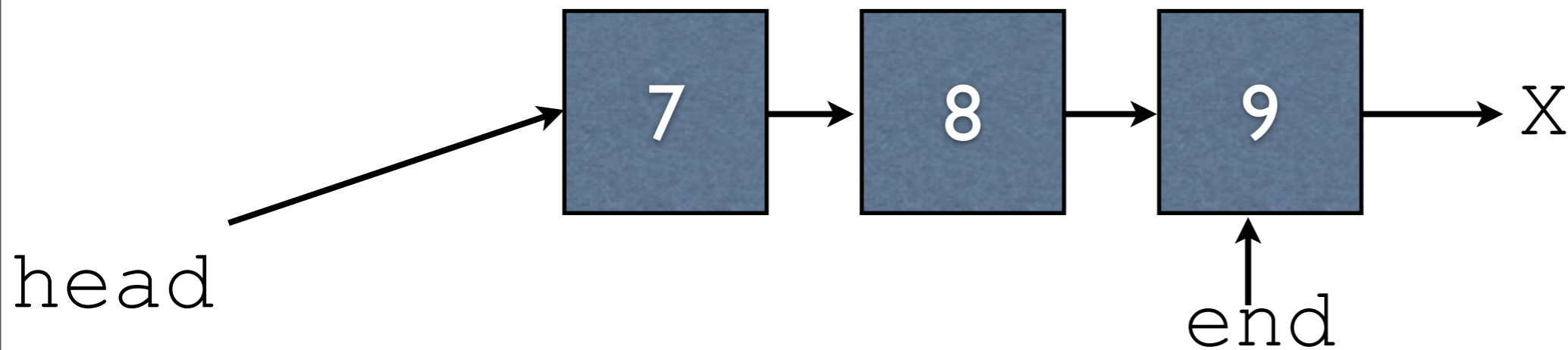# CS24 Week 5 Lecture 1

Kyle Dewey

Overview

- Queues in recap
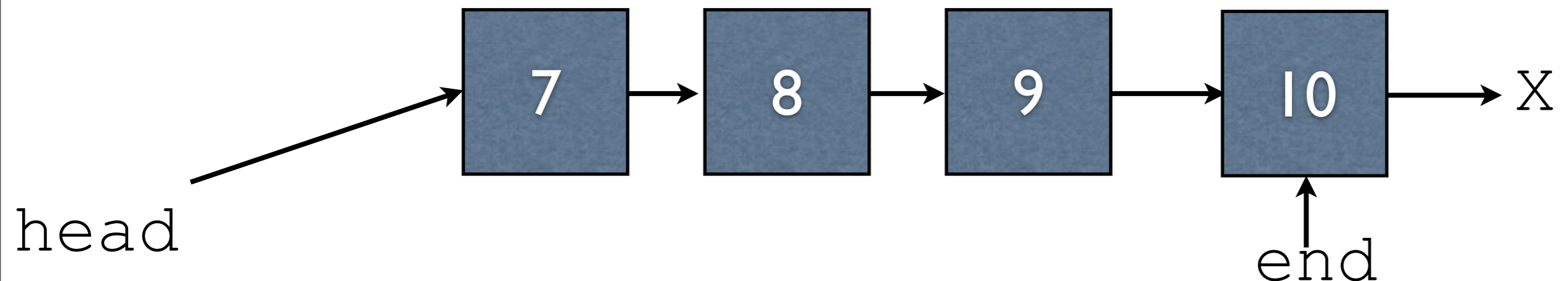
- Exam review

Addressing Efficiency Problem

- Without diverging too much from a standard linked list, how might we address this efficiency problem?

  - Hint: `head` essentially teleports us to the front of the list

  - We could add a special `end` pointer to the end of the list

After Change

Before `enqueue(10)`

After `enqueue(10)` **- add directly to** end

Questions

- For a queue of empty length, what is `head` and `end`?

- For a queue of length one, what is `head` and `end`?

Questions

- For a queue of empty length, what is `head` and `end`?

  - `NULL`

- For a queue of length one, what is `head` and `end`?

  - The same element

Extra Bookkeeping

- Need to ensure that `end` always points to the last element

Exam Review