

# Installing Visual Studio Code using an Ubuntu Terminal for compiling

February 2024

This document is a work in progress and may change at any time. Contact Donna French with questions, updates or corrections.

# Visual Studio Code

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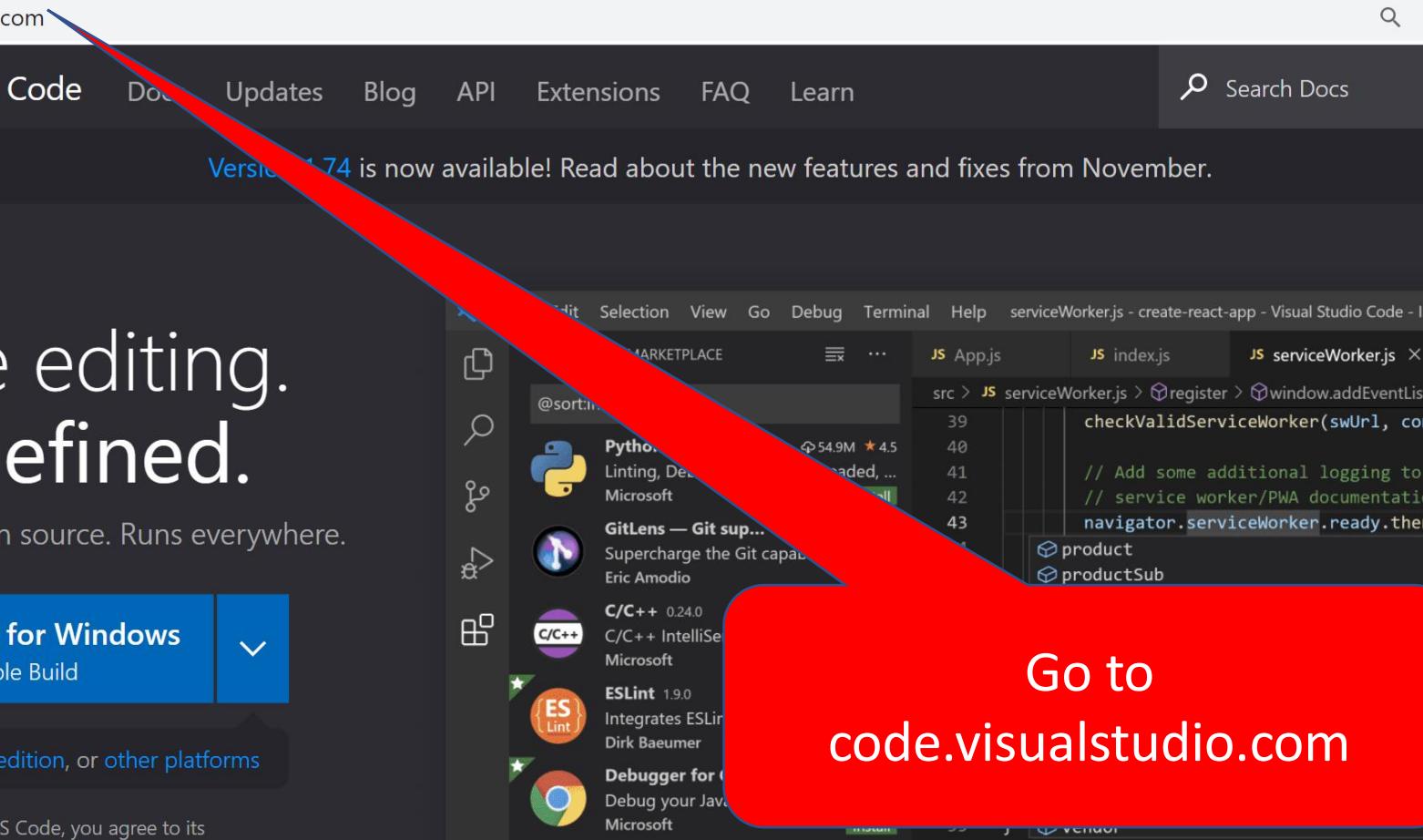
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```
serviceWorker.js - create-react-app - Visual Studio Code - In... — □ X
Edit Selection View Go Debug Terminal Help serviceWorker.js - create-react-app - Visual Studio Code - In... — □ X
MARKETPLACE JS App.js JS index.js JS serviceWorker.js X
@sortin... Python Linting, De Microsoft
Python Linting, De Microsoft
GitLens — Git sup... Supercharge the Git capab... Eric Amadio
C/C++ 0.24.0 C/C++ IntelliSense Microsoft
C/C++ 0.24.0 C/C++ IntelliSense Microsoft
ESLint 1.9.0 Integrates ESLint... Dirk Baeumer
ESLint 1.9.0 Integrates ESLint... Dirk Baeumer
Debugger for G... Debug your Java Microsoft
Debugger for G... Debug your Java Microsoft
Language Supp... 0.47.0 Java Linting, Intellisense, fo... Red Hat
Language Supp... 0.47.0 Java Linting, Intellisense, fo... Red Hat
Install
vscode-icons 8.8.0 Icons for Visual Studio Code VSCod...
vscode-icons 8.8.0 Icons for Visual Studio Code VSCod...
Install
Vetur 0.21.1 Vue tooling for VS Code Pine Wu
Vetur 0.21.1 Vue tooling for VS Code Pine Wu
Install
C# 1.21.0 C# for Visual Studio Code (powered ... Microsoft
C# 1.21.0 C# for Visual Studio Code (powered ... Microsoft
Install
src > JS serviceWorker.js > register > window.addEventListener('load') callback
39
40
41
42
43
checkValidServiceWorker(swUrl, config);
// Add some additional logging to localhost, p...
// service worker/PWA documentation.
navigator.serviceWorker.ready.then(() => {
product
productSub
serviceWorker...
TERMINAL ...
1: node
You can now view create-react-app in the browser.
Local: http://localhost:3000/
On Your Network: http://10.211.55.3:3000/
Note that the development build is not optimized.
Ln 43, Col 19 Spaces: 2 UTF-8 LF JavaScript

```

Go to [code.visualstudio.com](http://code.visualstudio.com)

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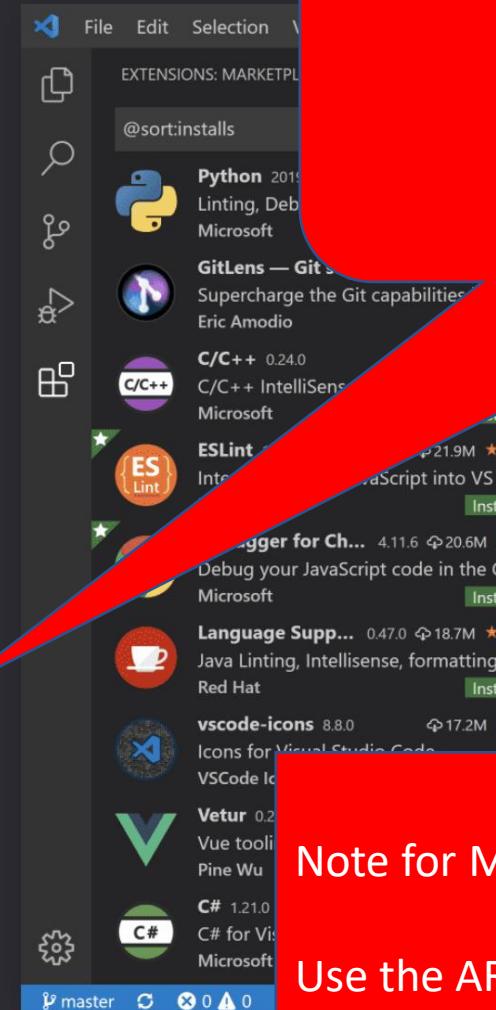
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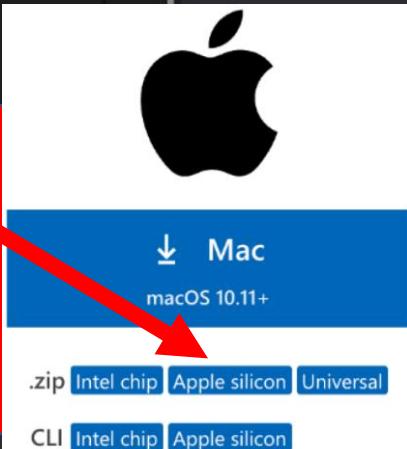
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Linux x64	.deb .rpm	
<a href="#">Other downloads or open on web</a>		



Click on the down arrow to see other choices for OS

Pick your OS  
Mac, Windows, Linux

