## **P-04**

## Login to ADA Via SSH

## Code Execution With VIM

```
. . .
                               gwitt@ada:~/P04
extern printf
                       ;c function to call
SECTION .data
n1: dq 10
n2: dq -5
n3: dq 0
fmt: db "Resulting Number = %1d", 10, 0
SECTION .text
        global main
main:
        mov rax, [n1]
        add rax, [n2]
        add rax, [n3]
        mov rdi, fmt
        mov rsi, rax
        mov rax, 0
        call printf
                                 ;c function
                                 ; exit
        ret
"P04.nasm" 21L, 285C
                                                    6,8
                                                                  All
```

```
gwitt@ada:~/P04
"-f;clfunction@tocall
extern printf2
SECTION .data
n1: dq 10
n2: dq 5
n3: dq 0
fmt: db "Resulting Number = %1d", 10, 0
SECTION .text
        global main
main:
        mov rax, [n1]
        add rax, [n2]
        add rax, [n3]
        mov rdi, fmt
        mov rsi, rax
        mov rax, 0
                                ;c function
        call printf
                                ; exit
        ret
"P04.nasm" 21L, 284C
                                                                 All
                                                  5,8
```

```
.
                              gwitt@ada:~/P04
extern printf ;c function to call
SECTION .data
n1: dq 0
n2: dq 5
n3: dq 0
fmt: db "Resulting Number = %1d", 10, 0
SECTION .text
        global main
main:
        mov rax, [n1]
        add rax, [n2] add rax, [n3]
        mov rdi, fmt
        mov rsi, rax
        mov rax, 0
                             ;c function
        call printf
                                ; exit
        ret
"P04.nasm" 21L, 283C
                                                   4,1
                                                                 All
```

## Compiled Code via Commands Listed Terminated SSH Connection

```
. . .
                              gwitt@ada:~/P04
[gwitt@ada P04]$ vim P04.nasm
[gwitt@ada P04]$ nasm -f elf64 P04.nasm
[gwitt@ada P04]$ gcc P04.o
[gwitt@ada P04]$ ./a.out
Resulting Number = 5
[gwitt@ada P04]$ vim P04.nasm
[gwitt@ada P04]$ nasm -f elf64 P04.nasm
[gwitt@ada P04]$ gcc P04.0
[gwitt@ada P04]$ ./a.out
Resulting Number = 15
[gwitt@ada P04]$ vim P04.nasm
[gwitt@ada P04]$ nasm -f elf64 P04.nasm
[gwitt@ada P04]$ gcc P04.0
[gwitt@ada P04]$ ./a.out
Resulting Number = 5
[gwitt@ada P04]$
```