CS 162
Intro to CS II
Review: Pointers, Arrays, & Structs
Odds and Ends...

• Assignment #1 design due Sunday on Canvas
• Questions???
Array Review...

• What is a dynamically allocated array?
• 1-d dynamic arrays
  – Picture?
• 2-d dynamic arrays
  – Picture?
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?
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?
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...
C/C++ Compilation

• Preprocessor / Expand Macros
• Compile C / Translate to Assembly Code
• Run Assembler / Translate to Machine
• Run Linker / Translate to Executable Prog
C Coding & Projects

• Interface Files (Header files, .h)
• Implementation Files (C/C++ files, .c/.cpp)
• Application/Driver File (C/C++ file w/ main)

• Manage this process (Makefile)
Makefile Demo...