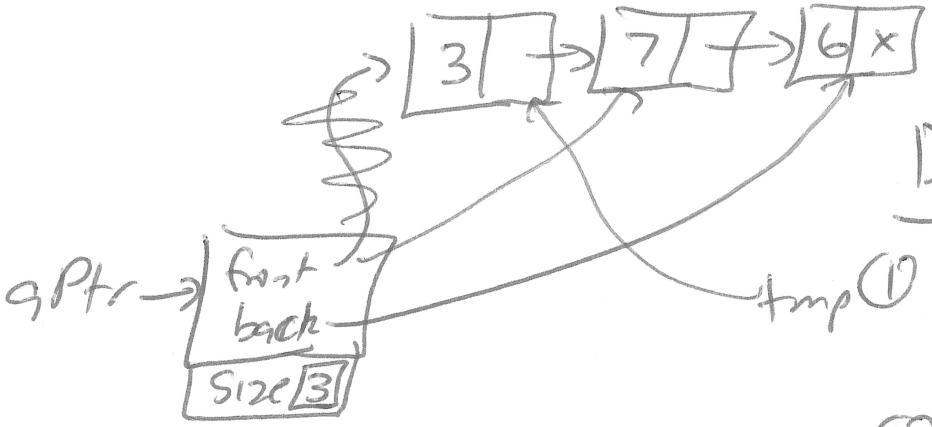
COP 3502 9/15/23

1. dequeue LL implement
2. Maze Lecture
3. Array Implement Queue
4. Live Code Kattis Problem: Elevator



Dequeue

ptr

① Save tmp ~~ptr~~ to front

② qPtr->front = qPtr->front->next;

③ qPtr->size--;

Array Implementation Queue

3, 7, 2, 5, 9

0

back 4 5

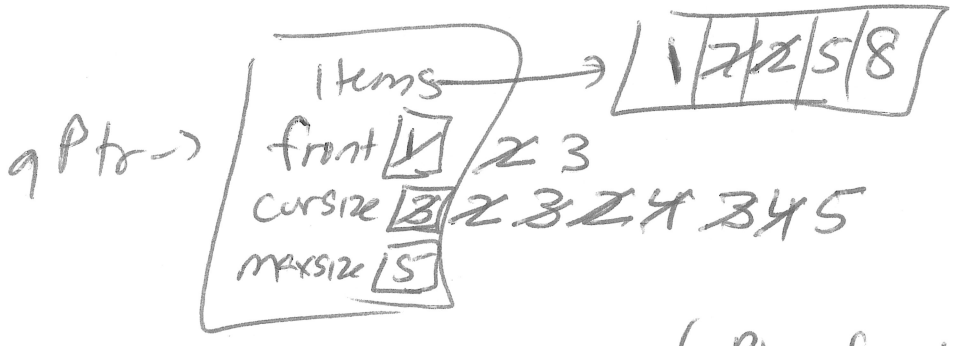
enqueue by adding to index 4

dequeue

if we assume front index 0

how do we do a dequeue

7 2 5 9] loop O(n) time n = # items queue



dequeue → 7

enqueue(8)

enqueue(1)

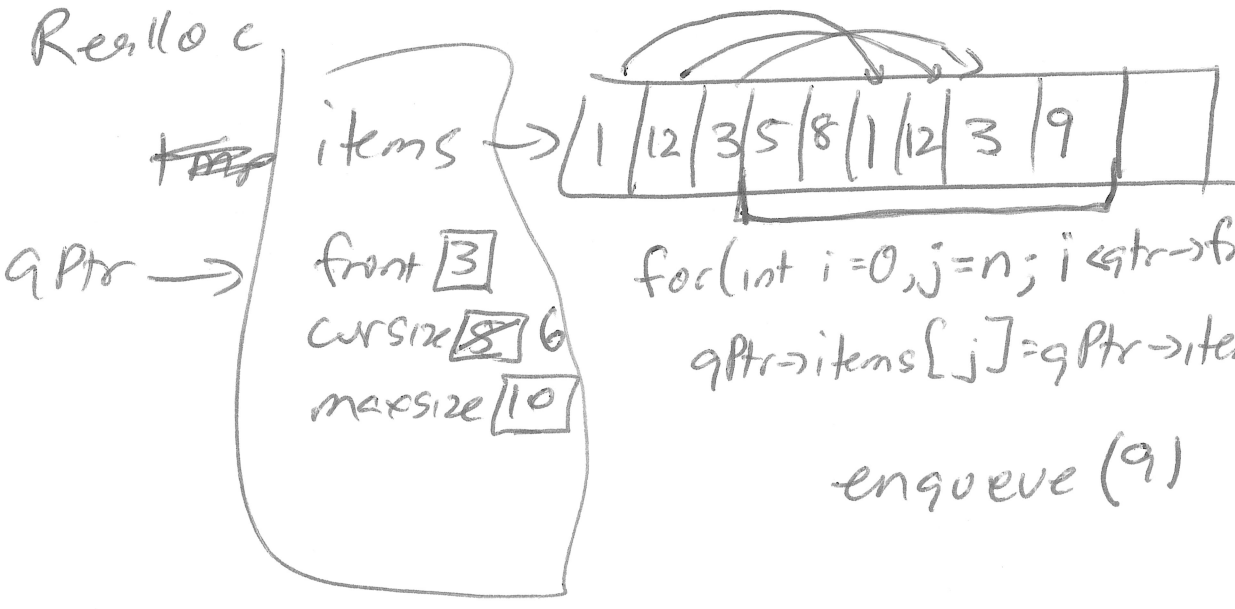
dequeue → 2

(qPtr->front + qPtr->cursize) % qPtr->maxsize

enqueue(12)

enqueue(3)

Realloc



for(int i=0, j=n; i<qPtr->front; i++, j++)

qPtr->items[j] = qPtr->items[i];

enqueue(9)