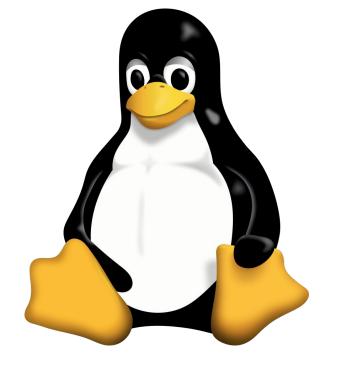
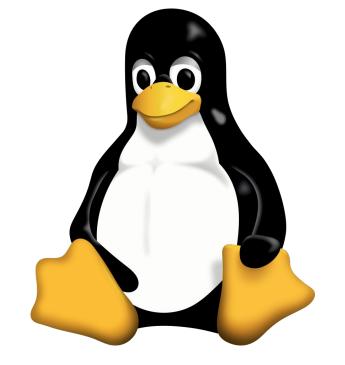
## ssh

Adapted from materials from Dr. Carrier

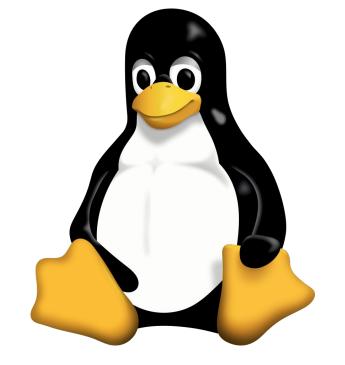




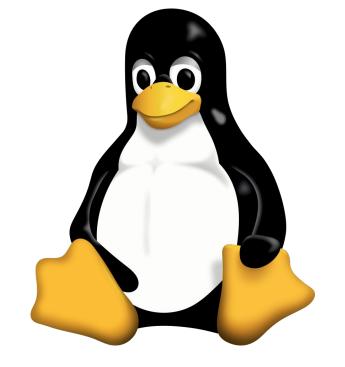
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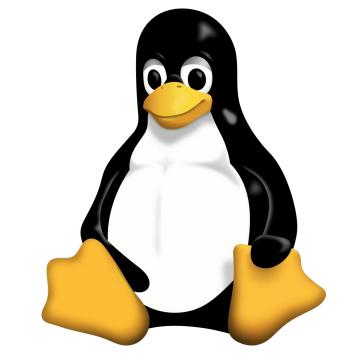
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- Linux is technically a *kernel*

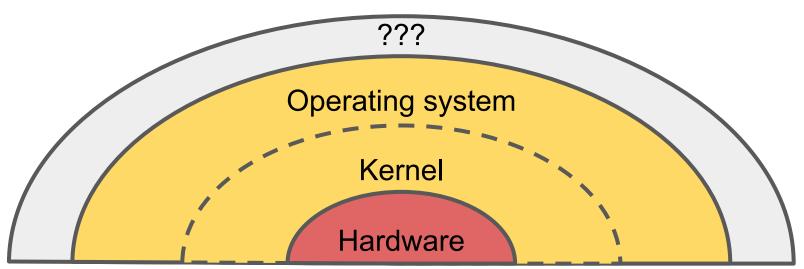


- It's not straightforward!
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  - Kernel core of the operating system

