

Visual Studio Code

Mac, Linux, Windows

- <https://code.visualstudio.com/download>

Rutgers CS Projects Server

- <https://csprojects.rutgers.edu>

Rutgers VPN

- <https://vpn.rutgers.edu>

Local Development ONLY

GCC for Mac

- Install Xcode from the App Store
- Open a terminal and type : `xcode-select --install`

GCC for Linux

- Debian, Ubuntu : `apt install gcc make` (*as root*)
- Red Hat : `yum install gcc make` (*as root*)

GCC for Windows

- <https://github.com/nixman/mingw-builds-binaries/releases>
x86_64-13.2.0-release-posix-seh-ucrt-rt_v11-rev0.7z
- Extract the file

Local Development ONLY

GCC for Windows

- Get PATH for VSCode
 - In the extracted folder, copy and paste the "mingw64" folder to the "Documents" folder
 - Open the "mingw64\bin" folder
 - Right-click on "gcc" file and select "Properties"
 - Copy the location (*similar to below*)

```
C:\Users\YourName\Documents\mingw64\bin
```

****** Need this information for the next step

Local Development ONLY

GCC for Windows

- Update "Environment Variable": Add mingw64
 - Press WindowsKey+R to open the run dialog
 - Type in `sysdm.cpl` then "Enter"
 - Click "Advanced" tab
 - Click "Environment Variables" (*bottom right*)
 - Select "PATH" or "Path"
 - Click "Edit" then Click "New"
 - Paste the location copied above
 - Click "OK"

Remote Development

- Extensions Icon
- Search for "Remote Development"
- Click "Install"

Change a Terminal Setting (Personal Installation)

- Ctrl + , or File → Preferences → Settings
- Type "Login" in the search bar
- Under "Remote.SSH" heading
- Check "Always reveal the SSH Login Terminal"
- Close all windows inside VS Code

Setup Connection to CS Projects Server (Personal Installation)

- Click "Remote Development"
- Select "Connect Current Window to Host"
- Click "Add New SSH host"
- Type "ssh netid@csprojects.rutgers.edu"
Replace "netid" with your Rutgers NetID
- Press Enter
- When prompted to save the config file
 - Choose the first one listed
- Press Enter
- Close any and all pop-ups (bottom right)

Connect to CS Projects Server

- Click "Open Remote Window" (*bottom left*)
- Select "Connect Current Window to Host"
- Type "netid@csprojects.rutgers.edu"
Replace "netid" with your Rutgers NetID
- If prompted, Choose "Linux", Select "Continue"
- Enter password then Click "details" *bottom right*
- Choose your DUO option
- Choose "Linux", Select "Continue"
- Enter password then Click "details" *bottom right*
- Choose your DUO option

Connecting to Working Folder

- Open a terminal : Ctrl Shift +, Terminal → New
- Make a directory for your class work
 - `mkdir cs211`
- Click "Open Folder"
 - Welcome Page / Side Bar Explorer / File → Open
- Select "cs211" folder
- Enter your password at the prompt
- Choose your DUO option
- Click on "Yes, I trust the authors of the Files" button
<https://code.visualstudio.com/docs/editor/workspace-trust>
- Enter your password at the prompt
- Choose your DUO option

Now to Open VS CODE

- Open VS Code
- Enter your password at the prompt
- Choose your DUO option
- Enter your password at the prompt
- Choose your DUO option

Programming

- Explorer → Find / Click "New File..." Icon
- Type file name "hello.c"
- C/C++ Extension Package is suggested
- Click "Install"

Classic First Program

```
#include <stdio.h>
int main()
{
    printf("Hello World\n");
    return 0;
}
```

Run Code

- Play Icon
 - Dropdown "Debug" or "Run"
 - Select /usr/bin/gcc
- Select "Run"

Keys	Action
Ctrl + `	Open a terminal
Ctrl + N	Open new file
Ctrl + B	Open / Close the sidebar
Ctrl + G	Jump to line number
Ctrl + F	Search for text in window
Ctrl + H	Search and Replace text in window
Ctrl + Shift + F	Search across all files in project
Ctrl + Shift + H	Search and Replace within all files
Ctrl + Tab	Switch between open editors
Ctrl + PGDN	Switch between your open
Ctrl + PGUP	Switch between your open

Assignment 2 Due Monday

Questions