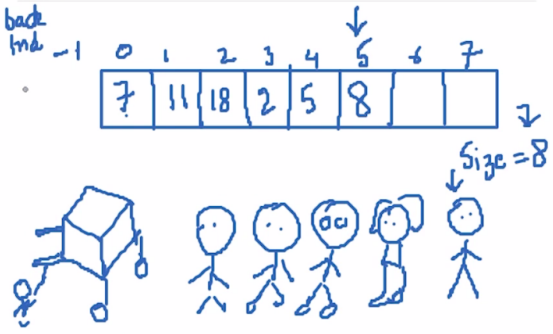
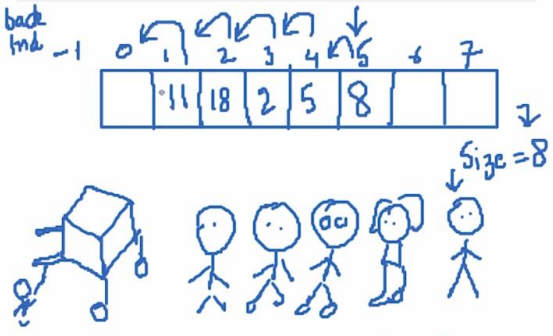
Implementation Of Queue Using Array



Insert : → Increment backInd
(enqueue) → Insert at backInd

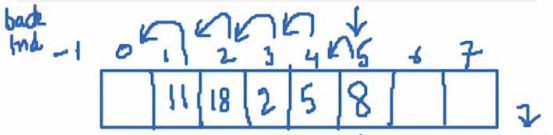
Implementation Of Queue Using Array

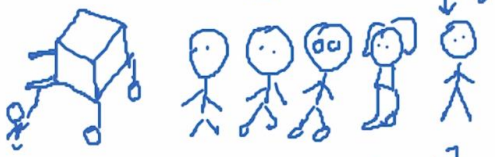


Insert : → Increment backInd
(enqueue) → Insert at backInd

Remove/dequeue :

Implementation Of Queue Using Array

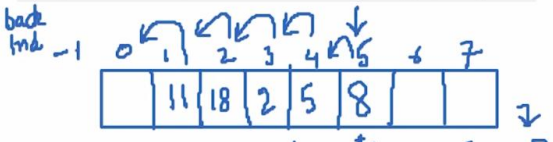


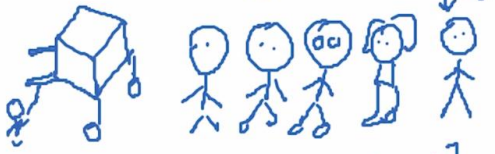


Insert: → Increment backInd — O(1)
(enqueue) → Insert at backInd

Remove/dequeue: Remove element at Ind 0
Shift all elements
O(n)

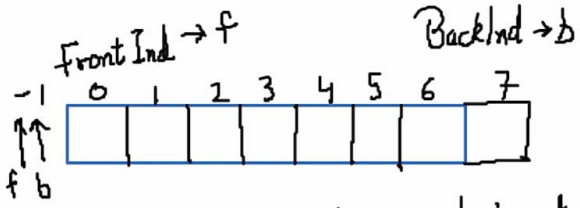
Implementation Of Queue Using Array





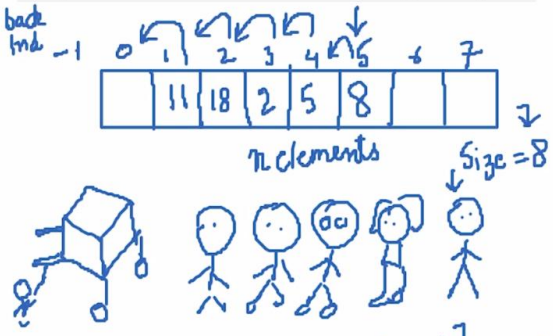
Insert: → Increment backInd — O(1)
(enqueue) → Insert at backInd

Remove/dequeue: Remove element at Ind 0
Shift all elements
O(n)



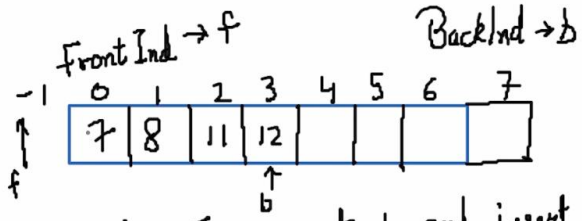
Insert: Increment b and insert at b

Implementation Of Queue Using Array



Insert: → Increment backInd (enqueue) → Insert at backInd — O(1)

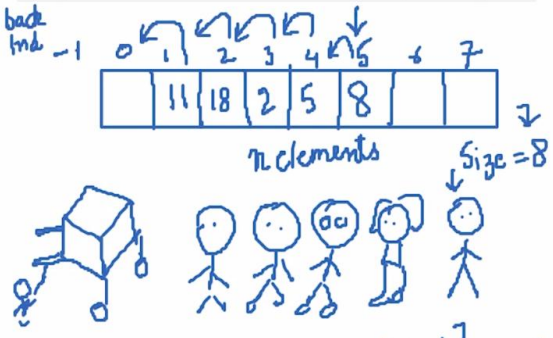
Remove/dequeue: Remove element at Ind 0
Shift all elements
O(n)



Insert: Increment b and insert at b

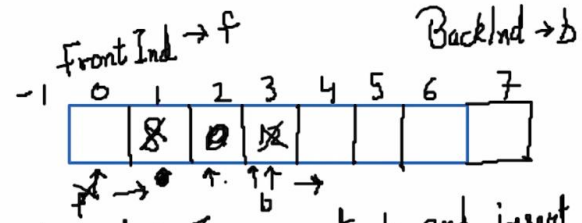
Remove:

Implementation Of Queue Using Array



Insert: → Increment backInd (enqueue) → Insert at backInd — O(1)

Remove/dequeue: Remove element at Ind 0
Shift all elements
O(n)



Insert: Increment b and insert at b

Remove: Increment f and Remove element at f

first element → frontInd + 1
Rear element → BackInd
Queue emty → f = b
Queue full → b = size - 1 ✓