

## DDS—Linked List Demo

### Queue ADT Demo

Dr. Robert A. Ravenscroft, Jr.  
Rhode Island College

## Queue ADT Demo

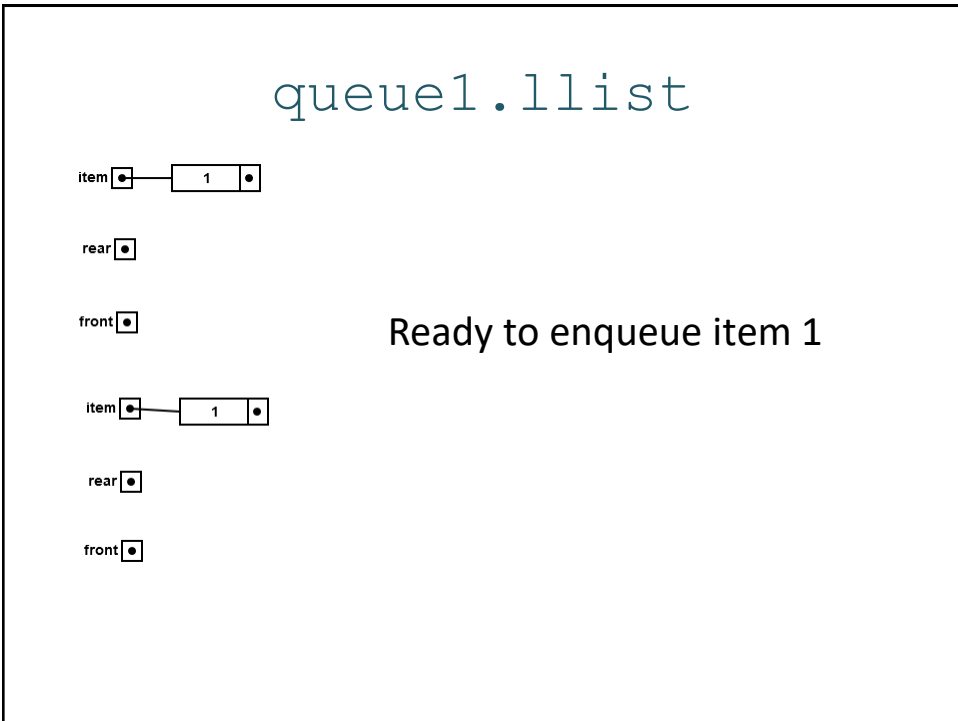
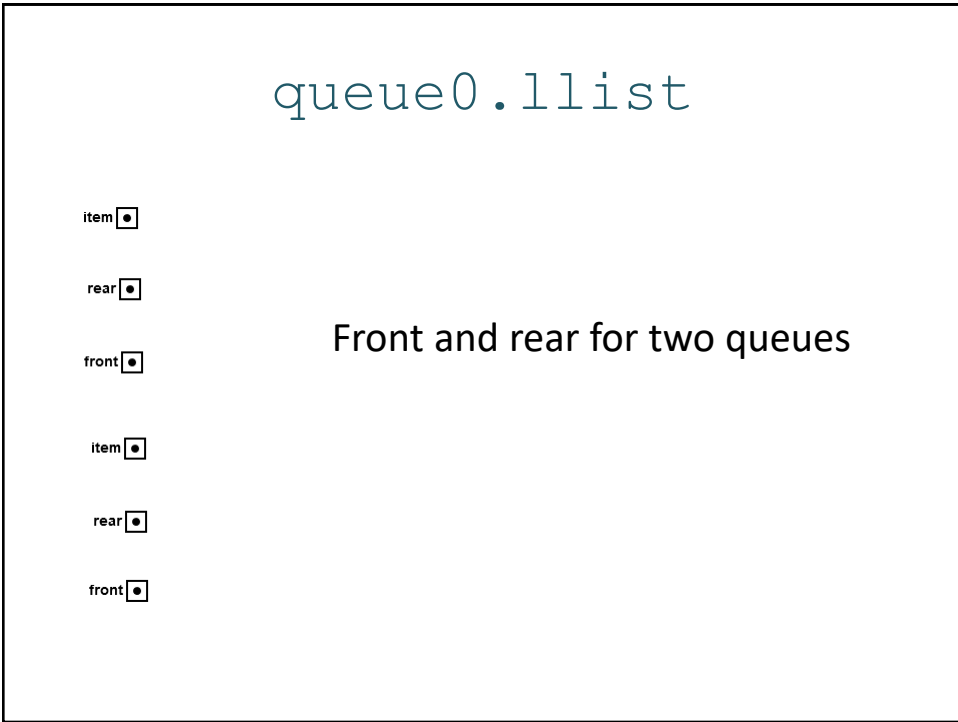
- These slides show a classroom demo for implementing a Queue ADT using a linked list
- A file was saved at each step of a recreation of the classroom demo
- The seven files are available in the ZIP archive `queue.zip` on the DDS homepage at <http://dsviewer.org/dds/homepage/>

