CS0449: Introduction to System Software | SHINWOO KIM

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All Sections

with materials from former CS 0449
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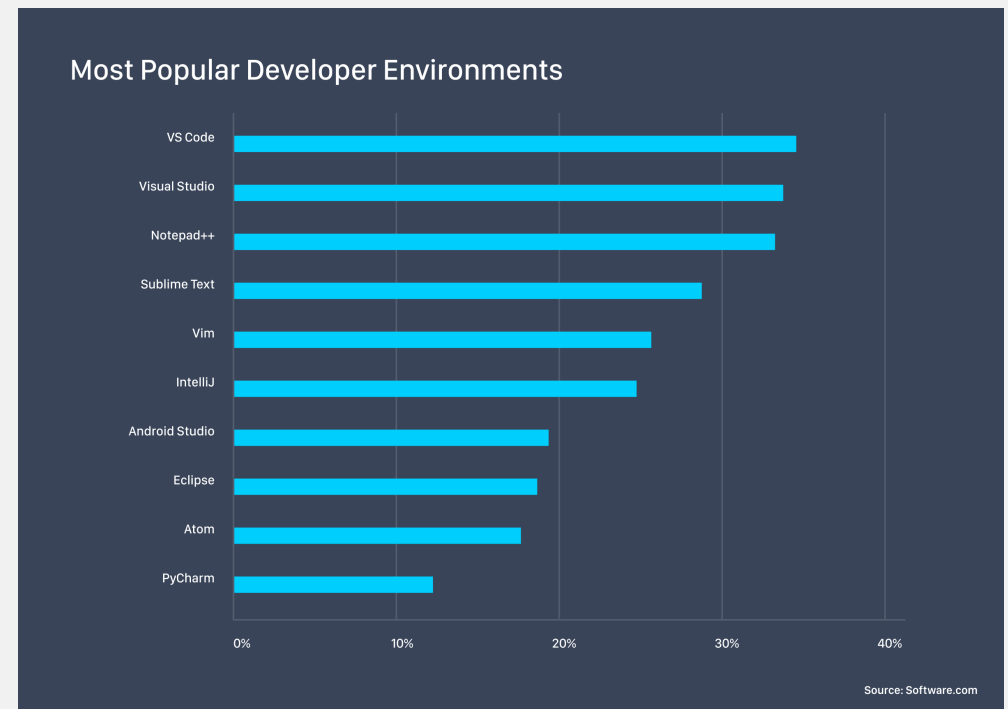## Connecting to Thoth via VS Code

➤ Installing VS Code

➤ Installing the Remote Development Extension

➤ **DISABLING FLOCK, C/C++ Extension**

➤ Connecting to Thoth

➤ Debugging VS Code/Thoth connections

We need for a more robust text editor…

- In Lab0, you most likely used a terminal-based text editor, such as Vim, Nano, and Emacs, to write a simple *"Hello World!"* program on Thoth.

- While those programs are great (they really are), once your projects become larger, you're going to want a more robust text editor…
  - like Visual Studio Code!

- VS Code is a source-code editor made by Microsoft…
  - and it's one of the most popular code editors (at least for now)