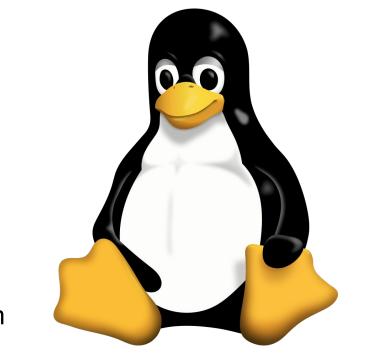


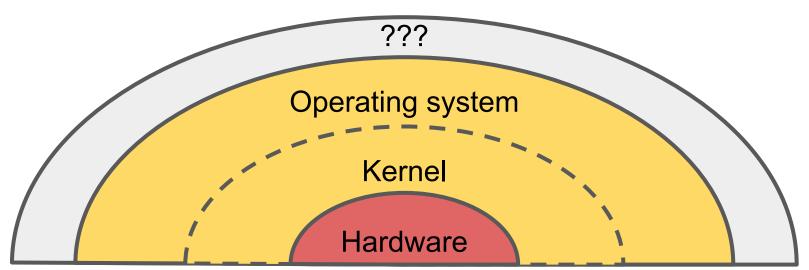
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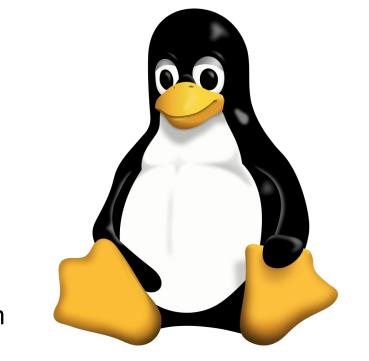
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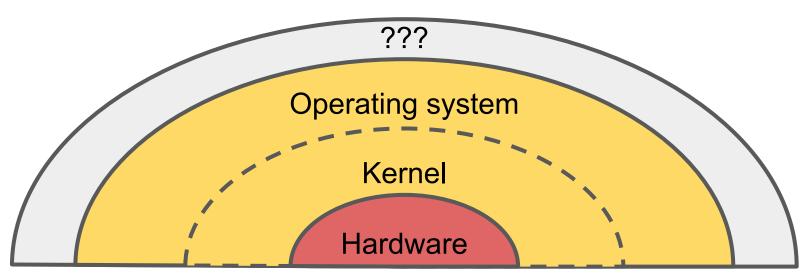




Many operating systems use the Linux kernel!

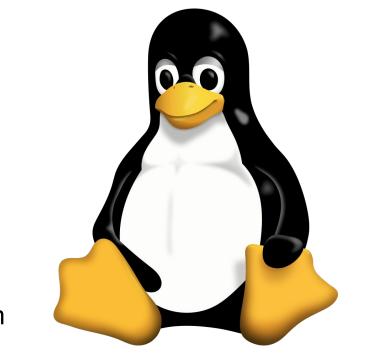
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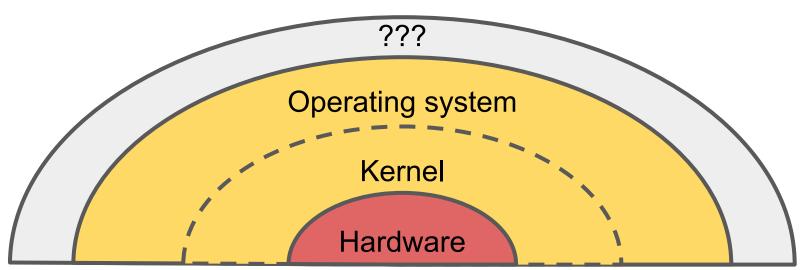




- Many operating systems use the Linux kernel!
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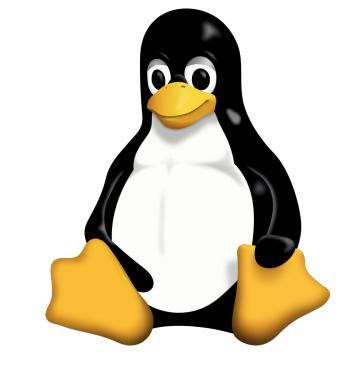
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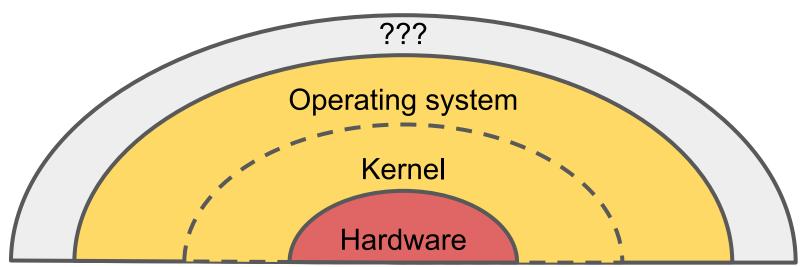




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- Many operating systems use the Linux kernel!
  - Ubuntu (what's on the EOS machines)
  - Arch, Kali, Gentoo, Fedora, Manjaro, etc.
- Confusingly, these OS's are often referred to as "Linux"

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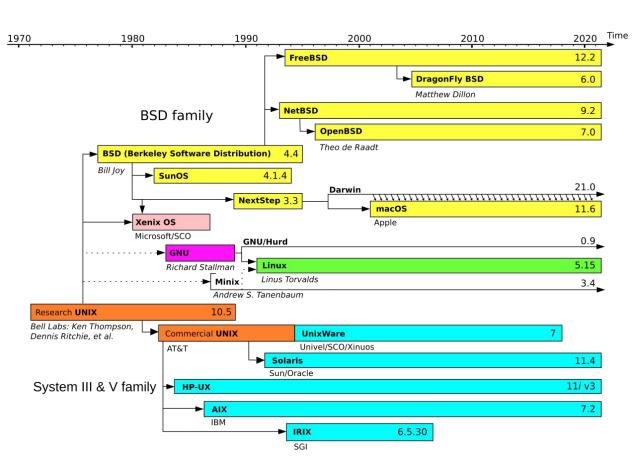
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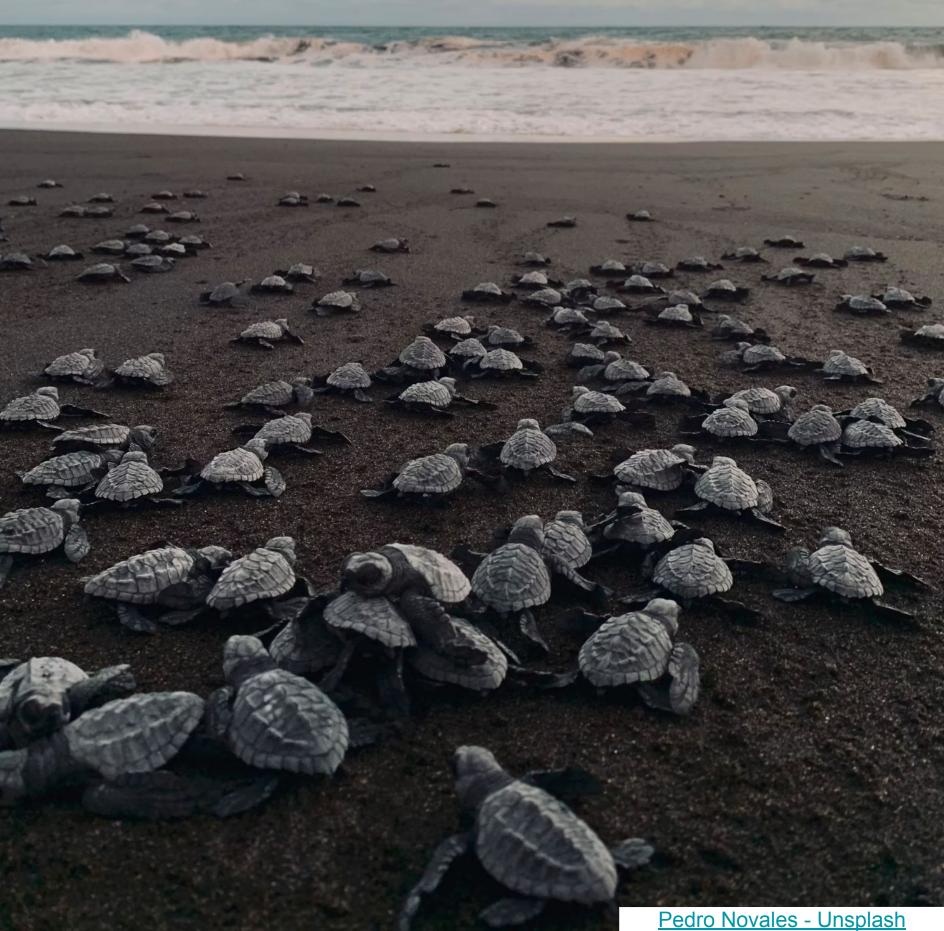
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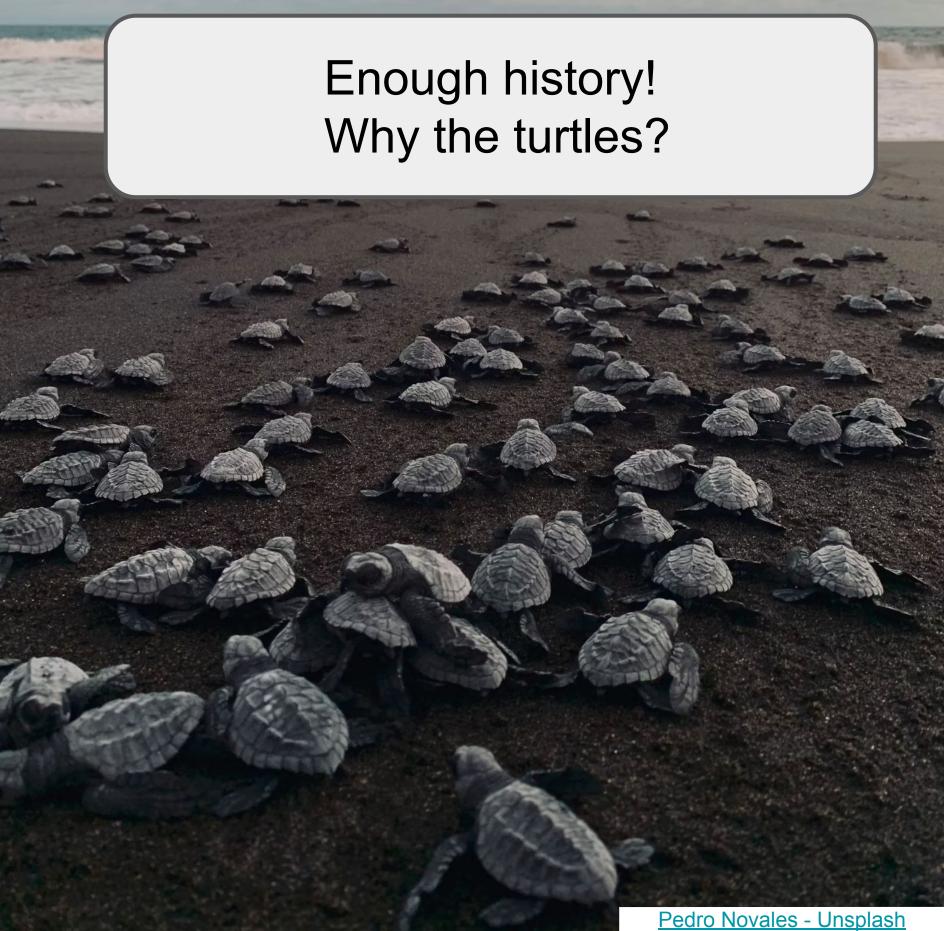
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  - However, we have WSL!
    - Windows Subsystem for Linux
    - If you are on Windows, you need to install WSL
      - Information on Piazza!





