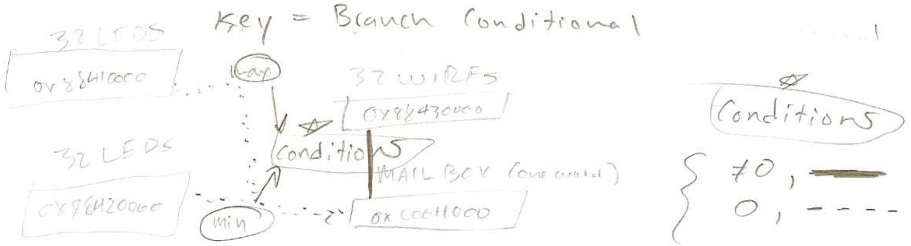
6. Another strange arithmetic/I/O question. Consider a system that has the following characteristics (that are germane to this question): GPIO module located at address `0x88410000` hooked to 32 LEDs (like in lab). GPIO module located at address `0x88420000` hooked to another 32 LEDs (like in lab). A third GPIO module located at `0x88430000` attached to 32 wires from unknown source. Mailbox assigned to address `0x00011000` (one word mailbox). The mailbox provides synchronization only. When the mailbox is non-zero, data is available on the third GPIO module. So, in the space below provide code to set up and do the following. When data is available, read the value and compare to maximum and minimum. Send maximum values to LEDs at first address. Send minimum value to second address. After 500 values, quit.



So the 32 wires send a binary digital logic signal to mail box which reads it and sends it to either 0x88410000 with the bit pattern or if it is a min it goes to 0x88420000 with bit pattern that is where the branch conditional is and repeat 500 times so there will be a counter

but, how?

I AM PRAYING FOR PARTIAL CREDIT THROUGHOUT THIS EXAM. yea, but essay answers to specific questions are not helping