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**Batch: D**

**Assignment No.4**

**Write an X86/64 ALP to find the maximum of give byte/word /Double word/64bit Numbers.**

section .data

welmsg db 10, 'The maximum number in the array is: len1 equ $-

welmsg

array dQ 8abc123456781234h, 90ff123456781234h, 7700123456781234h arrcnt equ 3 section

.bss dispbuff resb

2 buf resb 16

%macro print

2 mov eax,4 mov ebx, 1 mov ecx, %1 mov edx, %2

int 0X80

%endmacro

section .text global \_start \_start:

print welmsg, len1 mov esi, array mov rax, [esi] mov ecx, arrcnt up1: add esi, 8 mov rbx, [esi] cmp rax, rbx jnc

skip

mov rax, rbx

mov edi, buf skip: loop up1 mov rbx, rax mov

edi, buf mov ecx, 16 dispup1: rol rbx, 4 mov dl, bl and dl, 0fh add dl, 30h cmp dl, 39h jbe dispskip1 add dl, 07h dispskip1: mov [edi], dl inc edi loop dispup1 print buf, 16 ret

Output

