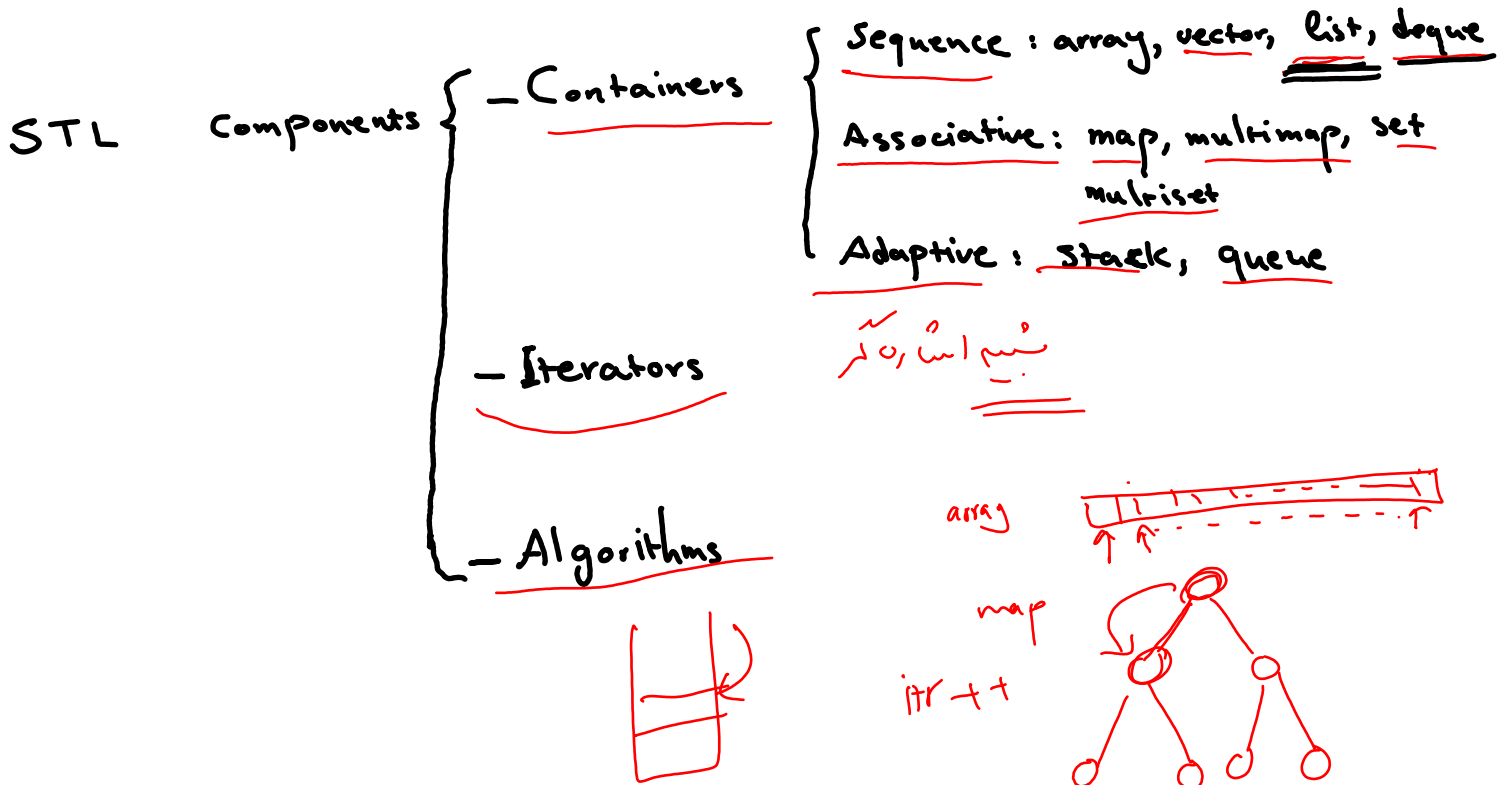
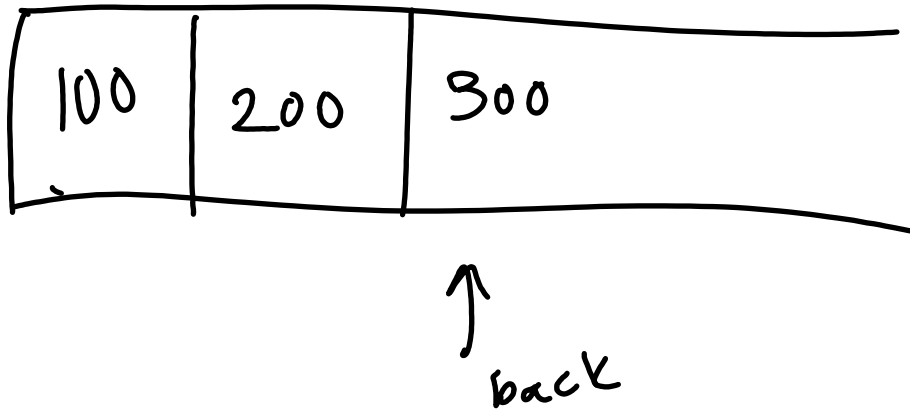