- VS Code is great because:
  - it supports many languages
  - it's cross-platform
  - has huge library of extensions
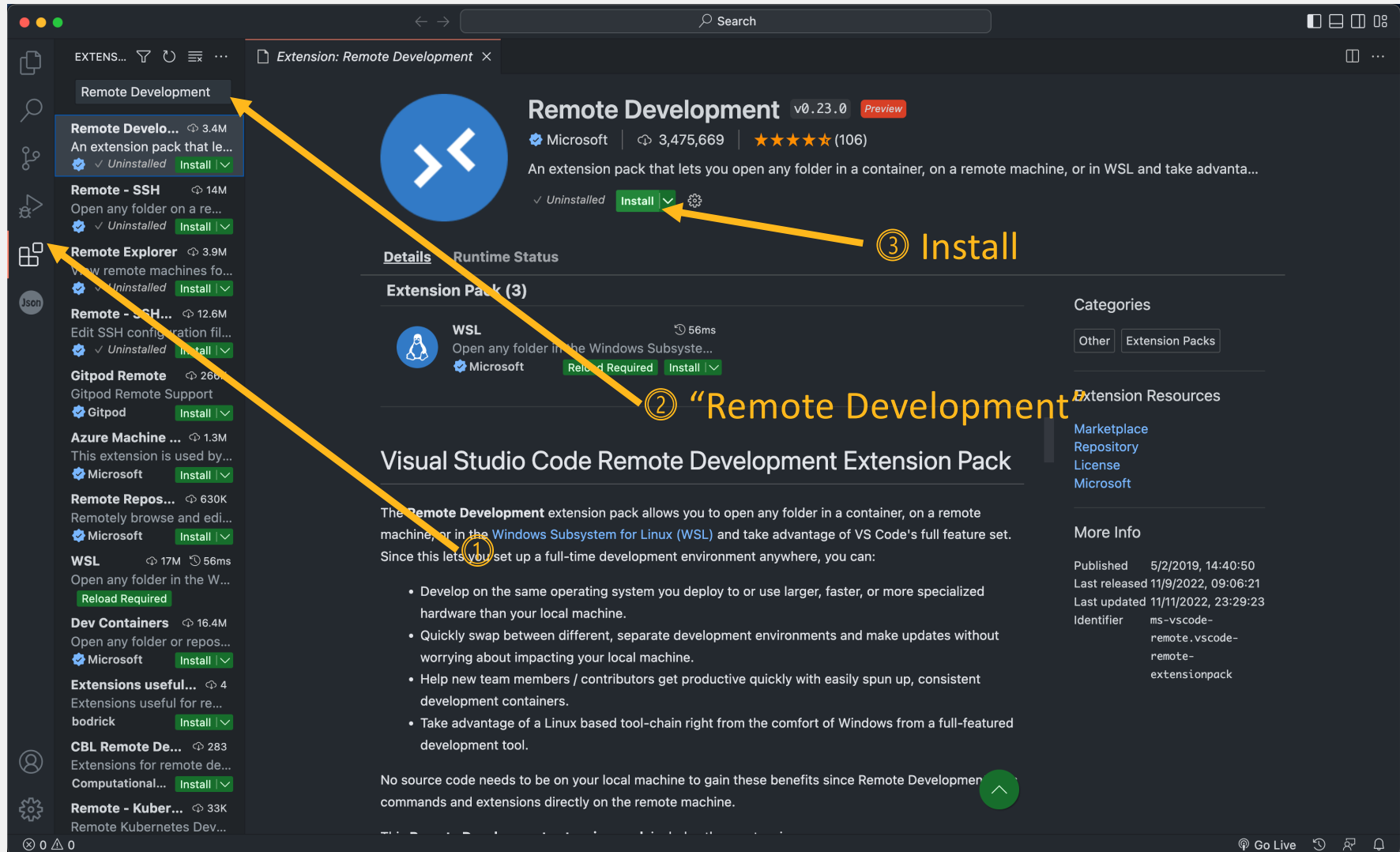 - **And can connect to Thoth (!)**

Most Popular Developer Environments

Source: Software.com

https://www.software.com/src/ranking-the-top-5-code-editors-2019

Downloading VS Code

- If you haven't already, you can download VS Code
  - from https://code.visualstudio.com/
    - Select 'Stable Version' for your platform

