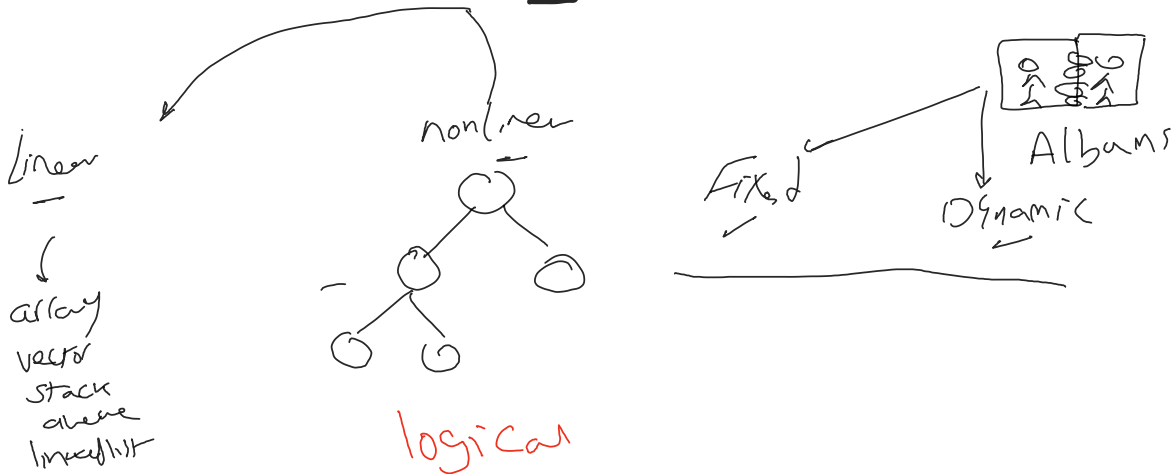


Saturday, 5 November 2022 7:04 PM

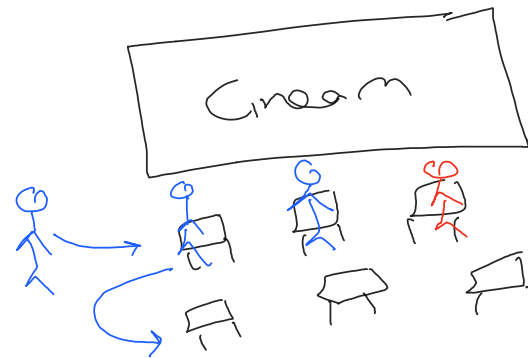
# Data structure



logical

Physical

Time complexity



Dynamic Array  
Vector

STL → implementation DS.....

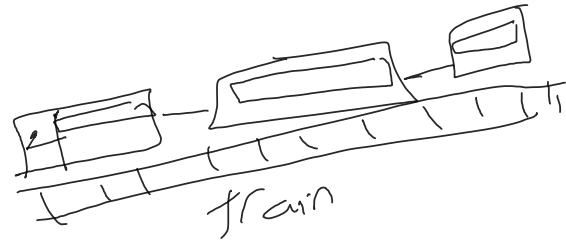
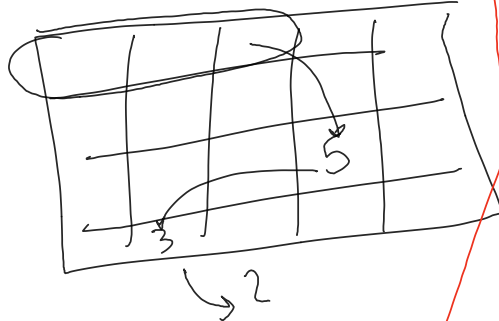
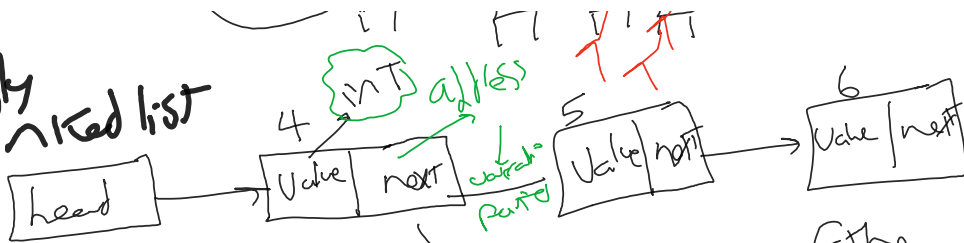
⇒ built in Data structure C++.