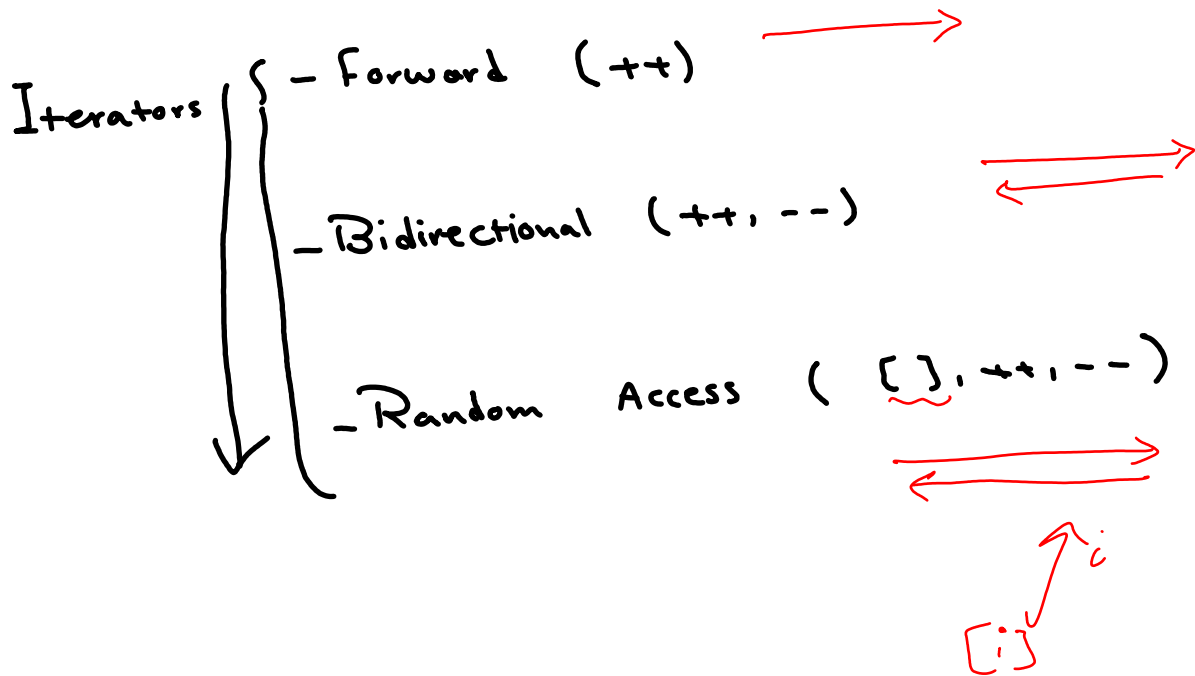
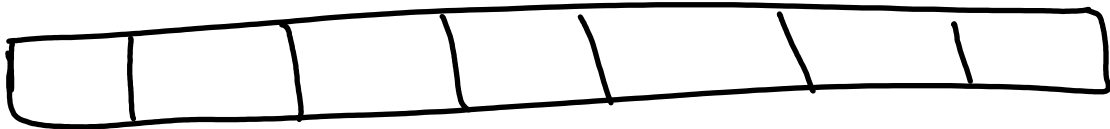