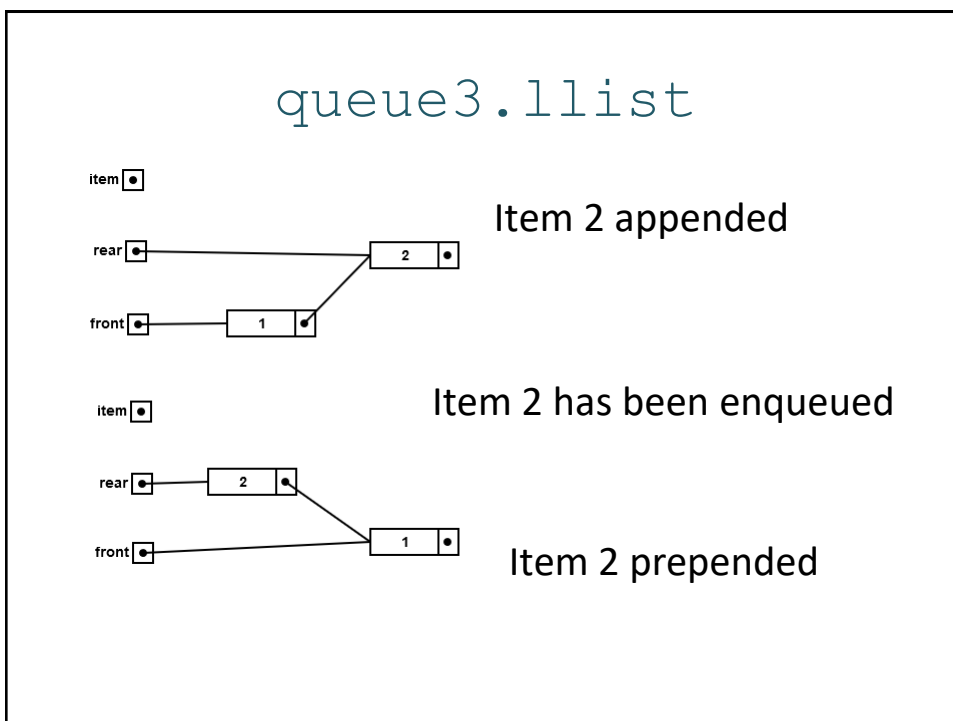
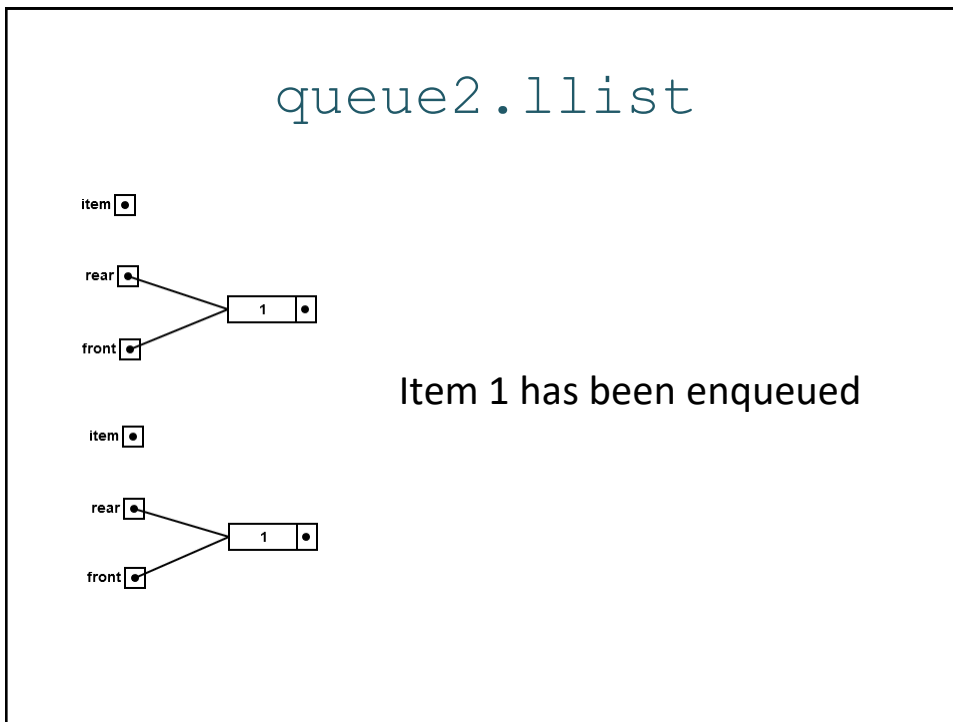
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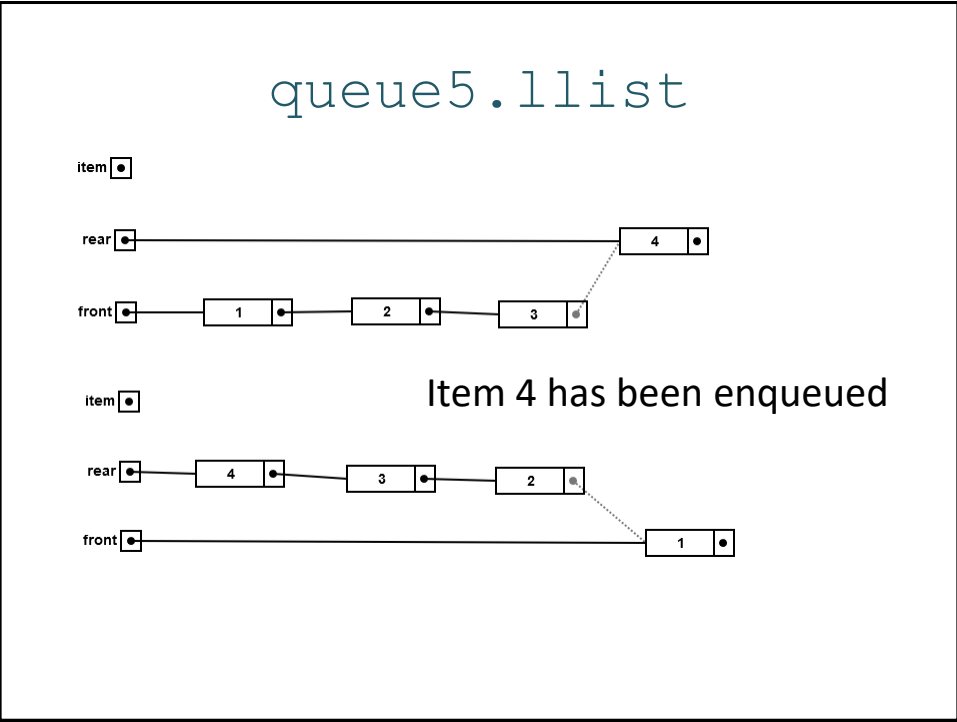
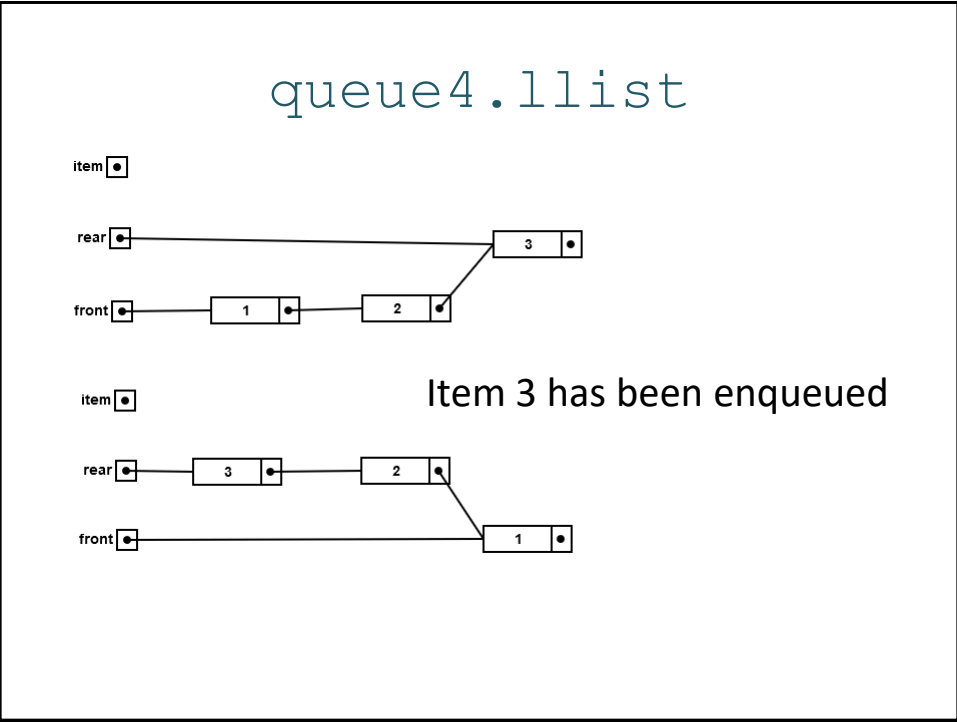
- The demo compares the use of prepend versus append list operations to enqueue items
- It illustrates the problem that queues built by prepending to the list have when performing a dequeue

## Queue ADT Example

- Run <http://www.dsviewer.org/dds-llist>
- Load the files `queue0.llist` through `queue6.llist` in order to view the major steps of the demo

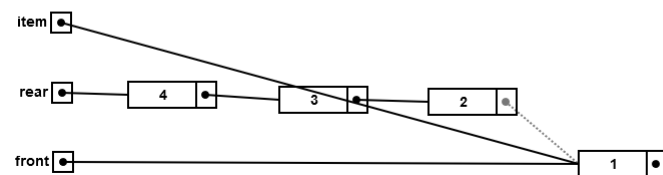
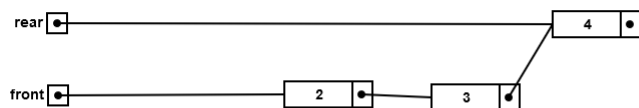






## queue6.llist

item   Item 1 dequeued using 3 assignments



How to efficiently dequeue item 1?  
Front is not easily assigned to the 2 node.