P-02

Login to ADA Via SSH

Code Execution With VIM

```
. .
                              gwitt@ada:~/P02
%macro write_string 2
        mov
              eax, 4
              ebx, 1
        mov
        mov
              ecx, %1
              edx, %2
        mov
        int
              80h
   %endmacro
   %macro exitsys 1
        mov eax,%1
                                 ;system call number (sys_exit)
        int 0x80
                                 ;call kernel
   %endmacro
                .text
section
   global _start
                                 ; must be declared for using gcc
                                 ;tell linker entry point
_start:
   write_string msg1, len1
   Write_string msg2, len2
   exitsys 1
section
                .data
               'Greg Witt',0xA,0xD
msq1 db
len1 equ $ - msg1
msg2 db __DATE__,
                   0xA,0xD
len2 equ $- msg2
"P02.nasm" 25L, 571C
                                                   18,4
                                                                 All
```

Compiled Code via Commands Listed Terminated SSH Connection

```
witt@ada:~/P02

→ ~ ssh gwitt@ada.ius.edu
gwitt@ada.ius.edu's password:
Last login: Sun Sep 29 17:34:13 2019 from cpe-74-139-255-57.kya.res.
rr.com
[gwitt@ada ~]$ cd P02/
[gwitt@ada P02]$ ls
a.out P02.nasm P02.0
[gwitt@ada P02]$ nasm -felf64 P02.nasm && ld P02.0
[gwitt@ada P02]$ ./a.out
Greg Witt
2019-09-29
[gwitt@ada P02]$
```

Source Code

```
%macro write_string 2

mov eax, 4

mov ebx, 1

mov ecx, %1

mov edx, %2

int 80h
```

%endmacro

```
%macro exitsys 1
                      ;system call number (sys_exit)
    mov eax,%1
    int 0x80
                    ;call kernel
 %endmacro
section
           .text
 global _start
                     ;must be declared for using gcc
                  ;tell linker entry point
_start:
 write_string msg1, len1
 write_string msg2, len2
 exitsys 1
section
           .data
msg1 db 'Greg Witt',0xA,0xD
len1 equ $ - msg1
msg2 db _DATE_, 0xA,0xD
len2 equ $- msg2
```

Resulting Code

[gwitt@ada P02]\$./a.out

Greg Witt

2019-09-29

[gwitt@ada P02]\$