SC165

Assignment No- 4 Write an X86/64 ALP to find the largest of given Byte/Word/Dword/64-bit numbers

```
%macro write 2
mov rax,1
mov rdi,1
mov rsi,%1
mov rdx,%2
syscall
%endmacro

section .data
array db 0Ah,1Ah,88h,98h,97h

section .bss
result resb 16
cnt resb 1

section .text
global _start
_start:
mov rsi,array
mov byte[cnt],5
mov al,0

l1:cmp al,[rsi]
jnc lp
xchg al,[rsi]

lp: inc rsi
dec byte[cnt]
jnz l1

call display

mov rax,60
mov rdi,0
syscall


display:
```

```
mov rbx,rax
mov cx,16
mov edi,result

up:
rol rbx,4
mov al,bl
and al,0FH
cmp al,09H
jg add_37
add al,30H
jmp skip

add_37:
add al,37H

skip:
mov[edi],al
inc edi
dec cx
jnz up
write result,16
ret
```