Standard Template Library (STL)



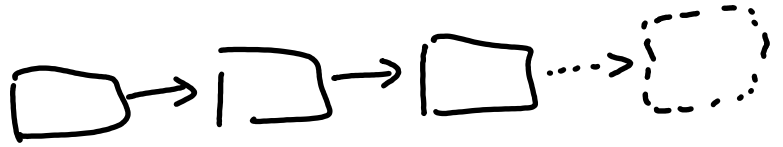




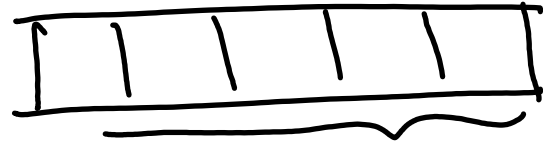
vector

dynamic array (reallocate)

linked-list

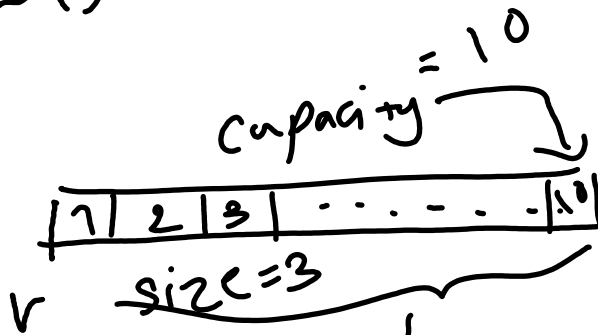


pushback()

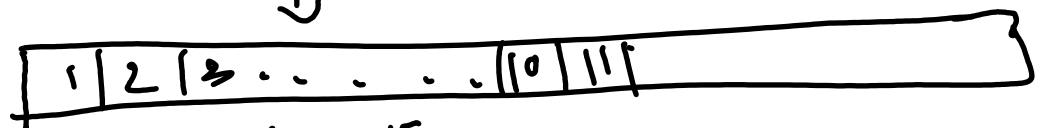


`vector<int> v;`

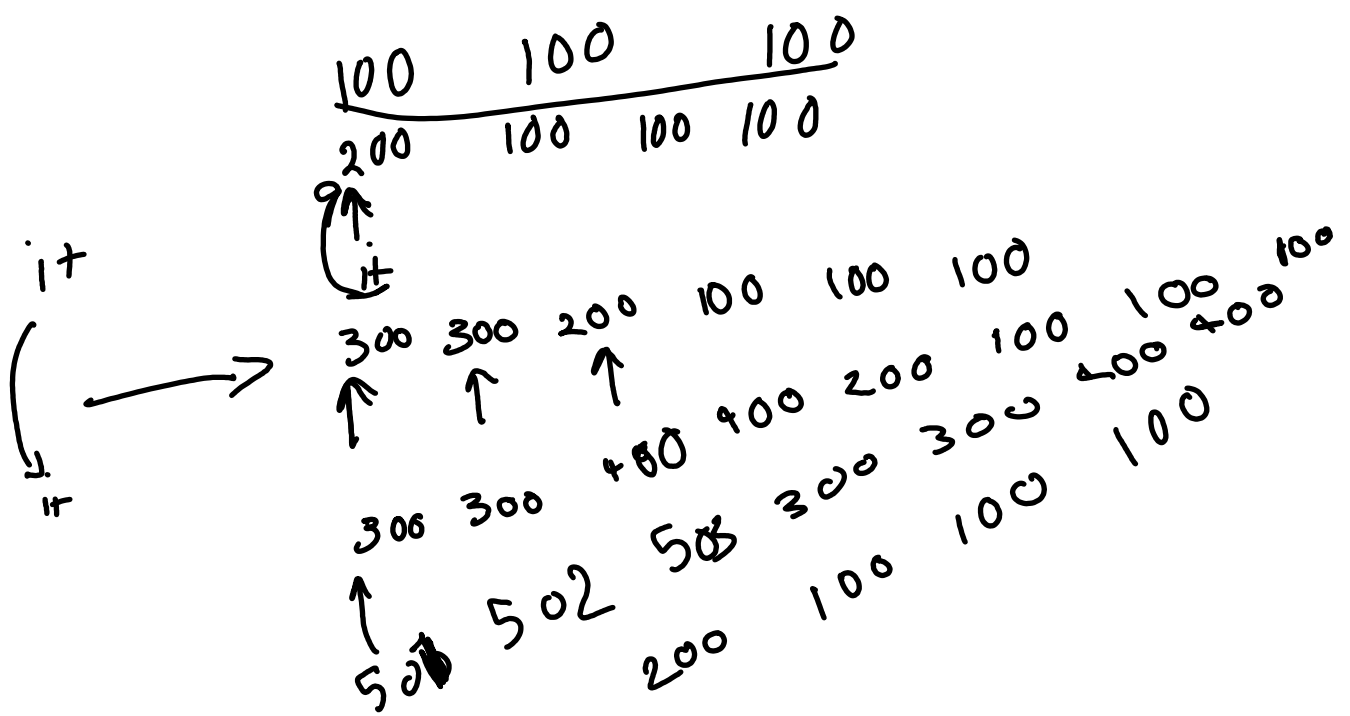
$\left\{ \begin{array}{l} \text{size} = \text{الآن عدد ایتیم در vector, 1, 1, 1} \\ \text{capacity} = \text{نفاذ تخمین و نه فعلی} \end{array} \right.$
 بر روی vector: اندازه فعلی ایتیم است

