16.216: ECE Application Programming
Spring 2013

Lecture 20: Key Questions
March 22, 2013

1. (Review) Explain the relationship between pointers and arrays, as well as the use of pointer arithmetic.

2. Explain how 2-D arrays are passed to functions.

3. **Example:** Say we have a program that stores student exam scores in a 2-D array:
   - Each row represents an individual student
   - Each column represents one of the 3 exams

Write functions to:
   - Calculate the exam average for each student and store it in a 1-D array that is accessible in the main program
     - Assume all exams have equal weight
   - Calculate the average for each exam and store it in a 1-D array that is accessible in the main program
   - Each function takes the same arguments:
     - The 2-D array
     - The # of students in the class
     - The 1-D array that will be used to hold the averages

3 (cont.) Extra space to write functions