

# CME 211 - 101

BECAUSE WORKING WITH NANO IS NOT THE WAY TO DO IT

OR VS CODE IN LOCAL

OR COLAB

“WHY DO I HAVE TO GO THROUGH THE TROUBLE  
TO DO ALL THAT?”

- BECAUSE IN REAL LIFE YOU WILL OFTEN HAVE WEIRD ENVIRONMENTS.
- BECAUSE SOFTWARE ENGINEERING IS ALSO ABOUT HOW AND WHERE YOU RUN YOUR CODE.
- ~~BECAUSE WE TOLD YOU SO~~

# OUR ENVIRONMENT

- RICE (UBUNTU LINUX, 16.04, PYTHON 3.5)
- No GUI
- NO EASY WAY TO INSTALL / UPDATE SOFTWARE
- BUT WE HAVE SSH



# CODING WITH SSH – BAD IDEAS

- CODING IN LOCAL AND THEN SENDING THE FILES VIA SCP
  - NO GUARANTY YOU HAVE THE RIGHT ENVIRONMENT.
  - IN REAL LIFE SOMETIMES YOU CAN'T EVEN DO IT LOCALLY – LEARN NOW.
- USING NANO
  - LACKS ADVANCED FUNCTIONALITY AND CANNOT BE ENHANCED
  - YOU WILL BE VERY SLOW.
  - CAN BE USED FOR VERY BASIC STUFF.

# CODING WITH SSH – BETTER IDEAS

- USING VIM OR EMACS
  - VIM OR EMACS ARE ALWAYS AVAILABLE, ESPECIALLY VIM.
  - GOLDEN STANDARD OF THE SWE COMMUNITY SINCE BEFORE YOU WERE BORN.
  - EXTENSIONS
- USING VS CODE
  - FREE, (ALMOST) OPEN SOURCE, USABLE FOR ALL LANGUAGES, GREAT SUPPORT, EXTENSIONS...
  - BECOMING / HAS BECOME A STANDARD.
  - LESS STEEP LEARNING CURVE, BUT STILL VERY POWERFUL.



“BUT, MR TA, VS CODE HAS A GUI, HOW DO I RUN IT ON RICE?”

- RUN IN LOCAL AND SCP THE FILES ONCE YOU'RE DONE.
  - No
- LEVERAGE VS CODE GREAT EXTENSION COMMUNITY TO GET IT TO RUN **ON RICE**.

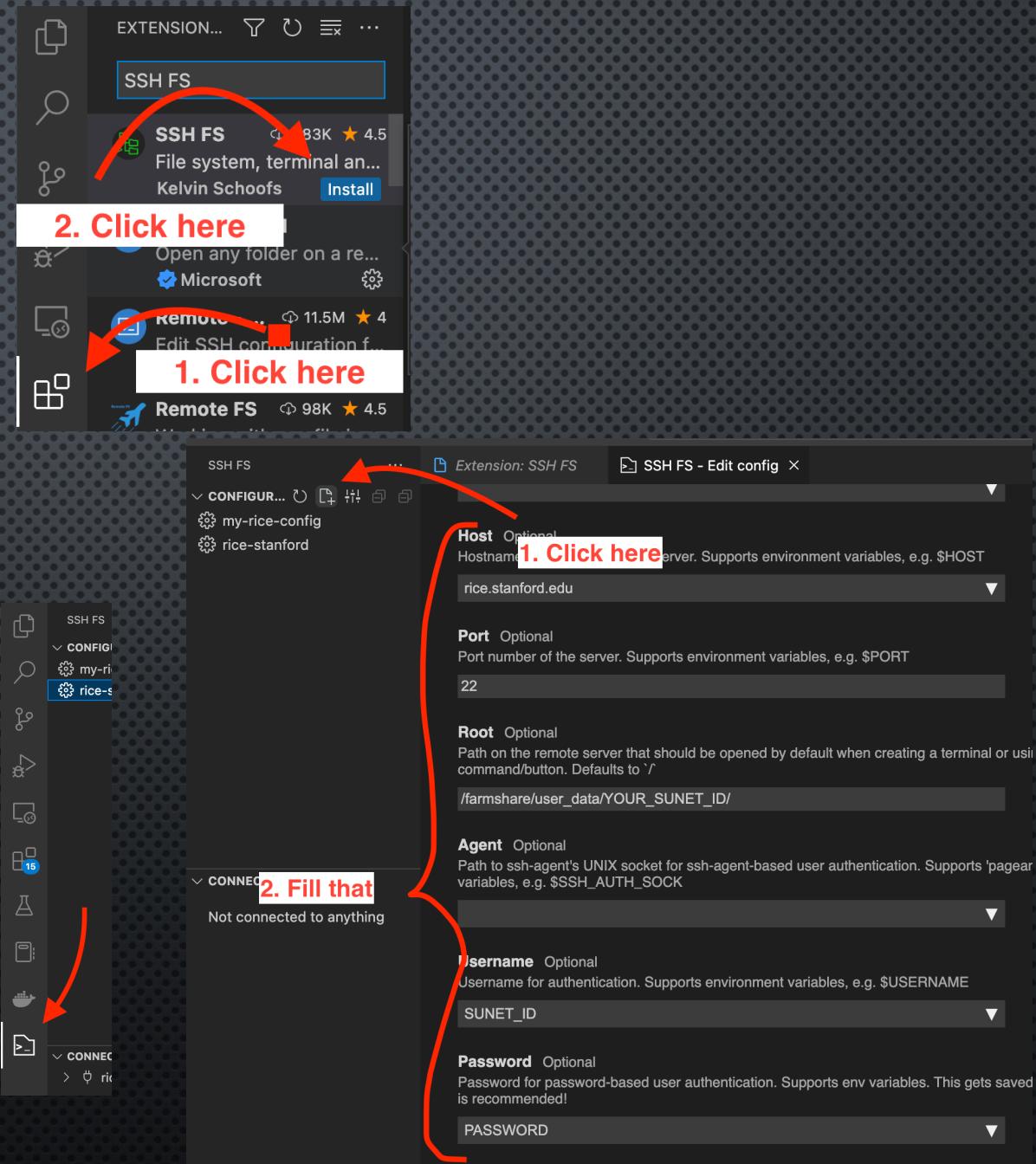
IT'S TUTORIAL TIME



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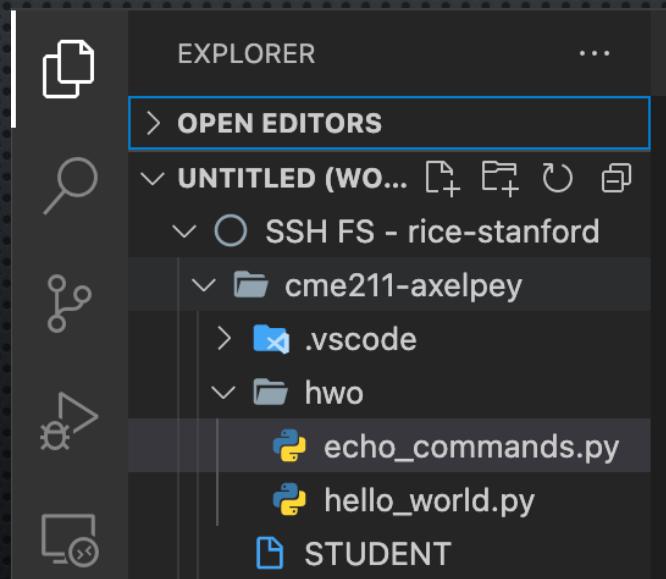
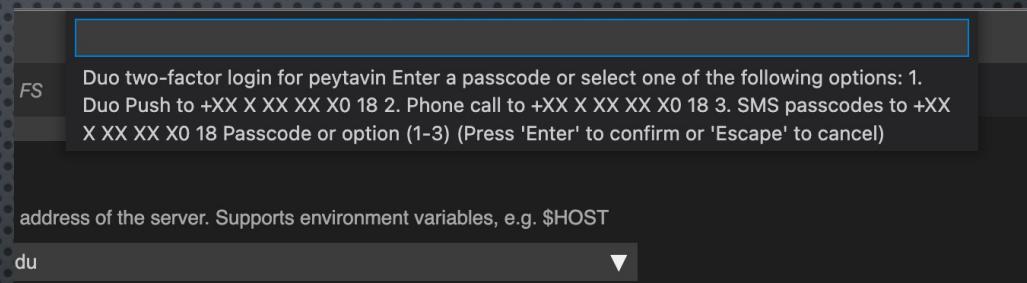
# SUMMARY

- INSTALL THE SSH FS EXTENSION



# SUMMARY

- OPEN TERMINAL AND CONNECTION. ENTER DUO 2FA ONCE OR TWICE.



- YOU'RE GOOD TO GO!

# OTHER METHODS

- ANOTHER EXTENSION + SOME SSH CONFIG WORK
  - WORKS ON MACOS AND LINUX.
  - CAN USE MORE VS CODE EXTENSIONS
- BOTH METHODS AVAILABLE IN MORE DETAILS ON THE FAQ (SEE SYLLABUS ON GITHUB).
- BIG SHOUTOUT TO CARLOS.

IN THE END, WHAT MATTERS IS THAT YOU  
HAVE A **COMFORTABLE** SETUP

JULIUS CAESAR – 45 B.C