

UNIVERSITY OF MASSACHUSETTS LOWELL  
Department of Continuing Engineering

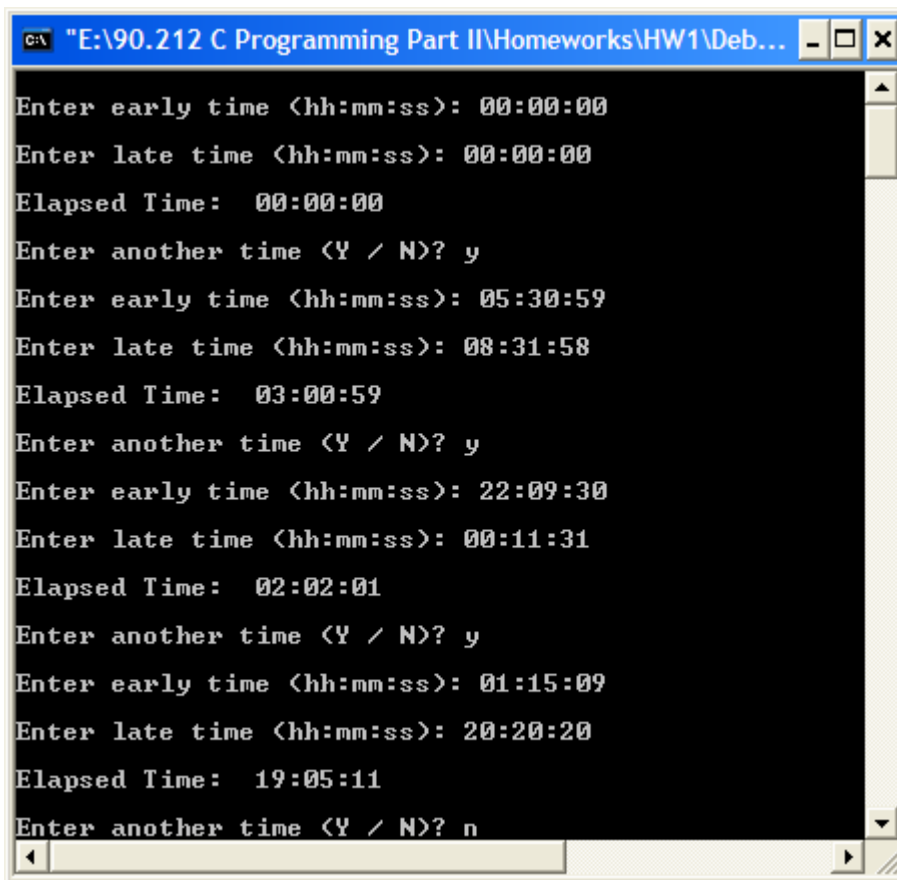
90.267

C Programming

Homework #5

Write a program to solve Exercise #3 (Page 193) in the assigned book. Your program should be built using separate compilation as discussed in class. That is, put all of your time functions in one source file, create a separate companion header file containing all information necessary to use your time functions, and put your main driver function in a separate source file. Assume a military clock based on 24 hours. For example, the time 1:30.45 a.m. is 01:30:45 in military time and the time 1:30.45 p.m. is 13:30:45 in military time. The time 11:59.59 a.m. is 11:59:59 in military time and 11:59.59 p.m. is 23:59:59 in military time.

Be sure to use good programming style and naming convention. Make sure each function has a function description header as discussed in class. Pass in all code (letting me know what code goes with what file), and a screen dump of the program execution. The screen dump should contain the exact times that I have shown in the screen dump below (at a minimum):



```
C:\ "E:\90.212 C Programming Part II\Homeworks\HW1\Deb...
Enter early time <hh:mm:ss>: 00:00:00
Enter late time <hh:mm:ss>: 00:00:00
Elapsed Time: 00:00:00
Enter another time <Y / N>? y
Enter early time <hh:mm:ss>: 05:30:59
Enter late time <hh:mm:ss>: 08:31:58
Elapsed Time: 03:00:59
Enter another time <Y / N>? y
Enter early time <hh:mm:ss>: 22:09:30
Enter late time <hh:mm:ss>: 00:11:31
Elapsed Time: 02:02:01
Enter another time <Y / N>? y
Enter early time <hh:mm:ss>: 01:15:09
Enter late time <hh:mm:ss>: 20:20:20
Elapsed Time: 19:05:11
Enter another time <Y / N>? n
```