#### What is this called?

```
austin@pop-os:~

Q = - + 
austin@pop-os:~

python3 main.py
```

#### What is this called?

```
austin@pop-os:- Q = - + ②

austin@pop-os:-$ python3 main.py
```

A terminal

## But what's going on in here?

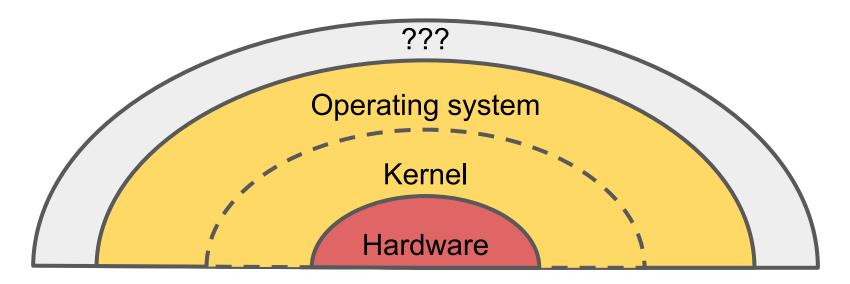


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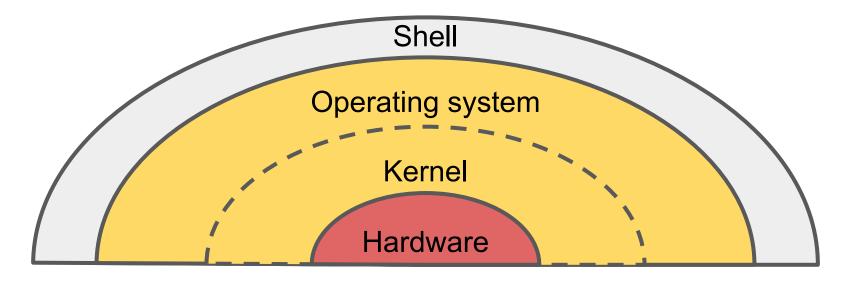


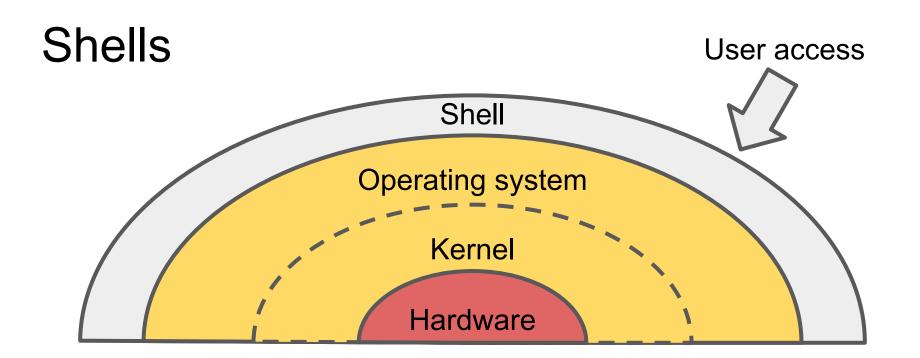
We are running a **shell** 

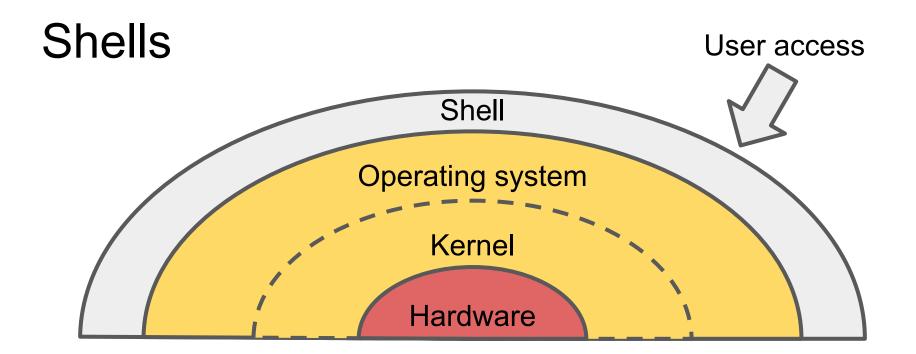
## Shells



## Shells







- We can check what shell we're using with echo \$0

ssh - Secure SHell

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ssh allows us to securely connect to a remote shell

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You can log onto different machines in the lab by changing this number!

Why would I use a shell or ssh?