CE433 Embedded Devices Spring 2023 final exam (100 points)
4:30 – 6:30 pm, Monday 5/1/2022
Open book, open notes, open internet
Submit the results (PDF) to yli@fortlewis.edu by 6:30 pm on 5/1

(Show your code that partially works if not fully functioning to receive partial credits)

1. Press one pushbutton to start the counting on one SSD module (at 1 Hz). It starts with 0 and counts to 9 and then restarts from 0. A second pushbutton is able to reset the counting to start with 0 at any time. Only use one SSD module. Show the code and the link to the video demo in your answer. (40 points)

2. Design a password checking module using assembly and the KCPSM6 soft core. LED[0] only turns on when the sw [7:0] input is 0xDE. LED[0] will be off for any other inputs. Show the code and the link to the video demo in your answer. (30 points)

3. Use assembly and the KCPSM6 softcore to show the number of pushbutton presses (any pushbutton on the board) on the LEDs (in binary form and only 8 bits). Show the code and the link to the video demo in your answer. (30 points).