```
product
└── productSub
    ├── removeSiteSpecificTrackingException
    ├── removeWebWideTrackingException
    ├── requestMediaKeySystemAccess
    └── sendBeacon
    └── serviceWorker (property) Navigator.serviceWorker...
        ├── storage
        ├── storeSiteSpecificTrackingException
        └── storeWebWideTrackingException
    └── userAgent
        └── vendor
function registerValidSW(swUrl, config) {
    navigator.serviceWorker
        .register(swUrl)
        .then(registration => {
            registration.onupdatefound = () => {
                const updateEvent = registration.waitUntil(
                    registration.installing
                        .then(installingServiceWorker =>
                            installingServiceWorker.postMessage({
                                type: 'update-available',
                                url: swUrl,
                                ...config
                            })
                        )
                )
                updateEvent
            }
        })
}
```



Note for Macs with ARM architecture

Use the ARM64 option called Apple Silicon

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# Getting Started

Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux. It comes with built-in support for CSS, LESS, SCSS, JavaScript (with Node.js), TypeScript and Python, PHP, Go, .NET). Begin your journey with VS Code today!

Installation file should download

## Visual Studio Code in Action

```
4  var server = express();
5  server.use(bodyParser.json());
6
7  server.get('/', (req, res) => {
8    res.send('Hello World');
9  });
10
11
12
```

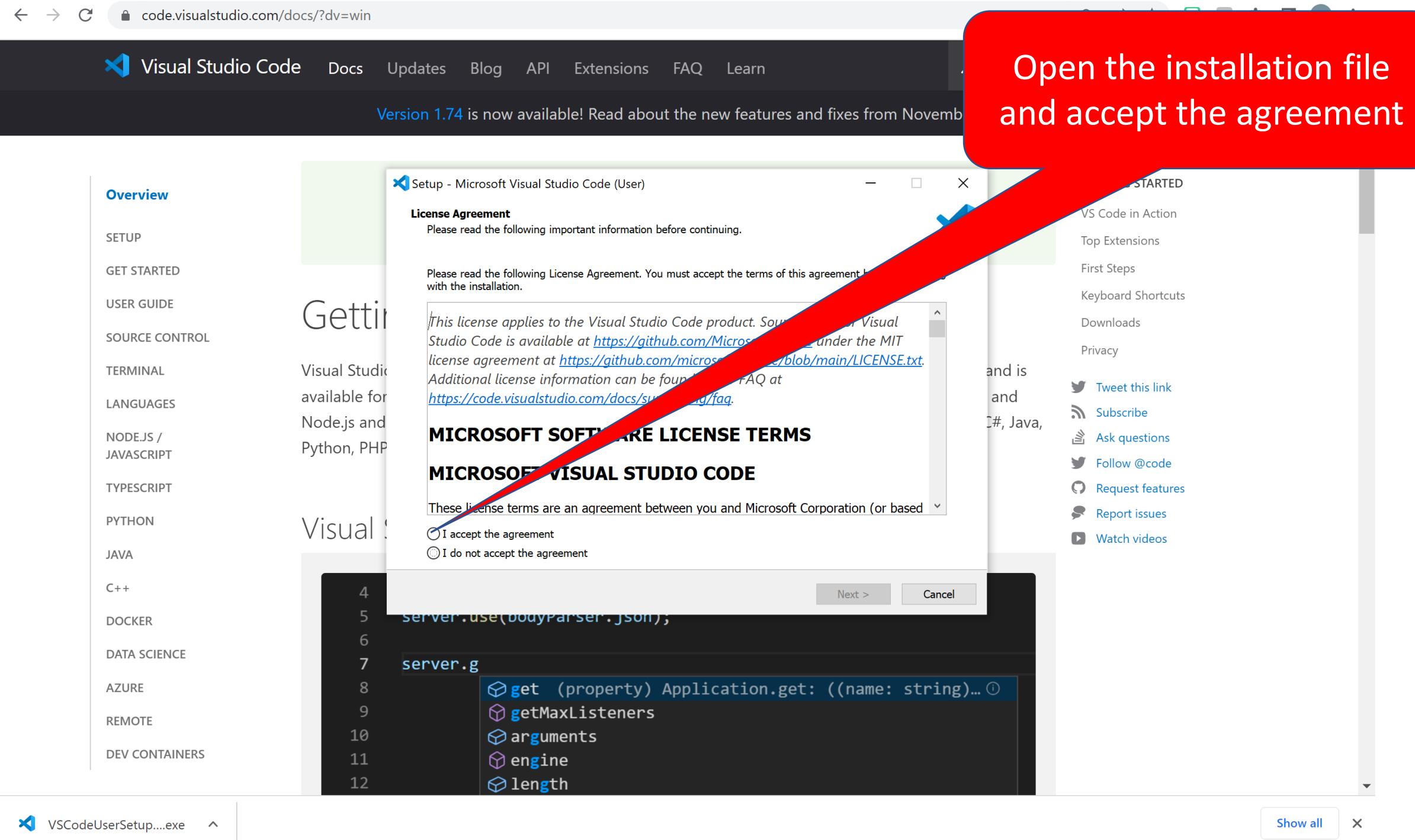
The screenshot shows a code editor window with a snippet of Node.js code. A red speech bubble points from the text "Installation file should download" towards the code editor. The code itself is a simple Express.js application that responds with "Hello World" to the root endpoint.



VSCodeUserSetup....exe

17.3/88.8 MB, 16 secs left

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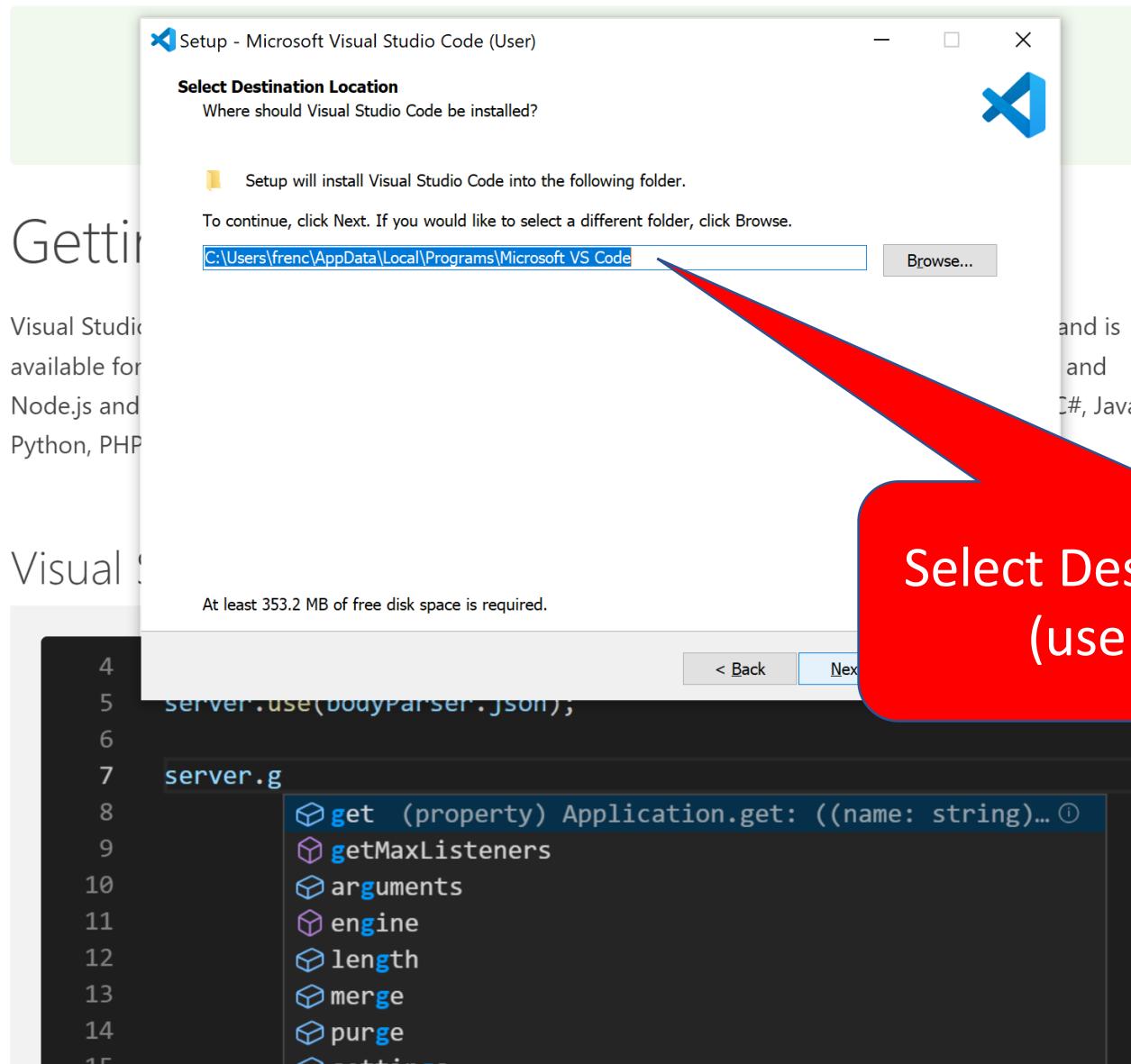


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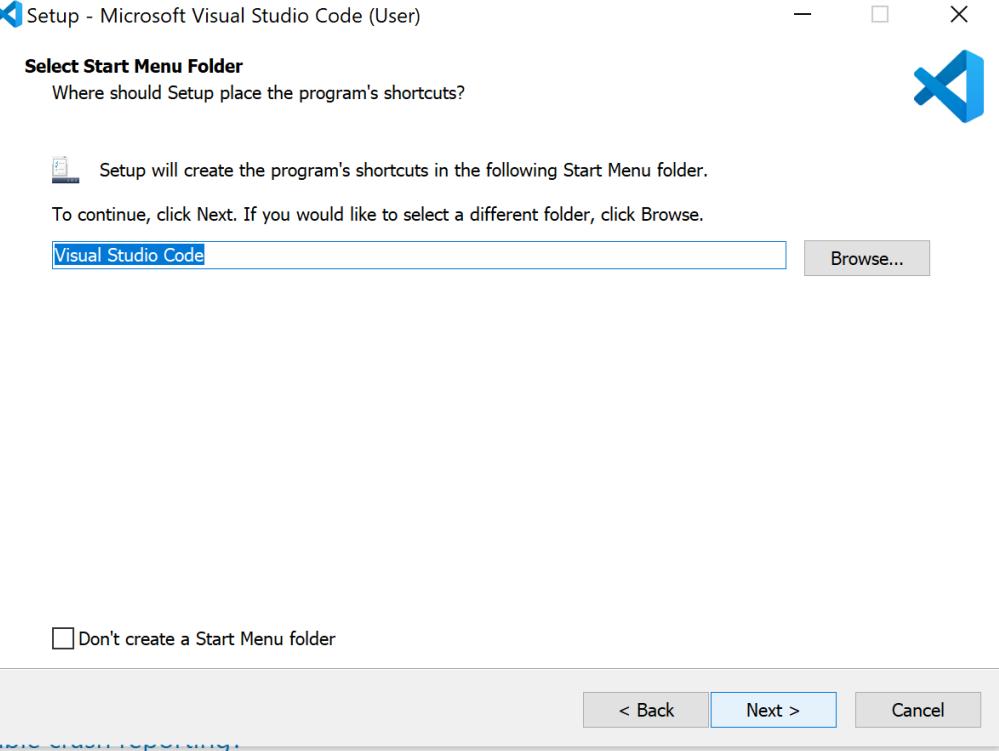
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Increase your productivity with VS Code's keyboard shortcuts.



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How do I dis

How do I disable crash reporting..

How do I disable usage reporting?

Linux)

information.

