

Lab 2 (First in person)

SSH into RON

Username = `student UNH id`

Password = `id+ zfG1`

► *example*

- `kcd1021`
- `kcd1021zfG1`

Example login

```
ssh kcd1021@ron.sr.unh.edu
```

Students are required to change their password after first login

SSH Key

- VSCode remote work site [see here](#).
- Terminal to generate ssh key

```
cd ~/.ssh  
ssh-keygen -t ed25519 -b 4096  
chmod 400 ~/.ssh/id_ed25519
```

- Next, share the public key with the Ron server

```
ssh-copy-id username@ron.sr.unh.edu
```

GitHub

- Clone their forked repos onto Ron

```
git clone https://github.com/<username>/<repo>
```

- Lab notebook

- VSCode: 'file' → 'new text file'. Save this empty file as 'lastname_firstname.md'. (replacing with your last/firstname).
- nano:

```
nano lastname_firstname.md
```

remind students importance of good notes, they will be graded, and can/will be used throughout classes

- Have students use VSCode's built in git source control to upload to github, and have students check that the changes were made
 - you can use the **source control** tab in VS Code
 - or through the terminal

```
git add lastname_firstname.md
git commit -m "update notes"
git push
```

- through terminal may cause some issues
 - github keys: developer options -> classic
 - insert as password when prompted

Learning Git fetch/ merge

- Save your VS Code workspace in your repo on RON. Go to 'File' → 'Save Workspace As' and save it to the 'gen711-811' folder on RON. This way, you can load this workspace each week to pick up where you left off.
- To get new course files added to your repository later, you will need to add the original repository (the one you forked) as a 'remote'
 - [help](#)
 - [and more help](#)
- To add updates from the gen711-811 repo:

```
cd gen711-811
git remote add upstream https://github.com/jthmiller/gen711-811.git
git fetch upstream
git merge upstream/master master
```

- Note, git merge is like "git pull" which is fetch + merge. Or, better, you can replay your local work on top of the fetched branch like a "git pull --rebase"

```
git rebase upstream/master
```

Optional Portion of Lab

- if we somehow make it through ssh and github keys

► *full terminal*

- nano
- tmux

```
tmux new -s "session name"  
tmux attach -t "session name"
```

- command/b d: exits tmux session
- command/b %: creates horizontal pane
- command/b ": creates vertical pane
- command/b x: deletes current pane
- command/b arrow key: change current pane to direction of arrow

► *changing PS1*

- PS1 is **Prompt String 1**
- allows you to change what you see in the command prompt
- temporary

```
PS1="\u001b[33;41m\[\[\[m\]\[\[32m\]\u\[\[m\]\[\[36m\]\@\[\[m\]\[\[34m\]\h\[\[m\]\[\[33;41m\]\]\[\[m\]\ \u263a "
```

- add **export** out front to make it permanent

[details on what does what](#)

► *VS Code Extensions*

- important ones
 - Dracula Official
 - Indent Rainbow
 - Rainbow CSV
- silly ones
 - vscode-pets