- Array.

LinkedList



⇒ Singly linked list

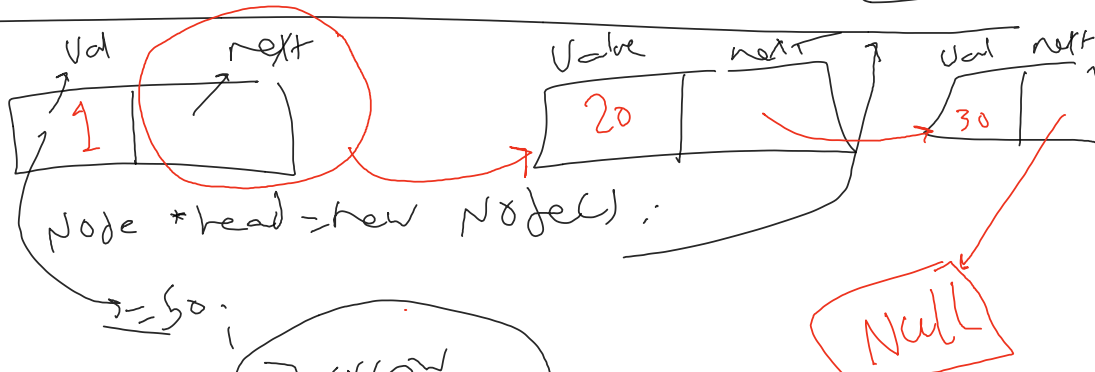
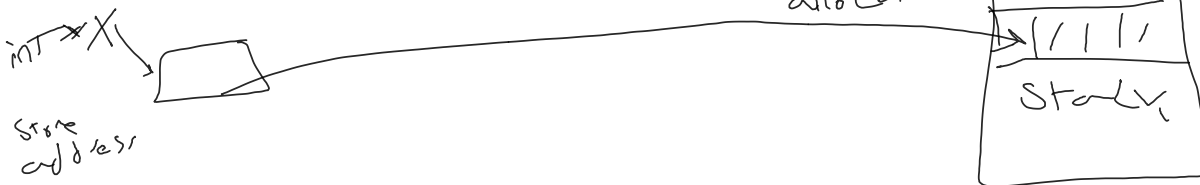


