

Assignment No.3

Write an X86/64 ALP to accept a string and to display its length.

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

```
section .data
msg1 db "Enter your string:",0Ah
msglen equ $-msg1
```

```
section .bss
str1 resb 200
result resb 16
section .text
```

```
global _start
_start:
mov rax,1
mov rdi,1
mov rsi,msg1
mov rdx,msglen
syscall
mov rax,0
mov rdi,0
mov rdi,0
mov rsi,str1
mov rdx,200
syscall
dec rax
mov rbx,rax
call display
mov rax,60
mov rdi,0
syscall
```

```
display:
mov rdi,result
mov cx,16
up1
rol rbx,04
mov al,bl
```

```
and al,0fh  
cmp al,09h  
jg add_37  
add al,30h  
jmp skip
```

```
add_37:  
add al,37h
```

```
skip:  
mov[rdi],al  
inc rdi  
dec cx  
jnz up1  
disp result,16  
ret
```