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 `0x86410000` hooked to 32 LEDs (like in lab). GPIO module located at address `0x86420000` hooked to another 32 LEDs (like in lab). A third GPIO module located at `0x86430000` attached to 32 wires from unknown source. Mailbox assigned to address `0x00023200` (one word mailbox). The mailbox provides synchronization only. When the mailbox is non-zero, data is available on the wires of 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.

what is this

```
lis r2, 0x8641 ← first Leds
lis r3, 0x8642 ← Second Leds
lis r4, 0x8643 ← GPIO
lis r5, 0x00023200 @h
ori r5, r5, 0x00023200 @l
li r6, 500
li r7, 0
stw r7, 0(r2)
```

need more time this question is a beast

begin: (I would first load the value from GPIO to see if there is something waiting to transmit. If Do compare to see if value max or min and I would wait in this loop till I get a max, if max # then branch to Max subroutine)

```
b begin
```

max: (now once the max is found and recieved, I will start my counter in this loop to increment 500 values. You start your counter in this Max loop because you dont care about the min values. I will send the max values to the leds at r2, which their already defined as outputs, and then branch back to begin to see what next value is.)

```
bdnz max
```