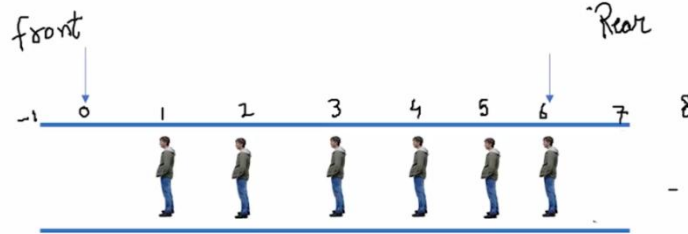


## Double Ended Queue (DEQueue)

Not to be Confused with  
dequeue

Queue  $\rightarrow$  FIFO  
DEQueue  $\rightarrow$  X



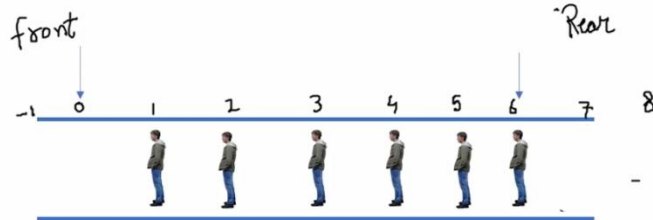
Queue  
 $\rightarrow$  Insertion from Rear  
 $\rightarrow$  Deletion from front

DEQueue  
 $\rightarrow$  Insertion from Rear + front  
 $\rightarrow$  Deletion from Rear + front

## Double Ended Queue (DEQueue)

Not to be Confused with  
dequeue

Queue  $\rightarrow$  FIFO  
DEQueue  $\rightarrow$  X



Queue  
 $\rightarrow$  Insertion from Rear  
 $\rightarrow$  Deletion from front

DEQueue  
 $\rightarrow$  Insertion from Rear + front  
 $\rightarrow$  Deletion from Rear + front

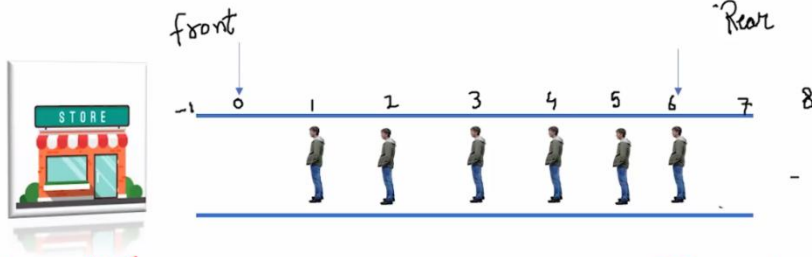
Two types of DEQueue

$\rightarrow$  Restricted Input DEQueue  $\rightarrow$  Insertion from front Not Allowed  
 $\rightarrow$  Restricted output DEQueue  $\rightarrow$  Deletion from rear is not allowed

## Double Ended Queue (DEQueue)

Not to be confused with  
dequeue!

Queue  $\rightarrow$  FIFO  
DEQueue  $\rightarrow$  X



### DEQueue - ADT

- 1> Data  $\rightarrow$  Same as Queue
- 2> Operations  $\rightarrow$ 
  - 1> isEmpty()
  - 2> isFull()
  - 3> initialize()
  - 4> print()
  - 5> enqueueF()
  - 6> enqueueR()
  - 7> dequeueF()
  - 8> dequeueR()



Implement  
Yourself !!!