- Run the installer
  - Video Walkthrough: https://code.visualstudio.com/learn/get-started/basics
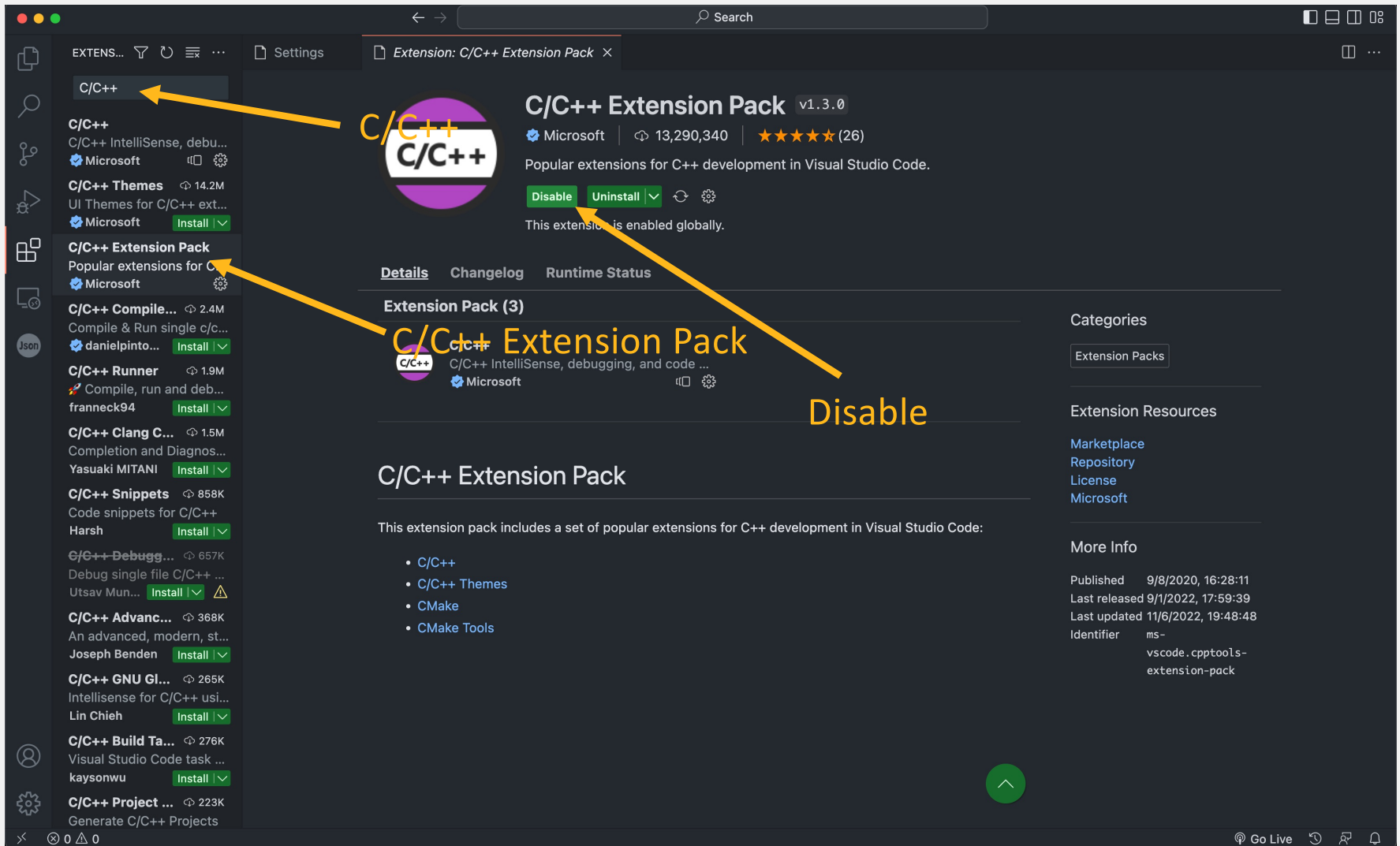
Once you've installed VS Code…

