UNC Charlotte, Department of Electrical and Computer Engineering
ECGR 4101/5101, Fall 2008, Homework #10
Due: 12/1/2008, at the beginning of class (20 points)

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

1. How long did this homework take you? (1 point)
2. Read the Eric Umansky article "Studs and Duds". In three sentences of correct English, summarize the general concept presented in the article. (4 points)
3. Read the David Kalinsky article "Context Switch". In three sentences of correct English, summarize the general concept presented in the article. (4 points).
4. Fill in the table below to show which tasks the processor will execute and when, as well as scheduler table contents. Assume that timer tick interrupts occur every 1 millisecond, all tasks take 1.2 milliseconds to complete, and initialTimerValue for tasks A, B and C are 2, 4 and 5 respectively. Note that the entries in the table in column "Right before n" (e.g. timer, run, enabled) show the variable's value right before the timer tick interrupt occurs. This means that a task will run on the tick when its timer reaches 0 (but show the value after the tick and after the ISR executes). Assume task A has the highest priority, followed by task B and then C. (11 points)

			Tick Number													
Task Name		**Right before n**	**n**	**n+1**	**n+2**	**n+3**	**n+4**	**n+5**	**n+6**	**n+7**	**n+8**	**n+9**	**n+10**	**n+11**	**n+12**	**n+13**
A	**timer**	2	1													
	run	0	0													
	enabled	1	1													
B	**timer**	3	2													
	run	0	0													
	enabled	1	1													
C	**timer**	1	5													
	run	0	1													
	enabled	1	1													
	Activity	---	C	C,												