CSC 160

Homework 04 – Due Wednesday, November 27, 2019

In Listing 2.8.2, Plantz gives a C program that uses low-level character handling functions to prompt the user to enter a character, then echoes that character back to the screen. In Listing 10.4.2, he provides a translation of the C program into ARM assembly language. The file `prob01.s` in this folder is a modification of Listing 10.4.2. Examine it closely: there are hints!

1. Modify `prob01.s` so that it prompts the user to enter 4 characters (all at once, not four separate prompts) and then echoes all four characters back. It's OK if your program doesn't end gracefully (echoed characters running into the console prompt, etc.) Reread Section 2.8 to understand why this is happening.

   Note that you will need to download `prob01.s` to your Raspberry Pi to compile it. You cannot compile it on Cocalc, because the virtual machine instances that power your Cocalc projects do not have ARM architecture.

   To download the file, check its box in the Cocalc file browser and click the Share button in the top toolbar. Choose "public (unlisted)" sharing and copy the link that appears. Then, run the following command on your Pi, making sure to substitute the copied link (Shift+Ins to paste on Pi):

   ```
   curl -o prob01.s <paste-your-link-here>
   ```

2. More problems coming soon (not too many).