5  
Variable address?  
Primitive datatype  
non Primitive Class.....

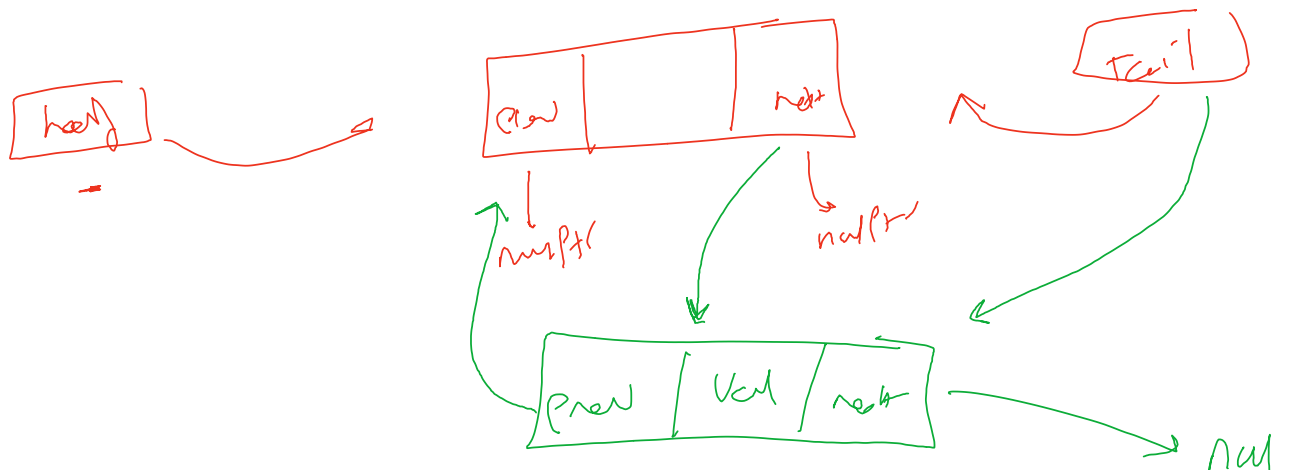
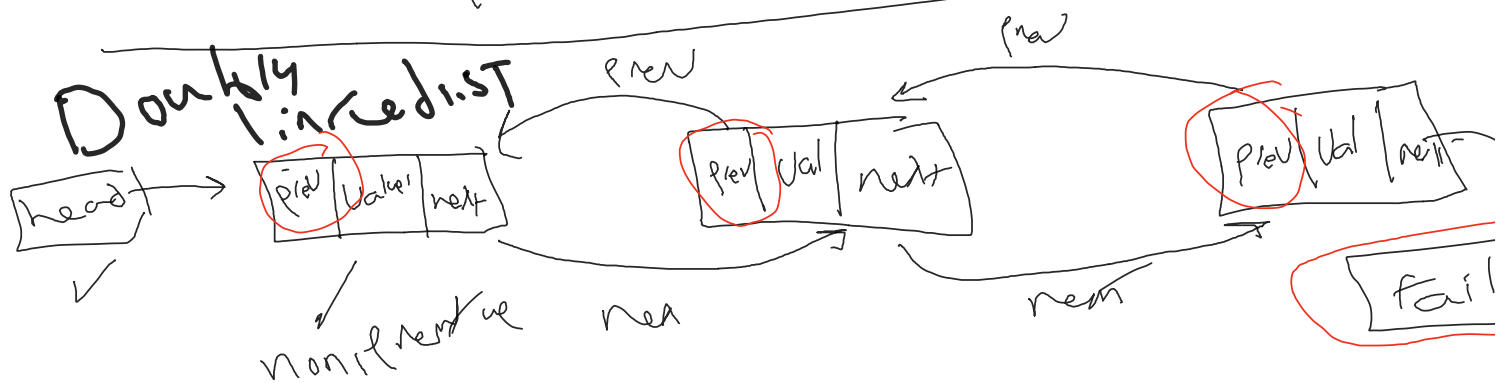
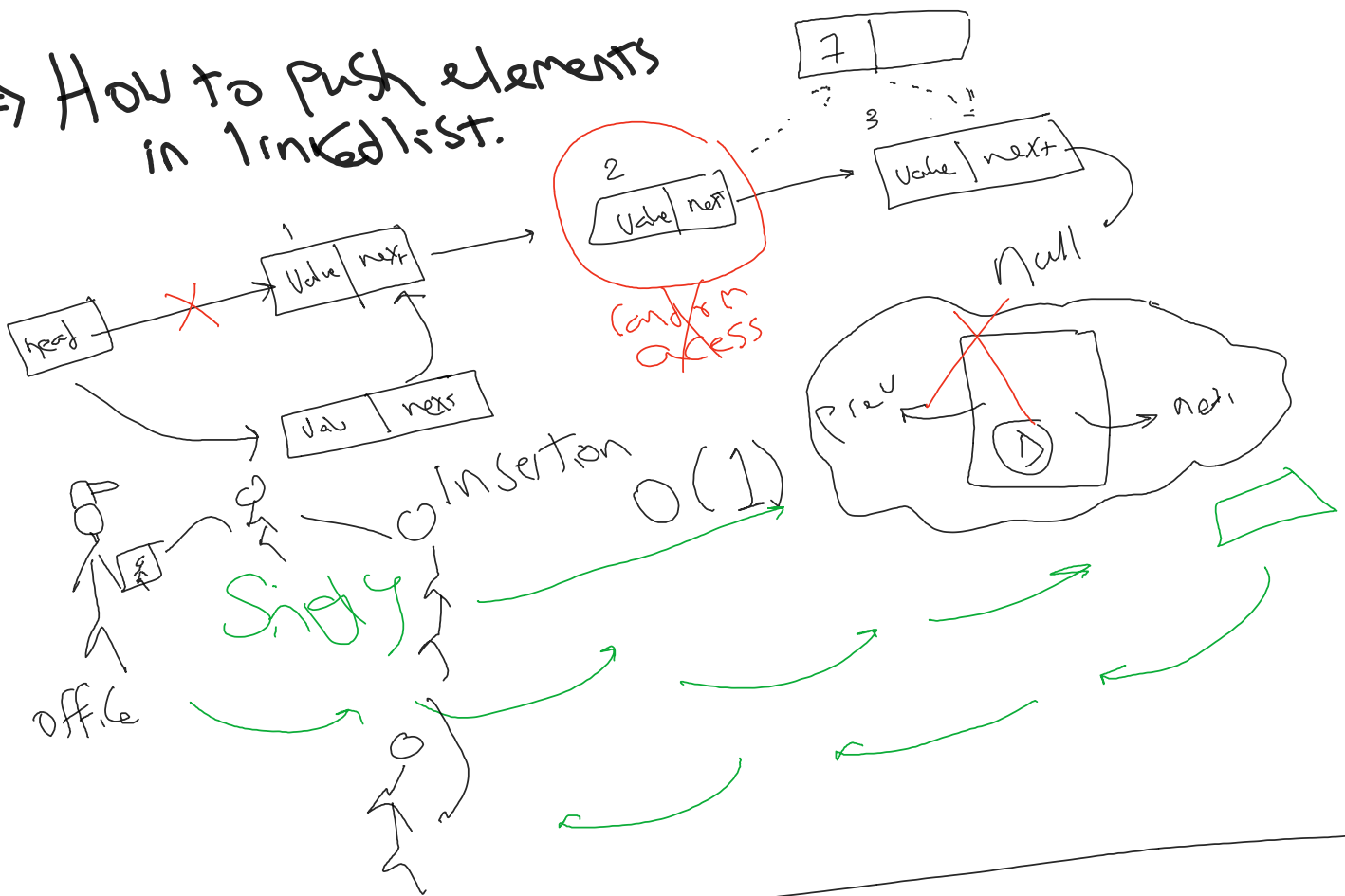
## Pointer

