

3.4

In lab 5, I initially just copied over the code for 3.1 and some elements of lab4. For example, I kept a global variable to track the value of the callback function of the current process. I also kept the variable for it in the process table. I made a new process table field to track the cputhr value being set by cbcpxregister. Then, I copied over my lab4 clkdisp.S code, and simply changed my placing of the global callback function address with xdetour. Then, in xdetour I call the function at the address of the callback function global variable. I also moved the statement where I set that value back to 0 into xdetour.

3.5

Similarly for the WALLX function, I added fields to the process table to represent the wallx callback function and wallx cpu threshold. I added an additional global variable named wallx_glbl and set it to the process table wallx callback value in clkhandler.c under the same conditions that I set the callback_glbl variable. I additionally added two other global variables as flags, use_callback and use_wallx, and in xdetour() I check these flags to determine which functions should be called.