrow$  form (3)  
 $x, / \rightarrow \dots (3)$   
 $+, - \rightarrow (1)$

$a - (b \wedge c) * c / d - e + g / h$   
 $a - [b \wedge c] * c / d - e + [g / h]$   
 $a - [b \wedge c * c / d - e + [g / h]]$   
 $a - [b \wedge c * c / d] - e + [g / h]$   
 $[a b \wedge c * c / d] - e + [g / h]$   
 $[a b \wedge c * c / d - e] + [g / h]$   
 $a b \wedge c * c / d - e - g / h +$

$\left( \begin{array}{l} 1. ( \\ 2. ) \\ 3. operand \\ 4. operator \end{array} \right) \quad (a + b) * (c / d) / e$   
 $ab + cd / * e /$

$a \wedge b / c \wedge d - e + f + g$

a		a
*	*	ab
/	/	ab/c
*	*	ab/c * d
-	-	ab/c * d - e
+	+	ab/c * d - e + f
+	+	ab/c * d - e + f + g