$\text{int}^* X = \text{malloc}(\text{sizeof}(4));$

C++  $\rightarrow \text{int}^* X = \text{new int}();$



⇒ How to push elements in linked list.

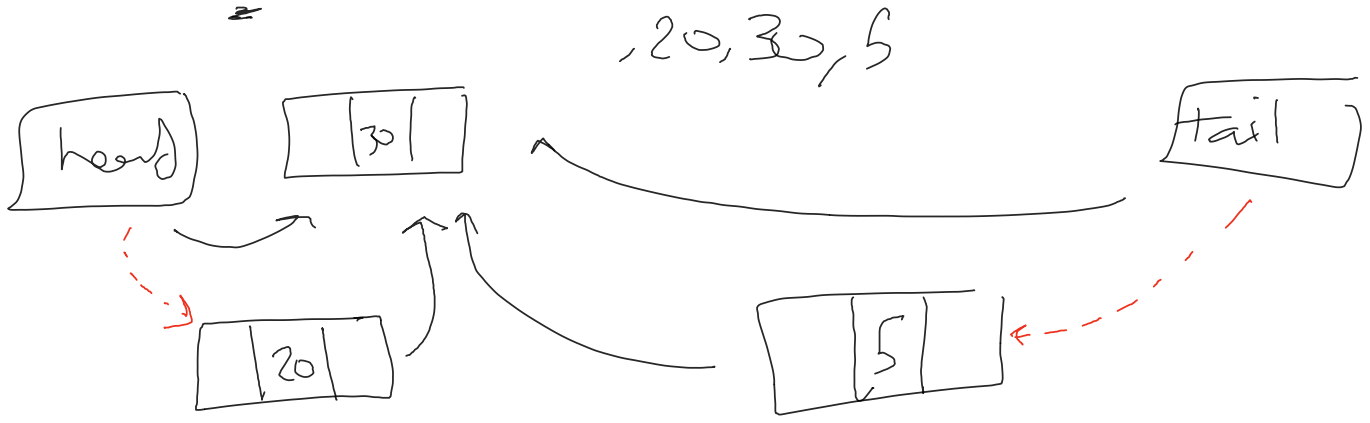


A

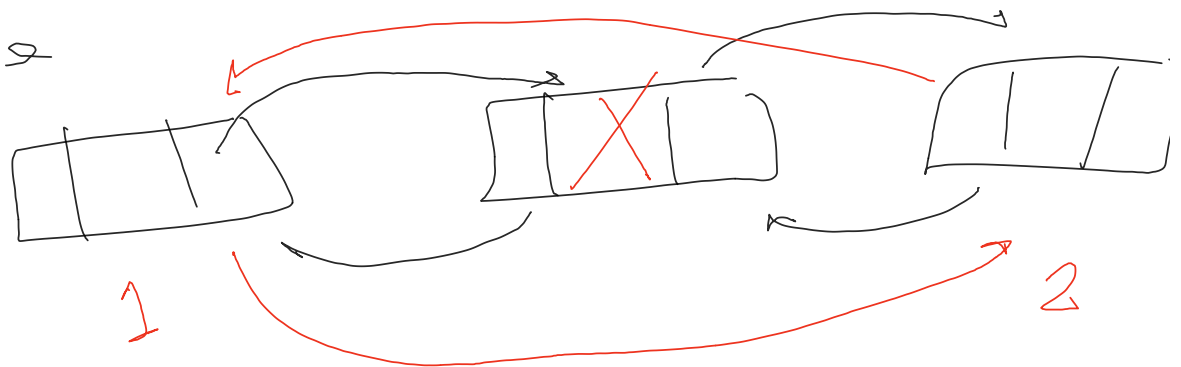
push\_Front(30)

push\_Front(20)

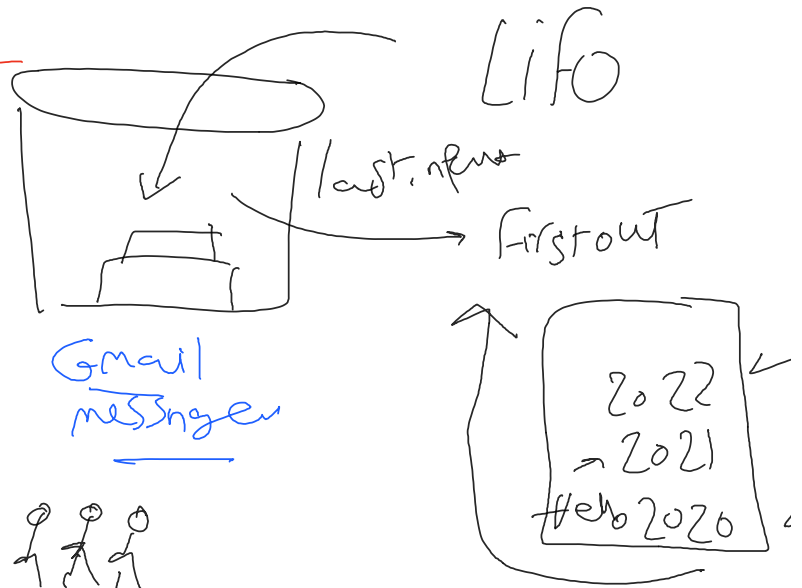
push\_back(5)



