ML Assignment

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Batch: S4 Comp

Assignment 3:

Code:

```
%macro output 2
        mov rax,1
        mov rdi,1
        mov rsi,%1
        mov rdx,%2
        syscall
%endmacro
        section .data
        msg1 db 10,13,"Maximum number is : " len1 equ $-msg1
        arr db 11h,3Ah,18h
        section .bss
        count resb 1
        maxi resb 4
section .text
global _start
_start:
        output msg1,len1
        mov byte[count],05
        mov rsi,arr
        mov al,0
        repeated:
        cmp al,[rsi]
        jnc skip
        mov al,[rsi]
        inc rsi
        dec byte[count] jnz repeated
skip:
        inc rsi
        dec byte[count] jnz repeated
        call display
exit:
        mov rax,60
        mov rbx,0
        syscall
display:
        mov bl,al
        mov rdi,maxi mov cx,02
```

```
up1:
        rol bl,04
        mov al,bl
        and al,0fh
        cmp al,09h
        jg add37
        add al,30h
        jmp skip1
        add37:add al,37h
        skip1:
        mov [rdi],al
        inc rdi
        dec cx
        jnz up1
        output maxi,4
        ret
```

Output: