

# Computer accounts: HW 1(i)

## Computer accounts:

We are going to work on

- ✓ Hummingbird – `hb.ucsc.edu`
- ✓ Lux – `lux.ucsc.edu`

Your UCSC accounts should let you access these machines already0

The Lux account is supposed to be set up next week (Week 2) so the following exercise may not be able to be completed until later in the week

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## HOMEWORK 1 (i):

Check that you can log in to these two machines!

Login to the computers, type “whoami” and screenshot the window.

Add these screenshots to a single PDF that you are going to submit to Canvas

Note that you already need some skills to do this!:

1. Access to a computer (laptop, computer lab, ...)
2. Access to `ssh` client on that computer
  - ✓ Terminal and command line “ssh” on Mac
  - ✓ PuTTY or similar on Windows
3. Knowledge of use of `ssh` (`ssh -Y <username>@<machinename>`)
4. A little bit of Unix/Linux to move around if you want ...
5. Type “`whoami`” and screenshot the window!
6. Submit the screenshot to Canvas

# HW 1 (ii)

Top 500: Pick a computer and describe it. Specify at least

- Name
- Location
- No. of nodes, No. of processors per node => Total no. of processors
- Clock speed of chips
- Flops/processor and Total flops
- Memory per processor and Total memory
- Architecture type (SIMD,MIMD, ...)
- Interconnect type
- Use?
- Anything special?

**Idea: Get you used to the vocabulary of machine architectures**

PS. All students should pick a unique machine! How do you do this efficiently?  
Oooohhhh ... !!

## HW 1 (iii)

Tell me about something in your life experience that involves concurrency/parallelism!

# HW 1: Recap

Create a single PDF called `<your_name>_HW1.pdf` and submit it to the CANVAS assignment HW1, that contains:

- (i) Screen shots of `whoami` that prove that you can get on machines:  
`hb.ucsc.edu`, `lux.ucsc.edu`
- (ii) A description of your `unique` Top500 machine
- (iii) A description of something in your life experience that involves concurrency/parallelism (1 paragraph)!

You should be able to use a phone app like CamScanner or IOS Notes to make PDFs if necessary.