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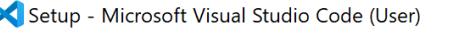
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Increase your productivity with VS Code's keyboard shortcuts.

**Select Additional Tasks**

Which additional tasks should be performed?



Select the additional tasks you would like Setup to perform while installing Visual Studio Code, then click Next.

Additional icons:

 Create a desktop icon

Other:

 Add "Open with Code" action to Windows Explorer file context menu Add "Open with Code" action to Windows Explorer directory context menu Register Code as an editor for supported file types Add to PATH (requires shell restart)**GETTING STARTED**

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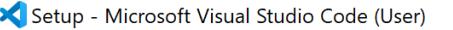
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**Ready to Install**

Setup is now ready to begin installing Visual Studio Code on your computer.

Click **Install** to continue with the installation, or click **Back** if you want to review or change any settings.Destination location:  
C:\Users\frencl\AppData\Local\Programs\Microsoft VS CodeStart Menu folder:  
Visual Studio CodeAdditional tasks:  
Other:  
Register Code as an editor for supported file types  
Add to PATH (requires shell restart)**GETTING STARTED**

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**Click "Install"**

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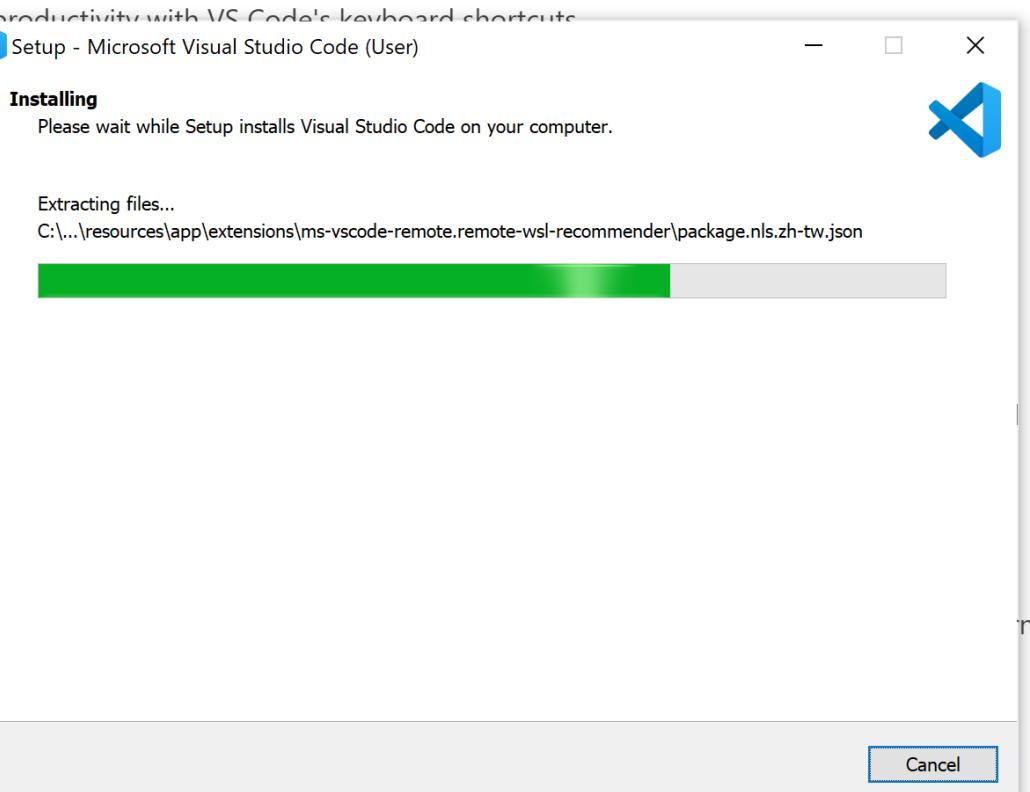
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Installing

Please wait while Setup installs Visual Studio Code on your computer.

Extracting files...

C:\...\resources\app\extensions\ms-vscode-remote.remote-wsl-recommender\package.nls.zh-tw.json

Linux)

Cancel

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reboot your computer.

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Setup - Microsoft Visual Studio Code (User)

## Completing the Visual Studio Code Setup Wizard

Setup has finished installing Visual Studio Code on your computer. The application may be launched by selecting the installed shortcuts.

Click Finish to exit Setup.

Launch Visual Studio Code

Finish

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# Mac Users

- Please skip all of the slides about WSL and Ubuntu. Those are specifically for Windows users.
- You will need to install a gcc compiler
- Suggestions
  - XCODE
  - HomeBrew

# Mac Users

Confirm you have gcc installed by running

