**ML Assignment**

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**Roll No:** 2089

**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:**