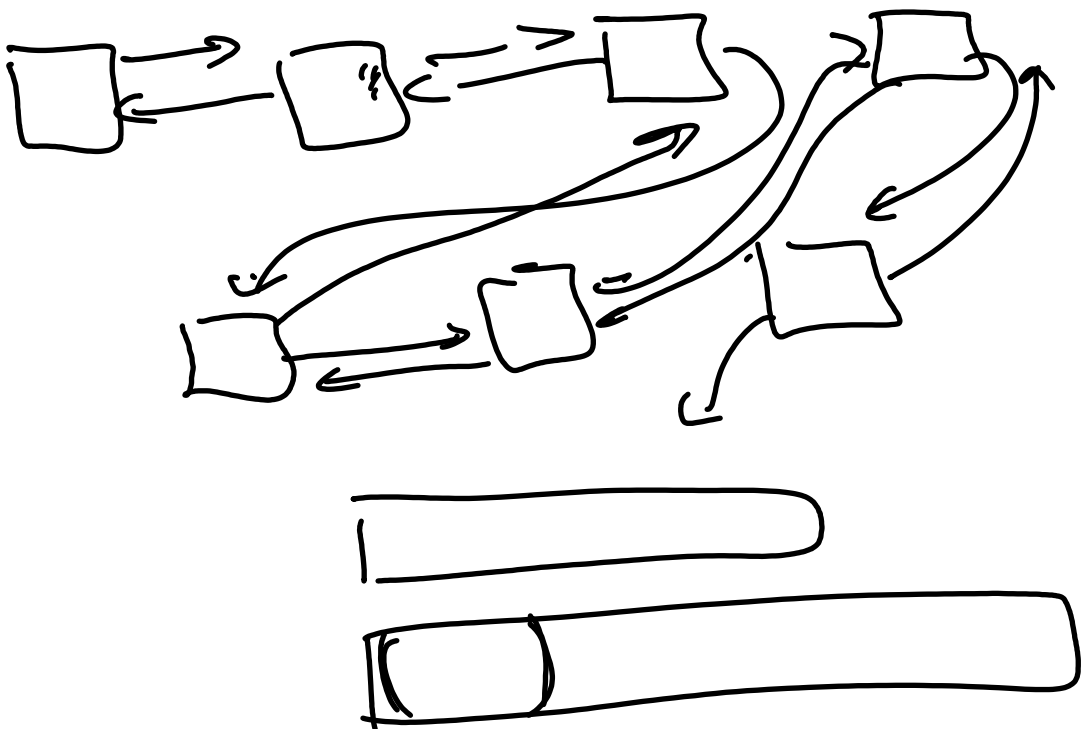
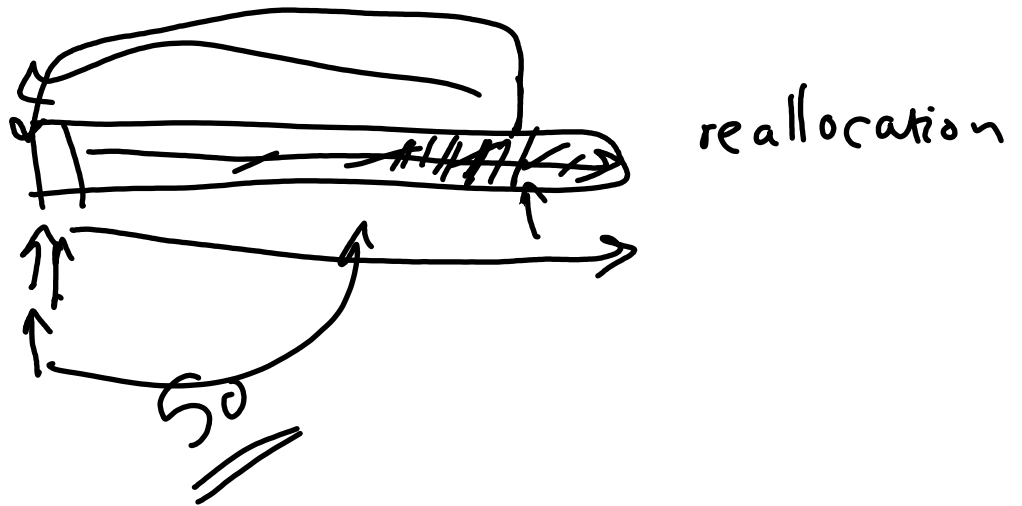
