16.216: ECE Application Programming

Fall 2015

Lecture 33: Key Questions
November 30, 2015

1. **Example:** Write each of the following functions:

a. **`char *readLine():`** Read a line of data from the standard input, store that data in a dynamically allocated string, and return the string (as a **`char *`**)
Hint: Read the data one character at a time and repeatedly reallocate space in string

b. **`int **make2DArray(int total, int nR):`** Given the total number of values and number of rows to be stored in a two-dimensional array, determine the appropriate number of columns, allocate the array, and return its starting address
Note: if **nR** does not divide evenly into **total**, round up. In other words, an array with 30 values and 4 rows should have 8 columns, even though 30 / 4 = 7.5