**Take-Home Quiz 8 (15 pts) – Recursion & More Pointers**

**NOTE: Please submit your hard copy solution in lab this week**

1. (7 pts) Write a function called recursively\_reverse\_string() that accepts a *pointer* to a string as a parameter, and any other parameters you see fit, recursively *reverses* the string, and returns a *pointer* to the *reversed* string. For example, the reversed string of input “string” is “gnirts”.

char recursively\_reverse\_string(char string[6])

{

Int i = 0;

if (i == 6)

{

return string;

}

else

{

string[i] = string[i+4];

recursively\_reverse\_string(string[i + 1]);

}

1. (8 pts) Write a function recursive\_string\_copy() which accepts a *pointer* to a source string and a *pointer* to a destination string as parameters, recursively *copies* from the source to destination (including the null character), and returns nothing. You may not use any functions from <string.h>. Hint: each recursive step requires that you pass in the address of the next character to copy from the source and the address of the next destination character location.

void recursive\_string\_copy(char source[], char dest[])

{

int i = 0;

if (i > strlen(source))

{

return dest;

}

else

{

dest[i] = source[i];

recursive\_string\_copy(source[i+ 1], dest[i + 1]);

}