

**UNC Charlotte, Department of Electrical and Computer Engineering
ECGR 4101/5101, Fall 2009, Homework #4
Due: 9/30/2009, at the beginning of class (20 points)**

Assignment should be typed, a hard copy turned in to instructor

1. (5 points) Read the article “Twenty-Five Most Common Mistakes with Real-Time Software Development”. How many of these problems are related to designing software versus writing code? In four sentences, make your observation.
2. (5 points) Write the algorithm to convert a two's complement integer value to a six-character ASCII string. Assume the value will be between -1024 and 1024. Assume the subroutine will get the integer and an address of the string location. The value returned will be “1” if the subroutine is successful, and a “0” if unsuccessful. The string pointed to by the address will be six characters wide. Include the minus sign, if needed. Don't forget the null character at the end.
3. (10 points) Write the code for the algorithm in Question 2.