

16.216: ECE Application Programming

Spring 2012

Lecture 37: Key Questions

May 4, 2012

1. Explain how pointers are used to access structure variables.
2. Explain how structures are passed to and returned from functions.

3. **Example:** Write the following functions that use the `StudentInfo` structure
- Given a pointer to a single `StudentInfo` variable, print all of the student info to the screen using the following format:
 - Michael J. Geiger
 - ID #12345678
 - GPA: 1.23
 - Given an array of `StudentInfo` variables, compute and return the average GPA of all students in the list

- Prompt the user to enter 3 lines of input (using the format below), read the appropriate values into `StudentInfo` elements, and return a value of type `StudentInfo`
 - Format (user input underlined)
 - Enter name: Michael J. Geiger
 - Enter ID #: 12345678
 - Enter GPA: 1.23