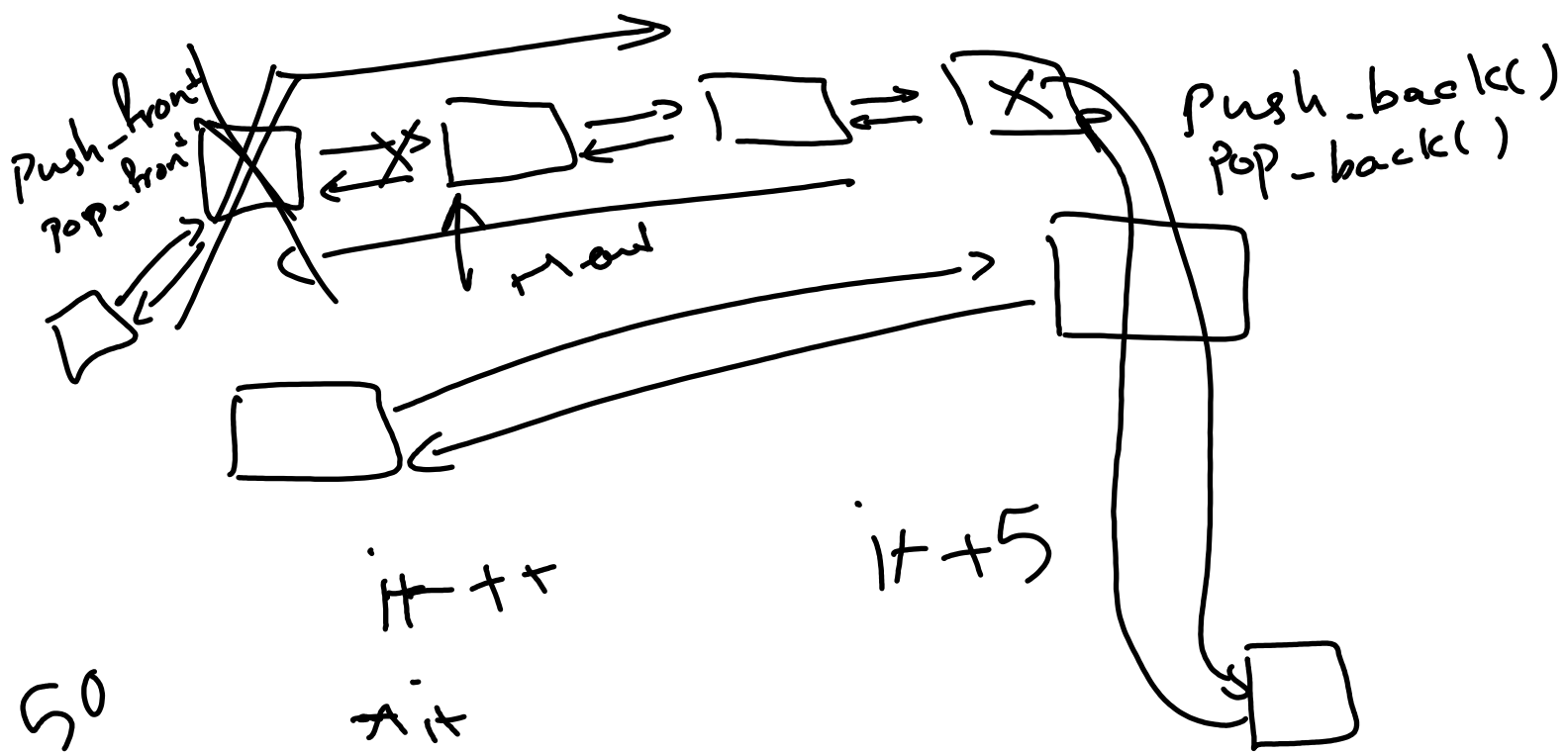


