```
a100
MOV DX,0120    ; establish base offset value of 120 in DX reg
MOV AX,[0200]  ; get stored signal value location 200 and put into reg AX
MOV BX,[0202]  ; get raw signal value from location 0202 put into reg BX
SUB AX,BX      ; compare both the raw signal and the stored signal and store in AX
JGE 0114       ; If the value is positive, jump to store the new adjusted signal
ADD AX,DX      ; If the value is neg add base offset (DX) store adjusted signal (AX)
JGE 0114       ; If the value is positive, jump (114) to store the new adjusted signal
JMP 010E       ; If the value is neg, jump back to add offset
MOV [0200],AX  ; store new adjusted signal value (AX) in memory location 0200
INT 20         ; end program
```