CSCD 340

Lab 1

1. Since everyone's C background is varied this lab is meant to be a C reminder. Provided is cscd340 _lab1prob1.c. The C file is nothing more than pointers and pointer arithmetic.

   Within the C file there are a few questions that must be answered. Place the answers in a PDF file named cscd340 _lab1prob1.pdf. You submission will include the answers to the questions and screen captures verifying the information.

2. Provided is a C file named cscd340 _lab1prob2.c Within the C file are printf statements. The starting address for a,b, c, and i are provided below. For each printf statement explain what you believe will be displayed. I want an educated guess. Your output for this will be similar to the following:

   1: a = 0022FF00, b = 0022FEFC, c = 0022FEF8, i = 0022FEF4

   2: b = 002D0F98, c = FFFFFFFE

   Save these guess as a PDF in a file named cscd340_lab1prob2.pdf. I hope you can get #1 and #2 correct.

3. After you have made an educated guess for question 2, compile and execute the code. Copy your output and either verify you were correct or explain where you went wrong. Your output for this will be similar to the following:

   - Although the addresses are different I was correct in how many bytes were allocated between a, b, c and i.
   - Although the addresses are different I was off on my count with the heap. I calculated 12 bytes as allocated between b and c when in reality 24 bytes were allocated.

   Save this output as a PDF at the bottom of cscd340_lab1prob2.pdf.

   NOTE: it is important that you have a fundamental understanding of pointers and pointer arithmetic, especially the differences between the HEAP and the stack.

TO TURN IN

A zip containing:

- All PDF files

You will submit a zip file named your last name, first letter of your first name, lab1
(Example steinerslab1.zip)

NOTE: before you run your code you must first execute the command date; uname –a
The output of the date; uname –a command will be captured as part of every execution.