Data Structures

Lecture 1

* Encapsulation – enclose data and methods within a class
  + Ex. An automobile’s controls are visible to the driver, but its inner workings are hidden
* Abstraction
  + Focus on what instead of how
    - What needs to be done?
    - For the moment ignore how it will be done
  + Divide class into two parts
    - Interface
      * Provides well-regulated communication between a hidden implementation and a client
    - Implementation
* Specifying Method Headers
  + Postconditions
    - What must be true before method executes
    - Implies responsibility for client
  + Postconditions
    - Statement of what is true after method executes
    - Usually is about the return value(s)
  + Use assertions
    - In comments or with assert statement