```
gcc -v
```

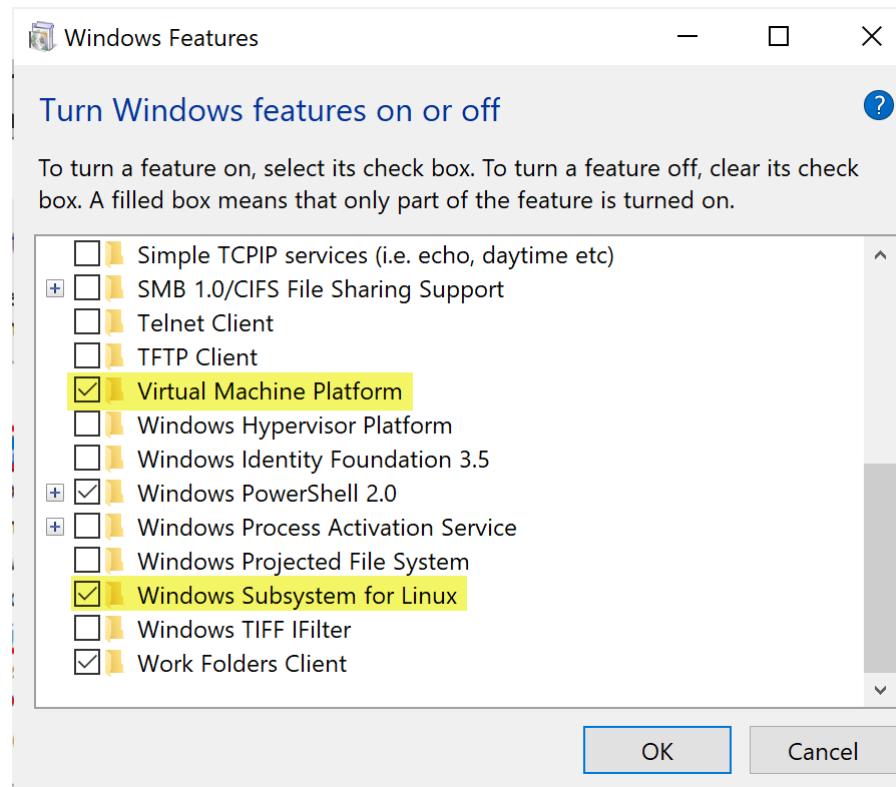
at your command prompt.

The version of gcc you have will depend on where you obtained it.

HomeBrew will have version 12.2.0

# For Windows Home Users

Windows Home users will need to enable "Virtual Machine Platform" (a subset of Hyper-V) and "Windows Subsystem for Linux" features.

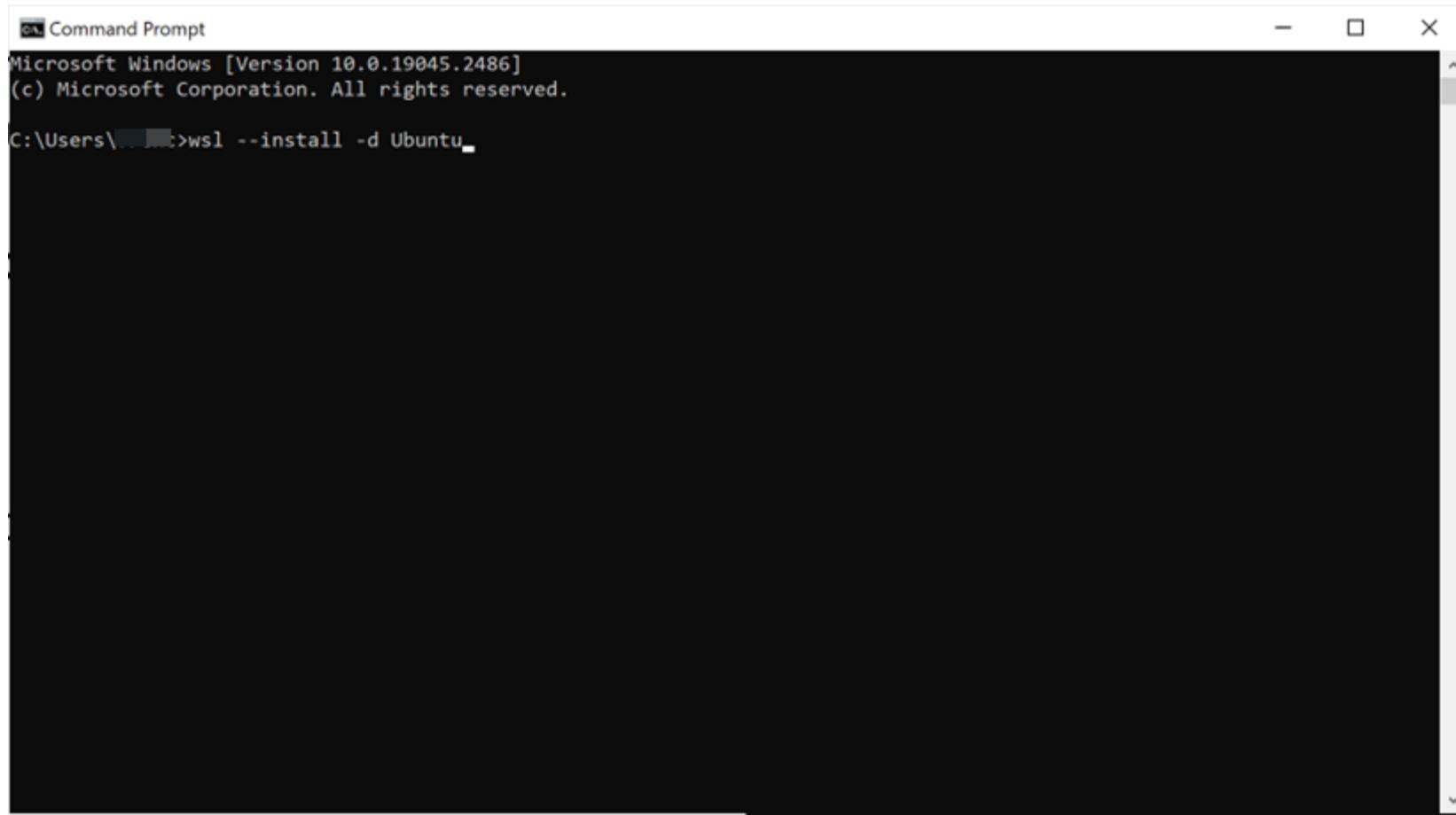


# For Windows users, go to the Command Prompt and install WSL – Windows Subsystem for Linux

Type

