

CS4720 Assignment No. 3

(Due September 12, 2014)

1. Using the structure defined (in the book), *struct ComplexNum*, develop a C program that performs complex addition, subtraction, multiplication, and division of the complex values of the elements of array *x* with the complex values of the elements in array *y*. Include a function for each complex operation that returns a new array with the results.
2. Design and implement in C a linked list in which each node represents a flight stop in a route to a destination. The data in each node is the airport code (an integer number). The airline can add or delete intermediate flight stops. It can also calculate and display the number of stops from the starting airport to the destination airport.

Work on Linux (use either the CS3 server or your own installation of Linux)

1. Provide a session log on Linux using the 'script' command
2. Use the 'tee' command on Linux to provide redirection of the output data (results). See Appendix B on page 408.