

16.216: ECE Application Programming

Spring 2015

Lecture 25: Key Questions

April 6, 2015

1. **Example:** Write a function for each of the following:

a. `int readStrings(char *s);`

Repeatedly read strings from standard input until the input string matches `s`. Return the number of strings read.

b. `void copyNull(char *s1, char *s2, int n);`

Copy the first n characters of `s2` into `s1`, and make sure that the new version of `s1` terminates with a null character.

c. `int fillString(char *s);`

Repeatedly read strings from standard input and concatenate them to `s` until there is no room in the string. Return the final length of the string.

For example, if `s` is a 6-character array already holding “abcd”:

- User enters “e”—string is full; return 5
- User enters “ef”—there’s not enough room; return 4

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5. **Example:** Write a program to:
- Read three integers from file `myinput.txt`
 - Determine the sum and average of those values
 - Write the original values, sum, and average to file `myoutput.txt`.