```
wsl --install -d Ubuntu
```

at the prompt



C:\WINDOWS\system32\wsl.exe

Installing: Virtual Machine Platform  
[=====60.0%==]

C:\WINDOWS\system32\wsl.exe

Installing: Virtual Machine Platform  
Virtual Machine Platform has been installed.  
Installing: Windows Subsystem for Linux  
Windows Subsystem for Linux has been installed.  
Installing: Windows Subsystem for Linux

0.0%

]

Command Prompt

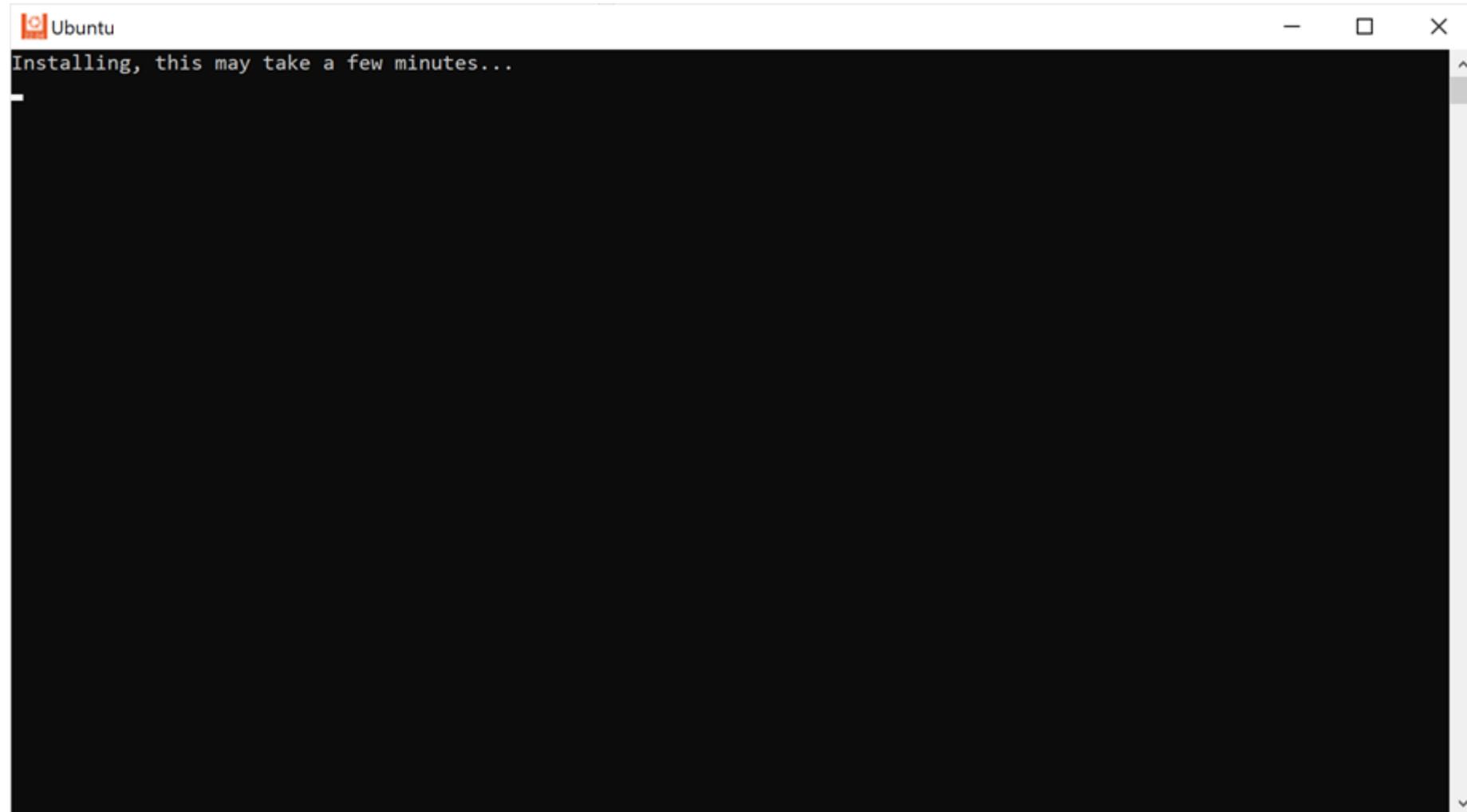
Installing: Windows Subsystem for Linux  
Windows Subsystem for Linux has been installed.  
Installing: Ubuntu  
Ubuntu has been installed.  
The requested operation is successful. Changes will not be effective until the system is rebooted.

C:\Users\ [ ] >

Windows only

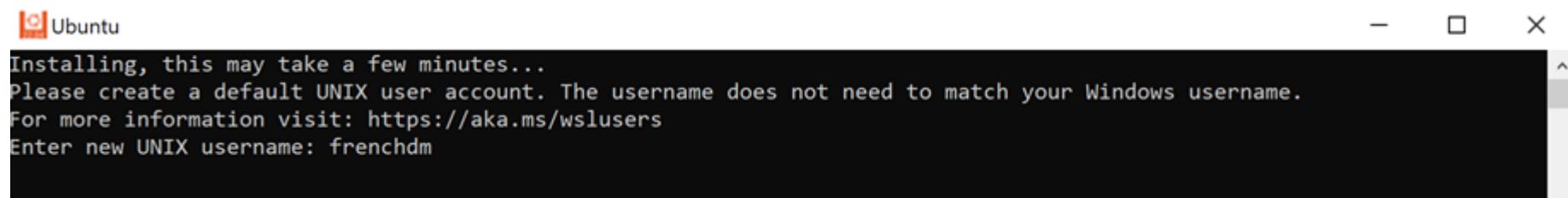
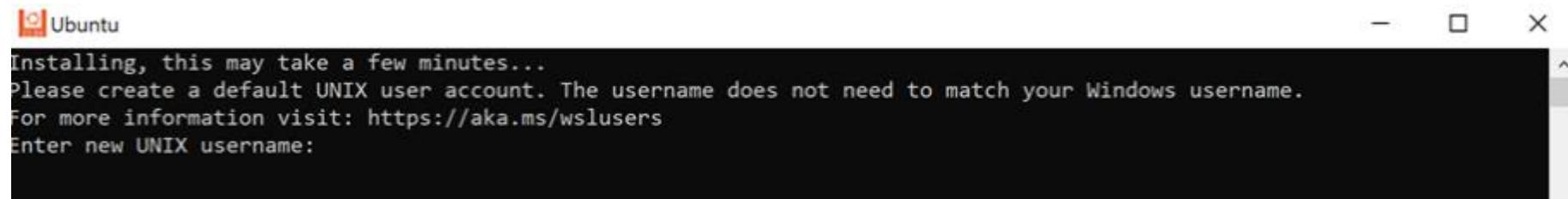
Reboot your computer now.

When your computer restarts, give it a moment and the Ubuntu window should open back up.

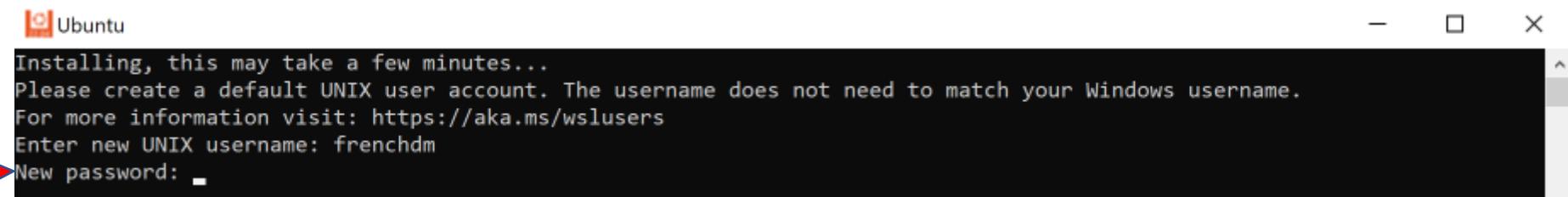


Windows only

Create a new username for your UNIX account and a password when prompted. Reenter password when prompted.



When you type the password, the cursor will not move and you will not see anything. Just keep typing.



