Lab 6 Report: Chess Timer

In order to create a chess timer, I used a state machine with 4 states. The first is an idle state that wait for an input. It also displays the word go (which took me awhile even after reading the code to relies on wasn’t 60). Once a button is pressed it becomes the opposite players turn. Depending on which switch was pressed it switches to state 2 or 3. Player 1’s state resets the timer for player 2 and starts their timer. Player 2’s state does the same with the timers reversed. If the player hits their switch during while the code is at their state and the timer is still going it will switch to the other player’s state. If either timer ends it goes to the final state, the win state. This switches to display to announce the winner with done p1 or done p2 depending on which timer hit 0. There is also a reset button to switch back to the idle state. For some reason Quartus crashed way more than usual while working on this project slowing down my ability to complete it.

