CS 162
Intro to CS II

Review: Pointers, Arrays, & Structs
Odds and Ends...

• Assignment #1 posted
• Clubs
  – IT Club http://corvallisitclub.com
  – ACM-W 5:30-6:30 Wednesday (odd weeks) KEC 1005
  – ACM Thursdays
• Questions???
Pointer Review...

• Why have pointers in C++?

• What does & mean in C++?

• Pictures?
Array Review...

• What is a statically allocated array?
• 1-d static arrays
  – Picture?
  – Parameters?
  – Arguments?
• 2-d static arrays
  – Picture?
  – Parameters?
  – Arguments?
Demo...
Array Review...

• What is a dynamic allocated array?
• 1-d dynamic arrays
  – Picture?
  – Parameters?
  – Arguments?
• 2-d dynamic arrays
  – Picture?
  – Parameters?
  – Arguments?
Demo...
Array Review...

• How do we create a 1-d dynamic array of n?

• How do we create a 2-d dynamic array of m x n?
Array Review...

• How do we free a 1-d?

• How do we free a 2-d?
Array Review...

• Example Function call: `fun(array);`
  – Can we change the contents of an array?
  – Can we change where it points?

• Example Function call: `fun(&array);`
  – Can we change the contents of an array?
  – Can we change where it points?
Demo...
Struct Review...

• What is a struct?
• How do we create the type?
• How are they passed by default?

• What if we want to change contents in a function?
Demo...