```
[sudo] password for [REDACTED]
Hit:1 http://archive.ubuntu.com/ubuntu focal InRelease
Get:2 http://archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:3 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Get:4 http://archive.ubuntu.com/ubuntu focal-backports InRelease [108 kB]
Get:5 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [2341 kB]
Get:6 http://archive.ubuntu.com/ubuntu focal-updates/main Translation-en [404 kB]
Get:7 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 c-n-f Metadata [16.2 kB]
Get:8 http://archive.ubuntu.com/ubuntu focal-updates/restricted amd64 Packages [1560 kB]
Get:9 http://archive.ubuntu.com/ubuntu focal-updates/restricted Translation-en [220 kB]
Get:10 http://archive.ubuntu.com/ubuntu focal-updates/restricted amd64 c-n-f Metadata [620 B]
Get:11 http://archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages [1010 kB]
```

```
Ign:17 http://archive.ubuntu.com/ubuntu jammy/universe amd64 Packages
Get:18 http://archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:19 http://archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:20 http://archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:21 http://archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:22 http://archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:23 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [834 kB]
Get:24 http://archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [184 kB]
Get:25 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [12.2 kB]
Get:26 http://archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [566 kB]
Get:27 http://archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [87.1 kB]
Get:28 http://archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 c-n-f Metadata [556 B]
Get:29 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [790 kB]
Get:30 http://archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [138 kB]
Get:31 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [14.8 kB]
Get:32 http://archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [7988 B]
Get:33 http://archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [2448 B]
Get:34 http://archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [432 B]
Get:35 http://archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [3324 B]
Get:36 http://archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [1580 B]
Get:37 http://archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [272 B]
Get:38 http://archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:39 http://archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [6744 B]
Get:40 http://archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [9460 B]
Get:41 http://archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [352 B]
Get:42 http://archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:17 http://archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Fetched 11.7 MB in 4min 54s (39.8 kB/s)
Reading package lists... Done
```

At the prompt in your WSL command window, type

sudo apt-get update

Anytime you use a sudo command, you will be asked for your password.

This is the password you just created for your new UNIX account.

At the prompt in your WSL command window, type

sudo apt-get upgrade

The screenshot shows two terminal windows side-by-side, both displaying the output of the command `sudo apt-get upgrade`. The left terminal window shows the initial steps of the upgrade process, including reading package lists, building dependency trees, and calculating upgrades. It lists packages that will be upgraded and those that will be kept back. The right terminal window shows the continuation of the upgrade process, including setting up snapd, installing new versions of config files, creating symlinks, and processing triggers for various system services like plymouth-theme-ubuntu-text, update-initramfs, and ufw. Both windows show the user being prompted with `Do you want to continue? [Y/n]`.

```
Frenchdm@DonnaPC:~$ sudo apt-get upgrade
Reading package lists... Done
Building dependency tree
Reading state information... Done
Calculating upgrade... Done
The following packages have been kept back:
  fwupd
The following packages will be upgraded:
  alsu-ucm-conf apport apt-utils base-files bash bind9-dnsutils bind9-host bind9-libs bolt ca-certificates
  cloud-init command-not-found curl dbus dbus-user-session dbus-x11 dirmngr distro-info-data dpkg e2fsprogs
  fwupd-signed git git-man gnupg gnupg-110n gnupg-utils
  gzip isc-dhcp-client isc-dhcp-common klibc-utils kmod
  libasn1-8-heimdal libc-bin libcom-err2 libcurl3-gnutls
  libdrm-intel1 libdrm-nouveau2 libdrm-radeon1 libdrm2
  libfwupd2 libgl1-mesa-dri libglapi-mesa libglvnr
  libgssapi3-heimdal libgstreamer1.0-0 libhcrypto4-heimd
  libhx509-5-heimdal libjcati libkeyutils1 libklibc libk
  liblvm12 liblzma5 libnetplan0 libnss-systemd libnss3
  libpython3.8 libpython3.8-minimal libpython3.8-stdlib
  libsqlite3-0 libss2 libssl1.1 libsystemd0 libtss2-esys
  libxslt1.1 linux-libc-dev locales login logsave mesa-v
  networkd-dispatcher ntfs-3g open-vm-tools openssh-clie
  perl-base perl-modules-5.30 python-apt-common python3-
  python3-jwt python3-pkg-resources python3-problem-repo
  python3-update-manager python3-urllib3 python3.8 pytho
  systemd systemd-sysv systemd-timesyncd tar tcpdump tzdata
  unattended-upgrades update-manager-core update-notifie
  zlib1g
170 upgraded, 0 newly installed, 0 to remove and 1 not u
119 standard security updates

libgssapi3-heimdal libgstreamer1.0-0 libhcrypto4-heimdal libheimbase1-heimd
libhx509-5-heimdal libjcati libkeyutils1 libklibc libkmod2 libkrb5-26-heimd
liblvm12 liblzma5 libnetplan0 libnss-systemd libnss3 libpng3 libpam
libpython3.8 libpython3.8-minimal libpython3.8-stdlib libroken18-heimdal1
libsqlite3-0 libss2 libssl1.1 libsystemd0 libtss2-esys0 libudev1 libwayland
libxslt1.1 linux-libc-dev locales login logsave mesa-vulkan-drivers m
networkd-dispatcher ntfs-3g open-vm-tools openssh-client openssh-server op
perl-base perl-modules-5.30 python-apt-common python3-apport python3-apt-p
python3-jwt python3-pkg-resources python3-problem-report python3-setuptools
python3-update-manager python3-urllib3 python3.8 python3.8-minimal rsync r
systemd systemd-sysv systemd-timesyncd tar tcpdump tzdata ubuntu-advantag
unattended-upgrades update-manager-core update-notifier-common vim vim-comm
zlib1g
170 upgraded, 0 newly installed, 0 to remove and 1 not upgraded.
119 standard security updates
Need to get 144 MB of archives.
After this operation, 23.3 MB of additional disk space will be used.
Do you want to continue? [Y/n] 
```