- **You are going to want to install the Remote Development Extension Pack**
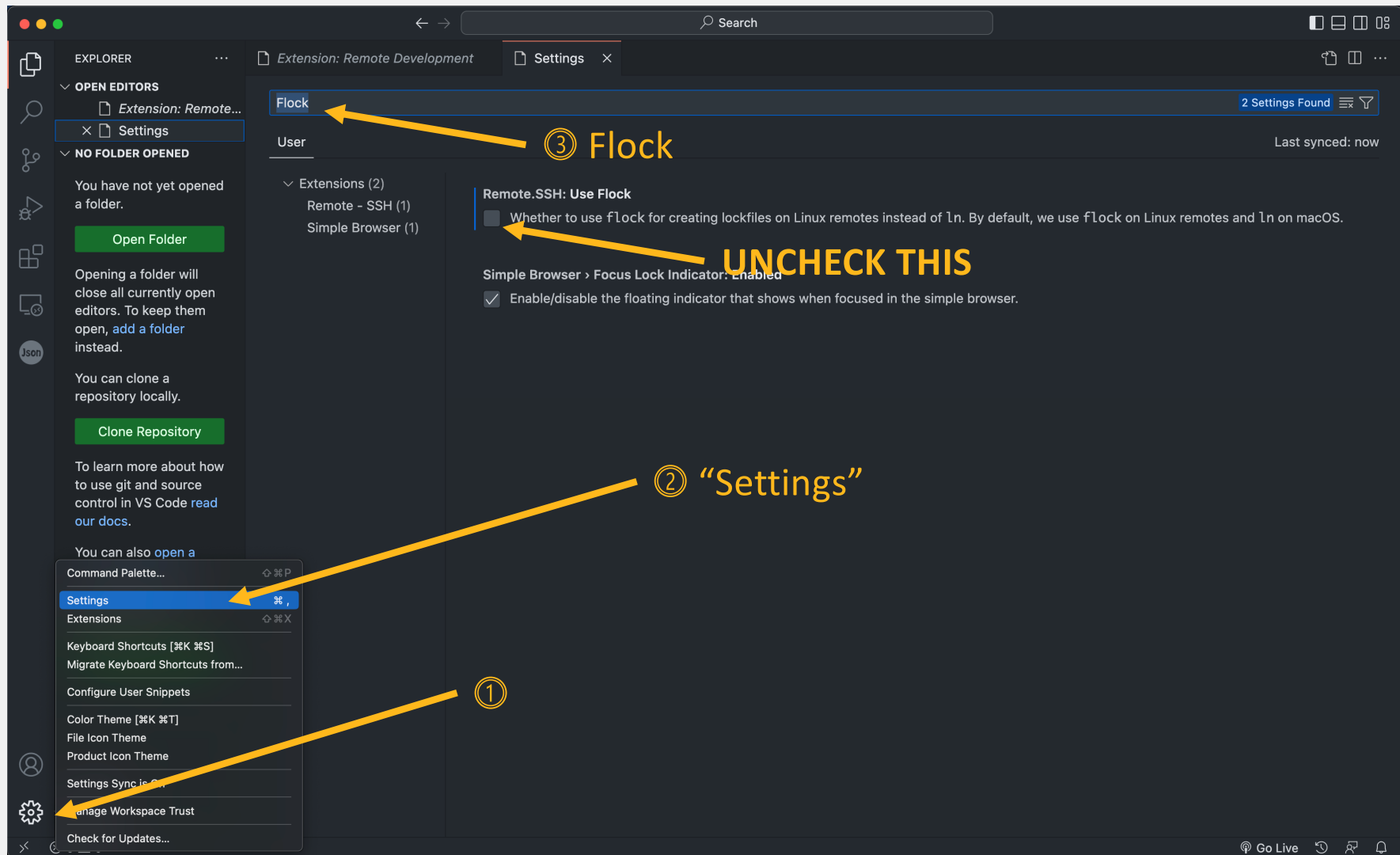 - This extension is what allows us to connect to Thoth

