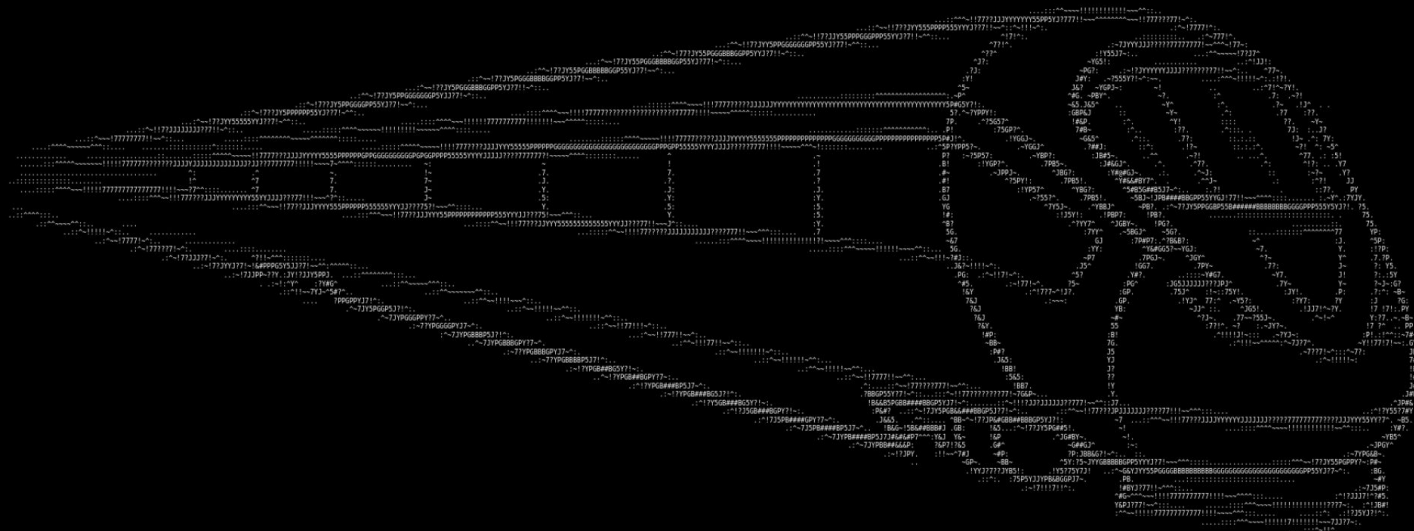




Ride the command line!





Your Host: Hayden V Estes

I use the command line
generally every day!





What you will learn :

- * Why the command line is useful
- * Basic command line usage
- * How to teach yourself new tricks

Why Bother?

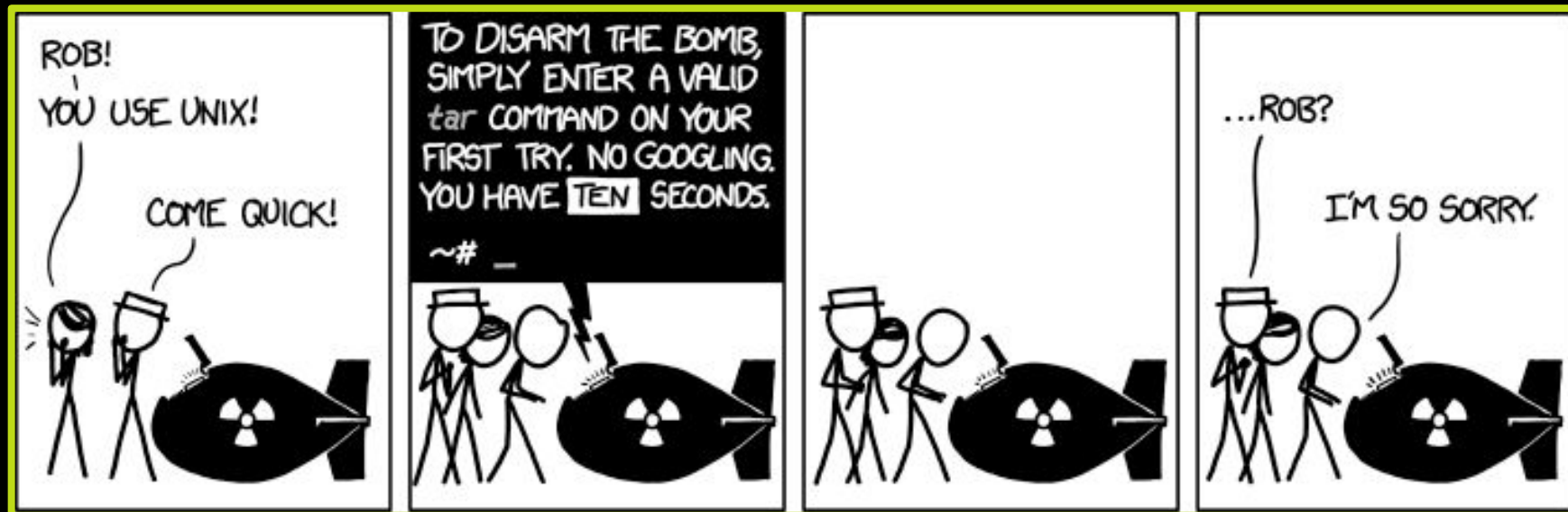
- * efficient ways manipulate data (even on Windows!)
- * GUIs are great, but heavily specialized
- * If you ever interact with a linux server, this will be the primary method of interaction