```
Reading state information... Done
Calculating upgrade... Done
The following packages have been kept back:
  fwupd
The following packages will be upgraded:
  alsu-ucm-conf apport apt-utils base-files bash bind9-dnsutils bind9-host bind9-libs bolt ca-certificates
  cloud-init command-not-found curl dbus dbus-user-session dbus-x11 dirmngr distro-info-data dpkg e2fsprogs
  fwupd-signed git git-man gnupg gnupg-110n gnupg-utils
  gzip isc-dhcp-client isc-dhcp-common klibc-utils kmod kpartx landscape-common libapt-pkg6.0 libarchive13
  libasn1-8-heimdal libc-bin libcom-err2 libcurl3-gnutls libibus1-3 libdrm-amdgpu1 libdrm-common
  libdrm-intel1 libdrm-nouveau2 libdrm-radeon1 libext2fs2 libflac8 libfreetype6 libfribidi0
  libfwupd2 libgl1 libgl1-mesa-dri libglapi-mesa libglvnd0 libglx-mesa0 libgx0 libgnutls30
  libgssapi3-heimdal libgstreamer1.0-0 libhcrypto4-heimdal libheimbase1-heimd
  libhx509-5-heimdal libjcati libkeyutils1 libklibc libkmod2 libkrb5-26-heimd
  liblvm12 liblzma5 libnetplan0 libnss-systemd libnss3 libpng3 libpam
  libpython3.8 libpython3.8-minimal libpython3.8-stdlib libroken18-heimdal1
  libsqlite3-0 libss2 libssl1.1 libsystemd0 libtss2-esys0 libudev1 libwayland
  libxslt1.1 linux-libc-dev locales login logsave mesa-vulkan-drivers m
  networkd-dispatcher ntfs-3g open-vm-tools openssh-client openssh-server op
  perl-base perl-modules-5.30 python-apt-common python3-apport python3-apt-p
  python3-jwt python3-pkg-resources python3-problem-report python3-setuptools
  python3-update-manager python3-urllib3 python3.8 python3.8-minimal rsync r
  systemd systemd-sysv systemd-timesyncd tar tcpdump tzdata ubuntu-advantag
  unattended-upgrades update-manager-core update-notifier-common vim vim-comm
  zlib1g
170 upgraded, 0 newly installed, 0 to remove and 1 not upgraded.
119 standard security updates
Need to get 144 MB of archives.
After this operation, 23.3 MB of additional disk space will be used.
Do you want to continue? [Y/n] 
```

Setting up snapd (2.57.5+20.04ubuntu0.1) ...
Installing new version of config file /etc/apparmor.d/usr.lib.snapd.snap-confine.real ...
Created symlink /etc/systemd/system/multi-user.target.wants/snapd.aa-prompt-listener.service → /lib/systemd/system/snapd.aa-prompt-listener.service.
Setting up systemd-sysv (245.4-4ubuntu3.19) ...
Setting up cloud-init (22.4.2-0ubuntu0.20.04.2) ...
Installing new version of config file /etc/cloud/cloud.cfg ...
Setting up libnss-systemd:amd64 (245.4-4ubuntu3.19) ...
Setting up python3-distupgrade (1:20.04.39) ...
Setting up ubuntu-release-upgrader-core (1:20.04.39) ...
Setting up update-manager-core (1:20.04.10.11) ...
Setting up libpam-systemd:amd64 (245.4-4ubuntu3.19) ...
Setting up update-notifier-common (3.192.30.14) ...
Setting up dbus-user-session (1.12.16-2ubuntu2.3) ...
Processing triggers for plymouth-theme-ubuntu-text (0.9.4git20200323-0ubuntu6.2) ...
update-initramfs: deferring update (trigger activated)
Processing triggers for install-info (6.7.0.dfsg.2-5) ...
Processing triggers for mime-support (3.64ubuntu1) ...
Processing triggers for initramfs-tools (0.136ubuntu6.7) ...
Processing triggers for libc-bin (2.31-0ubuntu9.9) ...
/sbin/ldconfig.real: /usr/lib/wsl/lib/libcuda.so.1 is not a symbolic link

Processing triggers for ufw (0.36-6ubuntu1) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for ca-certificates (20211016ubuntu0.20.04.1) ...
Updating certificates in /etc/ssl/certs...
0 added, 0 removed; done.
Running hooks in /etc/ca-certificates/update.d...
done.

## Now install the C compiler gcc

```
sudo apt-get install gcc
```

The terminal window shows the process of installing the GCC C compiler on an Ubuntu system. The output includes package lists, dependency resolution, suggested packages, and the actual installation of various libraries and tools required for the compiler.

```
:~$ sudo apt-get install gcc
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  cpp cpp-11 fontconfig-config fonts-dejavu-core gcc-11 gcc-11-base libasan6 libatomic1 libc-dev-bin libc-devtools
  libc6-dev libcc1-0 libcrypt-dev libdeflate0 libfontconfig1 libfreetype6 libgcc-11-dev libgd3 libgomp1 libis123
  libitm1 libjbig0 libjpeg-turbo8 libjpeg8 liblsan0 libmpc3 libnsl-dev libquadmath0 libtiff5 libtirpc-dev libtsan0
  libubsan1 libwebp7 libxpm4 linux-libc-dev manpages-dev rpcsvc-proto
Suggested packages:
  cpp-doc gcc-11-locales gcc-multilib make autoconf automake libtool flex bison gdb gcc-doc
  glibc-doc libgd-tools
The following NEW packages will be installed:
  cpp cpp-11 fontconfig-config fonts-dejavu-core gcc gcc-11 gcc-11-base libasan6 libatomic1
  libc6-dev libcc1-0 libcrypt-dev libdeflate0 libfontconfig1 libfreetype6 libgcc-11-dev libgd3 libgomp1
  libis123 libitm1 libjbig0 libjpeg-turbo8 libjpeg8 liblsan0 libmpc3 libnsl-dev libquadmath0 libtiff5
  libubsan1 libwebp7 libxpm4 linux-libc-dev manpages-dev rpcsvc-proto
0 upgraded, 38 newly installed, 0 to remove and 0 not upgraded.
Need to get 1383 kB/49.0 MB of archives.
After this operation, 153 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libxpm4 amd64 1:3.5.12-1u
Get:2 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 linux-libc-dev amd64 5.15
Fetched 1383 kB in 9s (150 kB/s)
Extracting templates from packages: 100%
Selecting previously unselected package gcc-11-base:amd64.
(Reading database ... 24113 files and directories currently installed.)
Preparing to unpack .../00-gcc-11-base_11.3.0-1ubuntu1~22.04_amd64.deb ...
Unpacking gcc-11-base:amd64 (11.3.0-1ubuntu1~22.04) ...
Selecting previously unselected package libis123:amd64.
Setting up libquadmath0:amd64 (12.1.0-2ubuntu1~22.04) ...
Setting up libmpc3:amd64 (1.2.1-2build1) ...
Setting up libatomic1:amd64 (12.1.0-2ubuntu1~22.04) ...
Setting up fonts-dejavu-core (2.37-2build1) ...
Setting up libjpeg-turbo8:amd64 (2.1.2-0ubuntu1) ...
Setting up libwebp7:amd64 (1.2.2-2) ...
Setting up libubsan1:amd64 (12.1.0-2ubuntu1~22.04) ...
Setting up libnsl-dev:amd64 (1.3.0-2build2) ...
Setting up libcrypt-dev:amd64 (1:4.4.27-1) ...
Setting up libis123:amd64 (0.24-2build1) ...
Setting up libc-dev-bin (2.35-0ubuntu3.1) ...
Setting up libcc1-0:amd64 (12.1.0-2ubuntu1~22.04) ...
Setting up liblsan0:amd64 (12.1.0-2ubuntu1~22.04) ...
Setting up libitm1:amd64 (12.1.0-2ubuntu1~22.04) ...
Setting up libtsan0:amd64 (11.3.0-1ubuntu1~22.04) ...
Setting up libjpeg8:amd64 (8c-2ubuntu10) ...
Setting up cpp-11 (11.3.0-1ubuntu1~22.04) ...
Setting up fontconfig-config (2.13.1-4.2ubuntu5) ...
Setting up libgcc-11-dev:amd64 (11.3.0-1ubuntu1~22.04) ...
Setting up gcc-11 (11.3.0-1ubuntu1~22.04) ...
Setting up cpp (4:11.2.0-1ubuntu1) ...
Setting up libc6-dev:amd64 (2.35-0ubuntu3.1) ...
Setting up libtiff5:amd64 (4.3.0-6ubuntu0.3) ...
Setting up libfontconfig1:amd64 (2.13.1-4.2ubuntu5) ...
Setting up gcc (4:11.2.0-1ubuntu1) ...
Setting up libgd3:amd64 (2.3.0-2ubuntu2) ...
Setting up libc-devtools (2.35-0ubuntu3.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...