Changing a few settings

- While you have the extensions tab open
  - Search for C/C++ Extension and **disable it**
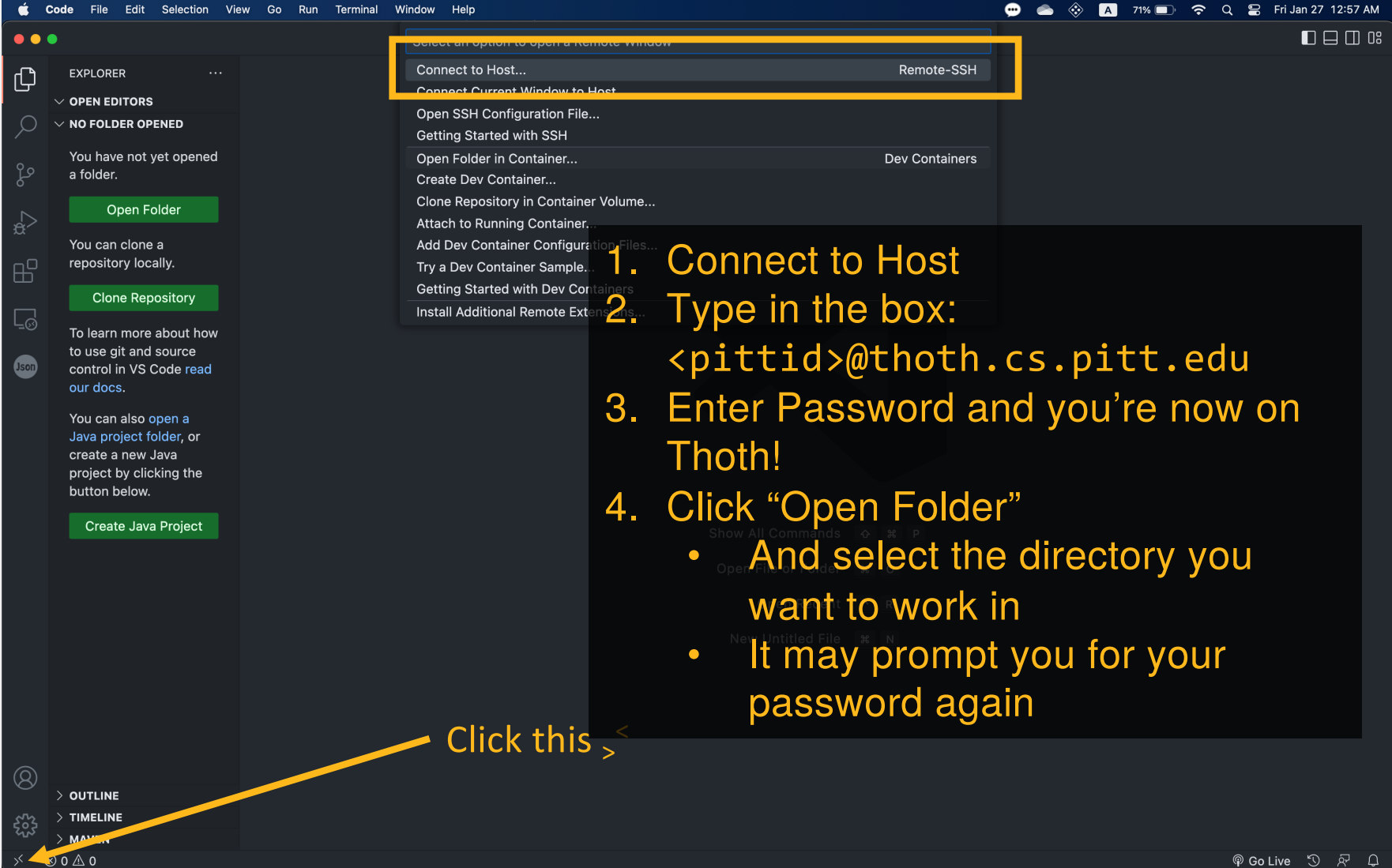   - Otherwise, you will get errors every time you are programming

Changing a few settings

- Before you connect to Thoth, you need to **Disable Flock**
  - If you don't do this, VS Code will continuously hang on login
    - And debugging this is a hassle…(*really*)

At last, connecting to Thoth

1. Connect to Host
2. Type in the box: `<pittid>@thoth.cs.pitt.edu`
3. Enter Password and you're now on Thoth!
4. Click "Open Folder"
   - And select the directory you want to work in
   - It may prompt you for your password again

Click this

Debugging VS Code

- If you were able to get on Thoth without errors, Hurray!

- If you are experiencing errors however:
    1. First, make sure both Flock and C/C++ extension is **disabled**
    2. Make sure you are able to login to Thoth via `ssh` (terminal)
        - And make sure you're entering your id & password correctly
    3. You may have to kill the VS Code process manually (to restart it)
        1. Log on to Thoth via SSH
        2. Run: kill `` `ps -ux | grep vscode | awk '{print $2}'` ``
            - This command should kill any VS code instances still running on Thoth
        3. Using `ls -a` and `rm -r`, remove the `.vscode` folder on your home directory (of Thoth)
    4. Try logging in again from VS Code

- Usually, these steps should be sufficient. However, if you are still experiencing issues with VS Code and Thoth, come visit the TA's office hours, and we will be able to assist you!