Delete

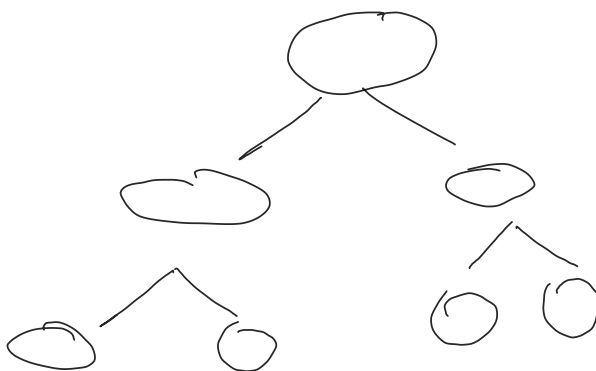
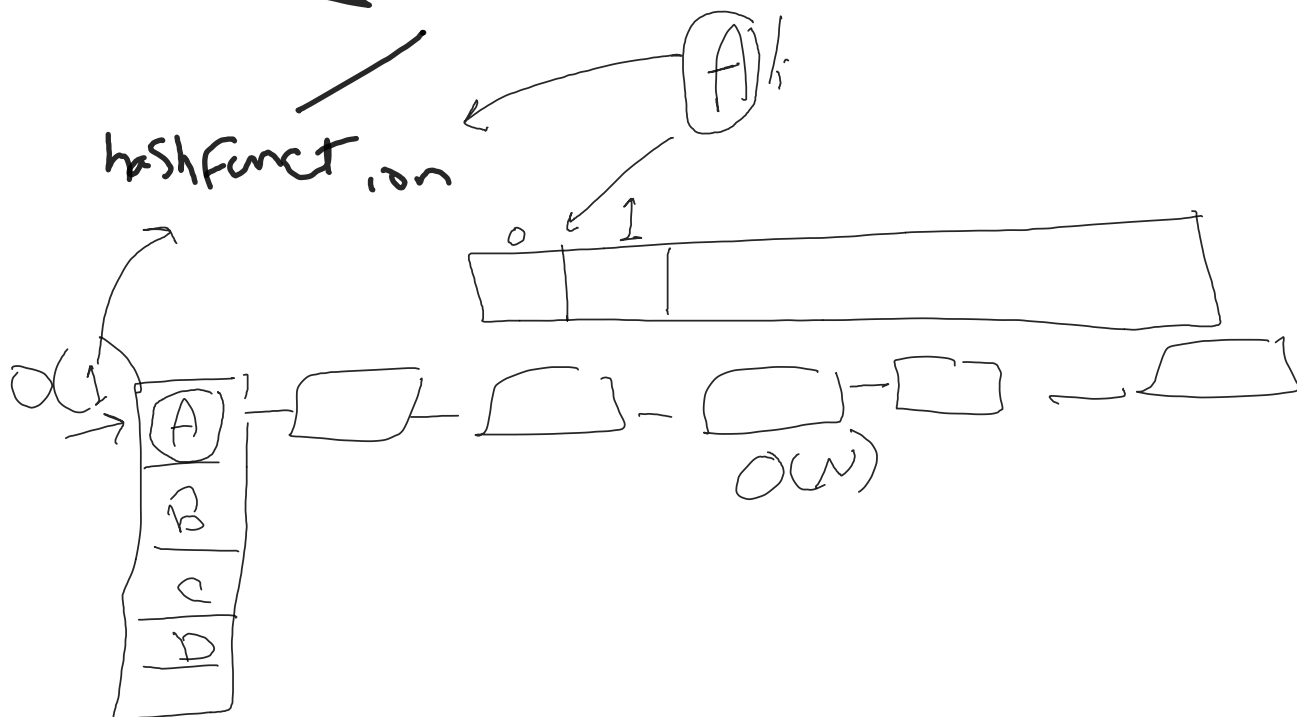


Stack



Hash table

1 0 1 0 0 1 0



logically