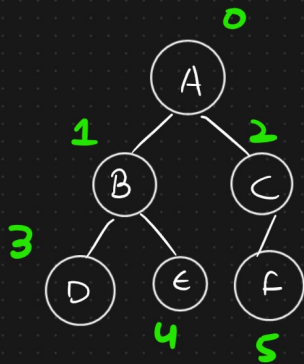


Heap \rightarrow Complete Binary Tree

\downarrow Array??

Heap $\left\{ \begin{array}{l} \text{Minheap Tree} \\ \text{Maxheap Tree} \end{array} \right\} \rightarrow$ Array for the storage purpose

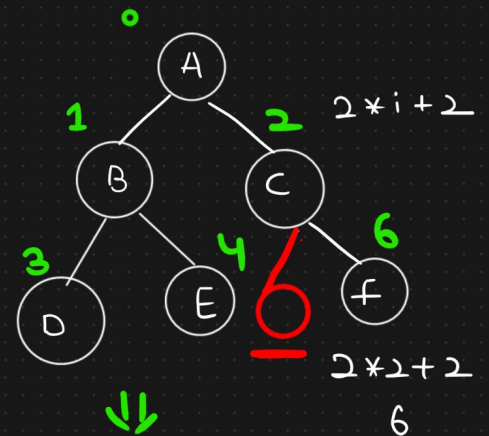


$2 \times i + 1$

very less wastage of space

ACBT

0	1	2	3	4	5	
A	B	C	D	E	F	



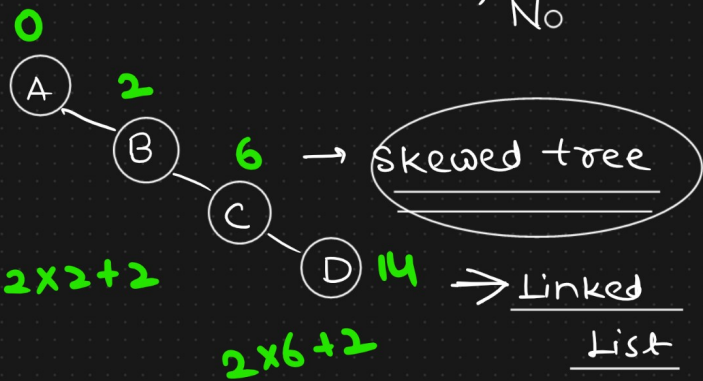
$2 \times i + 2$

CBT \rightarrow ??

\downarrow No

Left index $\rightarrow 2 \times i + 1$

Right index $\rightarrow 2 \times i + 2$



Skewed tree

\rightarrow Linked List

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A		B				C								D	

\rightarrow lot of wastage of space

Minheap Tree

↳ Parent node data < child node data

Root Node → smallest element data

↳ $O(1) = \text{constant}$

→ a[0]

Maxheap Tree

↳ Parent node data > child node data

Root Node → maximum/largest element

↳ $O(1) = \text{constant}$

→ a[0]