$$1,0 \times 1,0 = 1,0$$

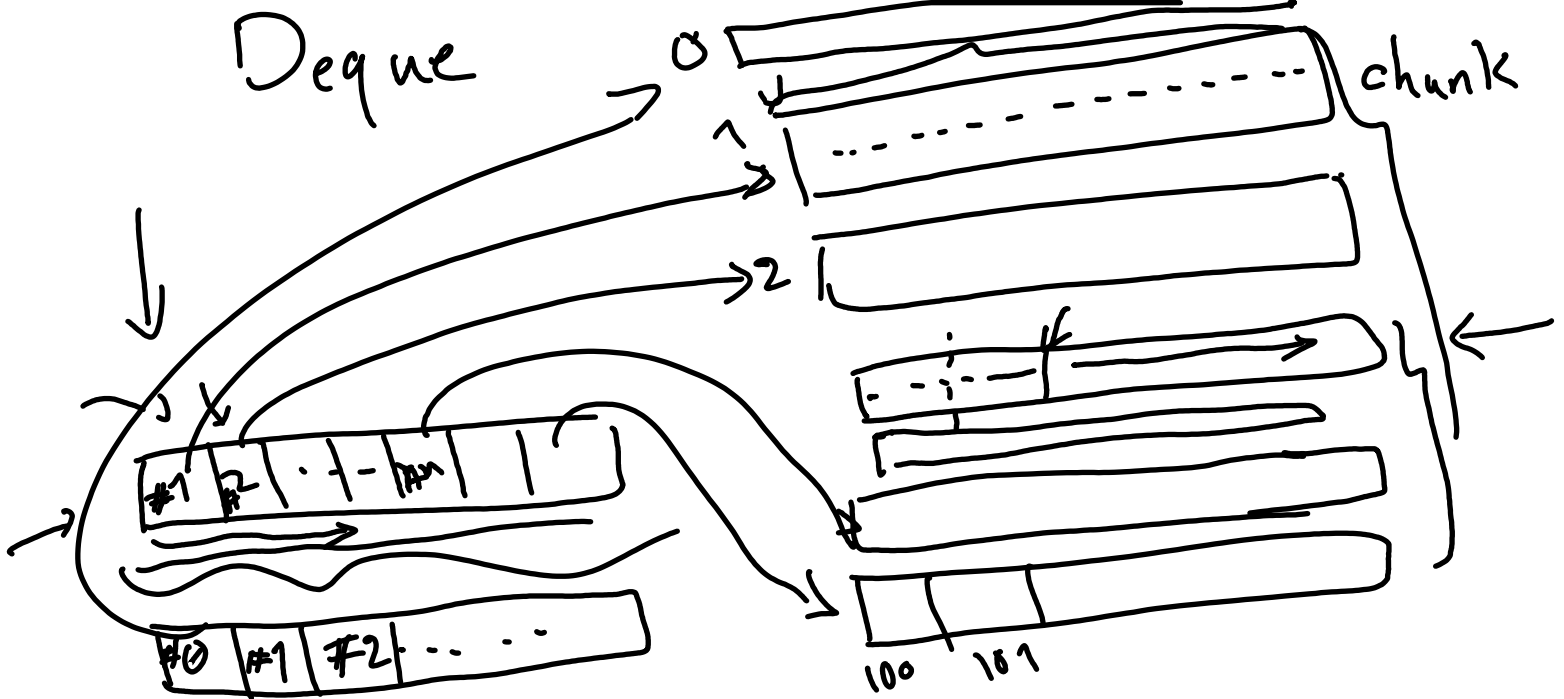


$\text{Capacity} = 15$
 $\text{size} = 11$





Deque



Random Access

$O(1)$

$O(n)$

$O(\log n)$

⋮

n

n

10

100

101

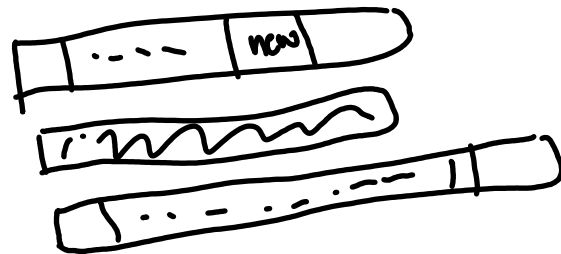
Push back $O(n)$

$O(1)$

$O(1)$

$O(1)$

= vector
+ list
deque



size
new n



