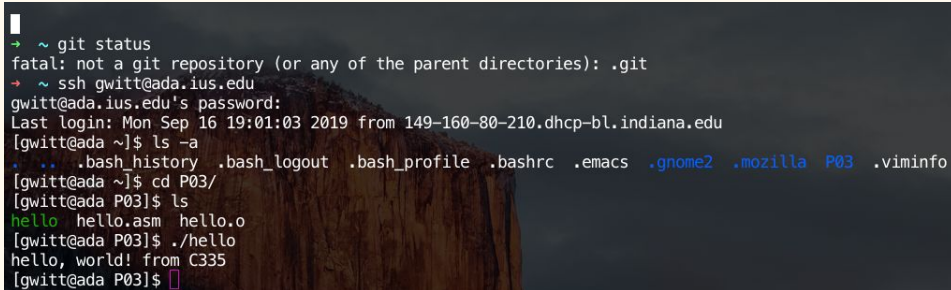


P-03

Login to ADA Via SSH

A terminal window with a dark background and a mountain landscape image. The terminal shows a sequence of commands and their outputs. The user starts in their home directory, attempts a git status check (which fails), then uses ssh to connect to gwitt@ada.ius.edu. After a password prompt and a login message, the user runs 'ls -a' showing hidden files. Then they run 'cd P03/' and 'ls', which shows 'hello', 'hello.asm', and 'hello.o'. Finally, they run './hello', which outputs 'hello, world! from C335'.

```
[~]  
-> ~ git status  
fatal: not a git repository (or any of the parent directories): .git  
-> ~ ssh gwitt@ada.ius.edu  
gwitt@ada.ius.edu's password:  
Last login: Mon Sep 16 19:01:03 2019 from 149-160-80-210.dhcp-bl.indiana.edu  
[gwitt@ada ~]$ ls -a  
.. .bash_history .bash_logout .bash_profile .bashrc .emacs .gnome2 .mozilla P03 .viminfo  
[gwitt@ada ~]$ cd P03/  
[gwitt@ada P03]$ ls  
hello hello.asm hello.o  
[gwitt@ada P03]$ ./hello  
hello, world! from C335  
[gwitt@ada P03]$
```

Code Execution With VIM

```

section .data
message: db "hello, world! from C335",10
section .text
_start: mov rax, 1 ; system call number
        mov rdi, 1 ; arg #1 in rdi, where to write (descriptor)
        mov rsi, message ; arg #2 in rsi, start of string
        mov rdx, 24 ; arg #3 in rdx, how many bytes to write
        syscall
        mov rax, 60 ; exit syscall
        xor rdi, rdi
        syscall

```

Compiled Code via Commands Listed Terminated SSH Connection

```

[lgwitt@ada home]$ exit
logout
Connection to ada.ius.edu closed.
→ ~
        syscall
        mov rax, 60 ; exit syscall
        xor rdi, rdi
        syscall

```