

**UNCC, Department of Electrical and Computer Engineering**  
**ECGR4101/5101, Fall 2006, Homework #6, Due: 10/17/06, at the beginning of class (20 points)**

0. (1 point) How long did this homework take you?
  
1. (10 points) Clean up the following C function (for converting temperature to Celsius from Fahrenheit) to meet coding guidelines of lecture 9. Assume that valid values of *i* range from -40 to 250. If this value is not valid, return the value TEMP\_ERROR. Make sure the code is correct!

```
int fc(int i) {  
    int r;  
    r = (i-32)*9.0/5.0;  
    return r;  
}
```

  - a. Is the code correct? Why or why not?
  - b. Change(s) needed to meet 1.1:
  - c. Change(s) needed to meet 1.2:
  - d. Change(s) needed to meet 8.1:
  - e. Change(s) needed to meet 5.1:
  
2. (3 points) Read the Russell Massey article “Introduction to Interrupts.” In four lines of correct English, summarize Mr. Massey’s article.
  
3. (3 points) Read the Jack Ganssle article “Interrupt Latency.” In four lines of correct English, summarize Mr. Ganssle’s article.
  
4. (3 points) Read the Stuart Ball article “Introduction to Interrupt Debugging.” In four lines of correct English, summarize Mr. Ball’s article.