Please print out this form (two-sided, if you can) and write your answers legibly in the spaces provided. If you can’t write legibly, type.

1. What value does the selekt signal have when the low-order hex digit of the program counter is written to the LCD display? Which hex digit of which register is being written when selekt=13?

2. Describe two ways in which the position of switch number 3 affects the operation of the console.
3. In the first simulation segment in the book, we can see button 1 being pressed. This triggers a memory write operation. Explain why this memory write is not performed immediately. Refer to the VHDL implementation when answering this question. Be specific.