CS 301 Lab 8

Min-Max.s

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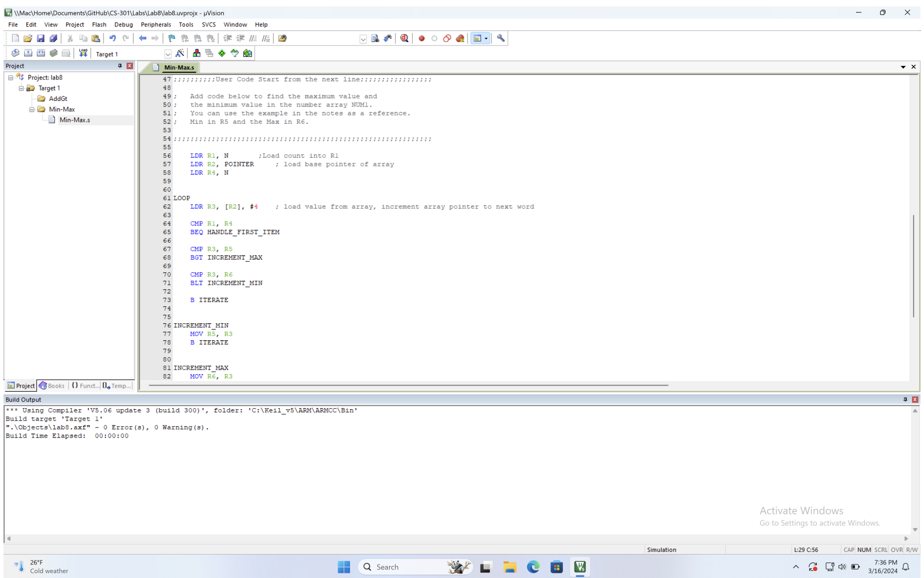
March 16th, 2024

MinMax.s source code

```
    LDR R1, N       ;Load count into R1
    LDR R2, POINTER     ; load base pointer of array
    LDR R4, N


LOOP
    LDR R3, [R2], #4    ; load value from array, increment array pointer to next word

    CMP R1, R4
    BEQ HANDLE_FIRST_ITEM

    CMP R3, R5
    BGT INCREMENT_MAX

    CMP R3, R6
    BLT INCREMENT_MIN

    B ITERATE


INCREMENT_MIN
    MOV R5, R3
    B ITERATE


INCREMENT_MAX
    MOV R6, R3
    B ITERATE


HANDLE_FIRST_ITEM
    MOV R5, R3
    MOV R6, R3
    B ITERATE


ITERATE
    SUBS R1, R1, #1     ; decrement counter
    BGT LOOP            ; keep looping until counter is zero
    B STOP


STOP
```

MinMax.s successful build



MinMax.s Min in R5 and Max in R6