Note: thanks to Wanda Dann and Steve Cooper for slide ideas
Announcements

• Read Chapter 10 Section 2 for next time
• Last day next Tuesday – do demos
Research Study

- Your choice whether or not to participate
- You will be emailed an id number from Gail Smith (LSRC D128)
- I do not know your number or whether you choose to participate
- Benefit – Take a survey (test) that may help in preparing you for the final exam.
What we will do today

• Lecture on Chap 10, Section 1
  – Review of variables

• Classwork – more practice with lists
Review: Properties

- Where is the class?
- Where is the object?
- A class defines properties
- When an object is created it receives its own set of properties
State and Changing State

- State of object – each property stores info about the object
  - Example:
    - vehicle
    - isShowing

- State change
Class-level Variables

• New variables can be added to the properties of an object
  – class-level

• The value of the variable can be changed
  – The variable is **mutable**.
  – Can be used to track state changes.
Inheritance

• If an object (and its new variable) are saved out and given a new name, a new class is created.
  – This is inheritance!
  – The new class inherits all properties and methods of original class.
• Did this before by adding new methods to a class and saving it out.
Examples in book

• Switch
  – Add property “isOn”
  – Boolean type property

• Steerable Car
  – Add property “direction” for amount of turn on front wheels, from –10 to 10
  – Number type property
Review: What is the difference between the following?

- Class-level variable
- Local variable in method or function
- World-level variable
- Parameter
Classwork today – sort animals

Start

Put Tallest two in place …

All in place!