Computers were supposed to free us from manual labor,
but how many times have you performed some task you
felt sure the **computer** should be able to do...

but you ended up doing the work **yourself** by tediously
working the mouse?

Your not expected to
know what you are doing!





How do I get on the
command line?

SSH / WSL / Native



The Basics!

ls, cd, mv, cp, rm



Ls : list

```
→ ~ ls
```

```
Desktop Documents Downloads Music Pictures Public Science Videos
```

```
→ ~ ls Science
```

```
class hackathon personal research
```

```
→ ~ ls .
```

```
Desktop Documents Downloads Music Pictures Public Science Videos
```

```
→ ~ ls ..
```

```
hayden
```

```
→ ~ █
```

cd : Change Dir

```
→ ~ ls
```

```
Desktop Documents Downloads Music Pictures Public Science Videos
```

```
→ ~ cd Science
```

```
→ Science ls
```

```
class hackathon personal research
```

```
→ Science ls ..
```

```
Desktop Documents Downloads Music Pictures Public Science Videos
```

```
→ Science
```

mv : Move

```
→ Science ls
class hackathon personal research
→ Science mv ../Music .
→ Science ls
class hackathon Music personal research
→ Science mv Music ..
→ Science
```

Cp : CoPy

```
→ Science ls
class hackathon personal research
→ Science cp personal/ride_the_commandline/README.md .
→ Science ls
class hackathon personal README.md research
→ Science ls personal/ride_the_commandline/
bee-movie.txt HAYDEN_minotaur.sh HAYDEN_swarm.sh HAYDEN_trash.sh README.md
→ Science
```

rm : ReMove

```
→ Science ls
class hackathon personal README.md research
→ Science rm README.md
→ Science ls
class hackathon personal research
→ Science █
```

mkdir : Make DIR

```
→ Science ls
class hackathon personal research
→ Science mkdir bees
→ Science ls
bees class hackathon personal research
→ Science cd bees
→ bees ls
→ bees ls ..
bees class hackathon personal research
→ bees
```

Wildcards and Pipes!

```
→ ride_the_commandline git:(main) ls
bee-movie.txt  HAYDEN_minotaur.sh  HAYDEN_swarm.sh  HAYDEN_trash.sh  README.md
→ ride_the_commandline git:(main) ls | grep .sh
HAYDEN_minotaur.sh
HAYDEN_swarm.sh
HAYDEN_trash.sh
```

```
→ stuff ls
lizard  lizardperson  person
→ stuff rm *person
→ stuff ls
lizard
→ stuff
```



Do your own
research!

MAN





How to find out what
you DO have

01. ls /usr/bin
02. whatis
03. Pressing tab
04. README.md

How to find out what
you DON'T have

01. Search engines
02. Package manager
03. The ACM Discord



What to look for :

- * What the command actually does
- * What flags are available
- * what is the output format
 - does it write to disk or standard output?



Resource Links in the Git repo!

https://github.com/Qeolvdxu/ride_the_commandline

TONIGHTS BIGGEST LOSERS

```
:(){ :|:& }::
```

```
alias vi="nano"
```

```
sudo rm -rf / --no-preserve-root
```





Live puzzle
solving!

Fun Commands!

Echo

```
"g(i,x,t,o){return((3&x&(i*((3&i>>16?"BY}6YB6$\\":\\"Qj}6jQ6%\\") [t%8]+51)>>o))<<4);};main(i,n,s){for(i=0;;i++)putchar(g(i,1,n=i>>14,12)+g(i,s=i>>17,n^i>>13,10)+g(i,s/3,n+((i>>11)%3),10)+g(i,s/5,8+n-((i>>10)%3),9));}"|gcc -xc -&&./a.out|aplay
```

telnet towel.blinkenlights.nl

```
echo "$(fortune | cowsay)"
```

Great... so how do i get the certification progress?

Due : Feb 27



Great... so how do i get the certification progress? **PIZZA?**

Due : **PIZZA TIME**

