Unix & connecting to a supercomputer

Connect to ocean

- Open cocalc
- Go to your folder in StudentFolders
- Open your .term file
- ssh ws2021@ocean.fullerton.edu
- Passphrase: see zoom chat

UNIX command line crash course activity

Commands to know

- Is, pwd, cd, mkdir
- ./, ../, paths
- cp, mv, rm, rmdir
- cat, less
- nano
- whoami, date, ...

- Play along with me...
 - mkdir YOURNAME and cd into it
 - Navigate file system: Is, pwd, cd, ./ and ../
 - Use nano to write a text file
 - Copy, rename, remove a file
 - Cat, less, more, head, tail
 - > to redirect output
 - Grab bag: whoami, date, grep, sed, zip...

Start your own simulation of merging black holes

- Start from rest, collide head-on
- Choose mass ratio between 1 and 1.2
- Choose spin = 0,0,0 on the smaller black hole (B)
- Choose spin = 0,0,X on the larger black hole (A), where X is between 0 and 0.2
- Set Omega0 = 0, adot0=0, D0=35

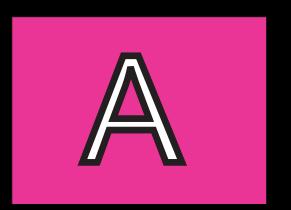
```
cd $HOME
cd StudentFolders
cd YOURNAME # replace YOURNAME with the name of your folder
mkdir BlackHoleMerger
cd BlackHoleMerger
source $HOME/spec/MakefileRules/this_machine.env
PrepareID -t bbh2 -no-reduce-ecc
nano Params.input
\# Omega0 = 0.0
\# adot0 = 0.0
\# D0 = 35.0
# MassRatio = 1.2 #or 1.0, or something in between
# @SpinA = (0.0, 0.0, 0.0) #can make 1 component up to 0.2 instead
of 0.1
\# (0.0, 0.0, 0.0)
nano Ev/DoMultipleRuns.input
\# MaxLev = 1
```

./StartJob.sh

• I want to list the files in the directory I'm in. Which command would I use?



 Which command edits the file "Hello.txt" in the directory I am currently in?



nano ./Hello.txt



nano ../Hello.txt

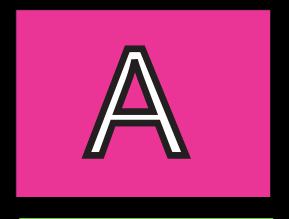


cat ./Hello.txt



cat ../Hello.txt

 Which command makes a new directory called "TestFolder"?



Is TestFolder



mkdir TestFolder



cd TestFolder



cp TestFolder

 Which command removes everything in the current directory, which is not empty?



rmdir ./



rm -r ./*



rm -r . /*



More than one of these will work

qstat qstat -f YOURJOBNUMBER ShowQueue