COSE321 Computer Systems Design

Assignment #7

No late turn-in accepted

You want to design a digital watch using **interrupt from the private timer**. Write the code with ARM assembly and C. Make your own decision on the language selection (Assembly and C). The followings are the coding requirements:

- Every second, the time information (**hour : minute : second**) should be sent to the UART terminal on PC.
 - The time starts from 00: 00: 00
 - Use some special ASCII characters to return back the cursor to the first column, when you display a new time. (That is, you don't want to use the next line to display a new time)
- The private timer interrupt should be used to inform each second to CPU.

What and How to submit:

- 1. Upload your assembly and C programs to Blackboard.
- 2. Upload video clip (3-min?) to YouTube and provide the link to Blackboard. Your video clip should have **at least** the following contents:
 - Your smiling face
 - Understandable explanation of your code
 - Demo on Zedboard

Note: This is an individual assignment. You are welcome to discuss, but DO NOT COPY solutions. If you are found to copy solutions from others or slightly modify the solutions from others, both of you will be given 0 credits.