:~$
```

# Start Visual Studio Code

 Visual Studio Code App

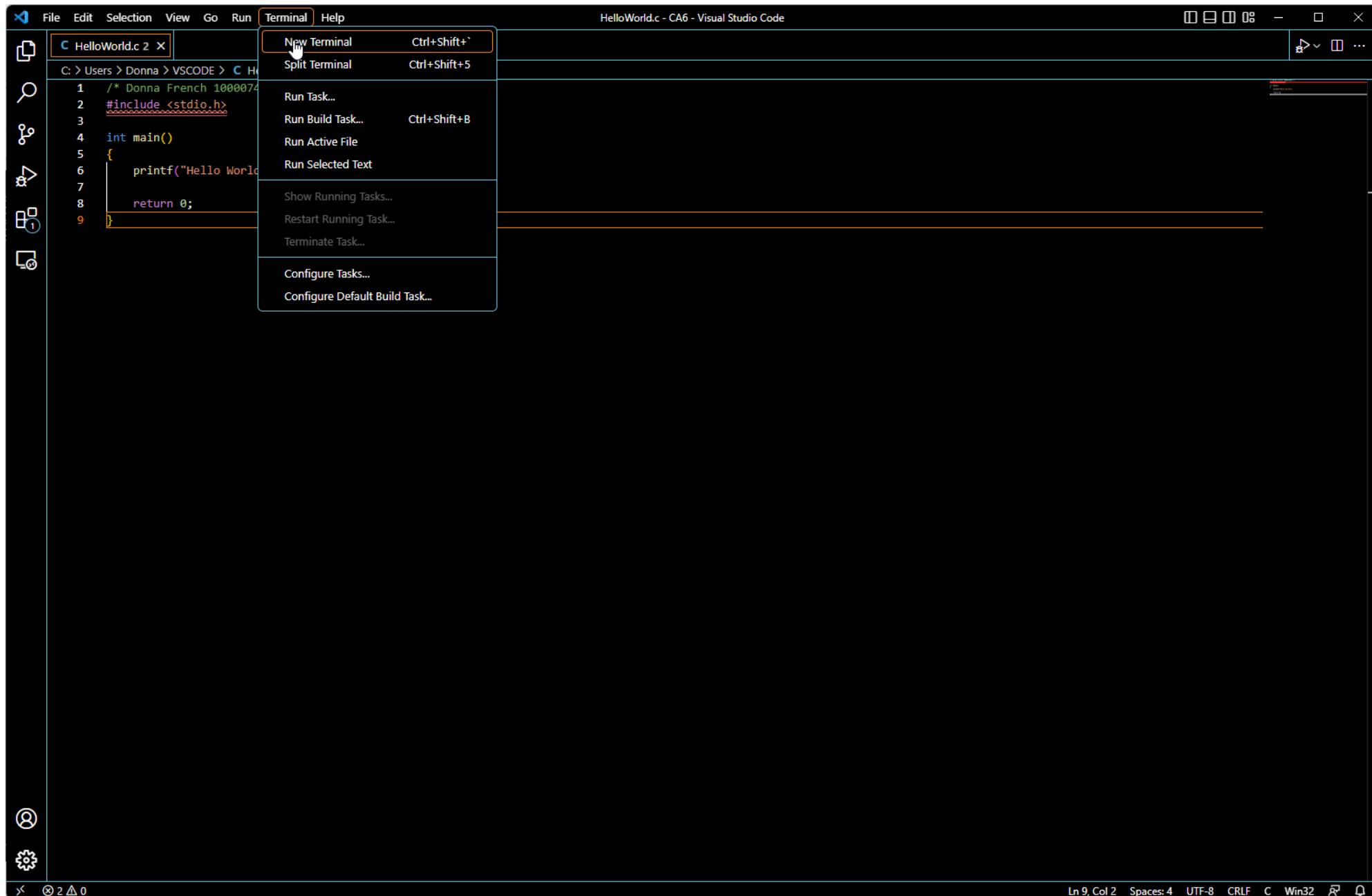
Open a new file and type in your C program.

Go to

Terminal

and choose

New Terminal



In the Terminal window,

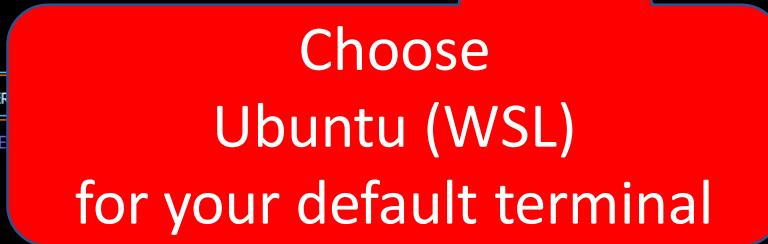
click on the down arrow



and choose

Select Default Profile





File Edit Selection View Go Run Terminal Help

HelloWorld.c - CA6 - Visual Studio Code

C HelloWorld.c 2 X

C > Users > Donna > VSCODE > C HelloWorld.c > main()

```
1 /* Donna French 1000074079 */
2 #include <stdio.h>
3
4 int main()
5 {
6     printf("Hello World");
7
8     return 0;
9 }
```

Select your default terminal profile

- Ubuntu (WSL) C:\WINDOWS\System32\wsl.exe -d Ubuntu profiles contributed
- Command Prompt C:\WINDOWS\System32\cmd.exe
- PowerShell C:\WINDOWS\System32\WindowsPowerShell\v1.0\powershell.exe detected
- JavaScript Debug Terminal
- Windows PowerShell C:\WINDOWS\System32\WindowsPowerShell\v1.0\powershell.exe detected

PROBLEMS ② OUTPUT DEBUG CONSOLE TERMINAL

frenchdm@DonnaPC:/mnt/c/Users/Donna/VSCODE

wsl + ▾ ✎ ^ ×

Choose Ubuntu (WSL) for your default terminal

File Edit Selection View Go Run Terminal Help

HelloWorld.c - CA6 - Visual Studio Code

C HelloWorld.c 2 X

C: > Users > Donna > VS CODE > C HelloWorld.c > main()

```
1 /* Donna French 1000074079 */
2 #include <stdio.h>
3
4 int main()
5 {
6     printf("Hello World");
7
8     return 0;
9 }
```

PROBLEMS ② OUTPUT DEBUG CONSOLE TERMINAL

wsl + ×

```
frenchdn@DonnaPC:/mnt/c/Users/Donna/VS CODE$ ls
frenchdn@DonnaPC:/mnt/c/Users/Donna/VS CODE$ gcc HelloWorld.c
frenchdn@DonnaPC:/mnt/c/Users/Donna/VS CODE$ ./a.out
Hello Worldfrenchdn@DonnaPC:/mnt/c/Users/Donna/VS CODE$
```

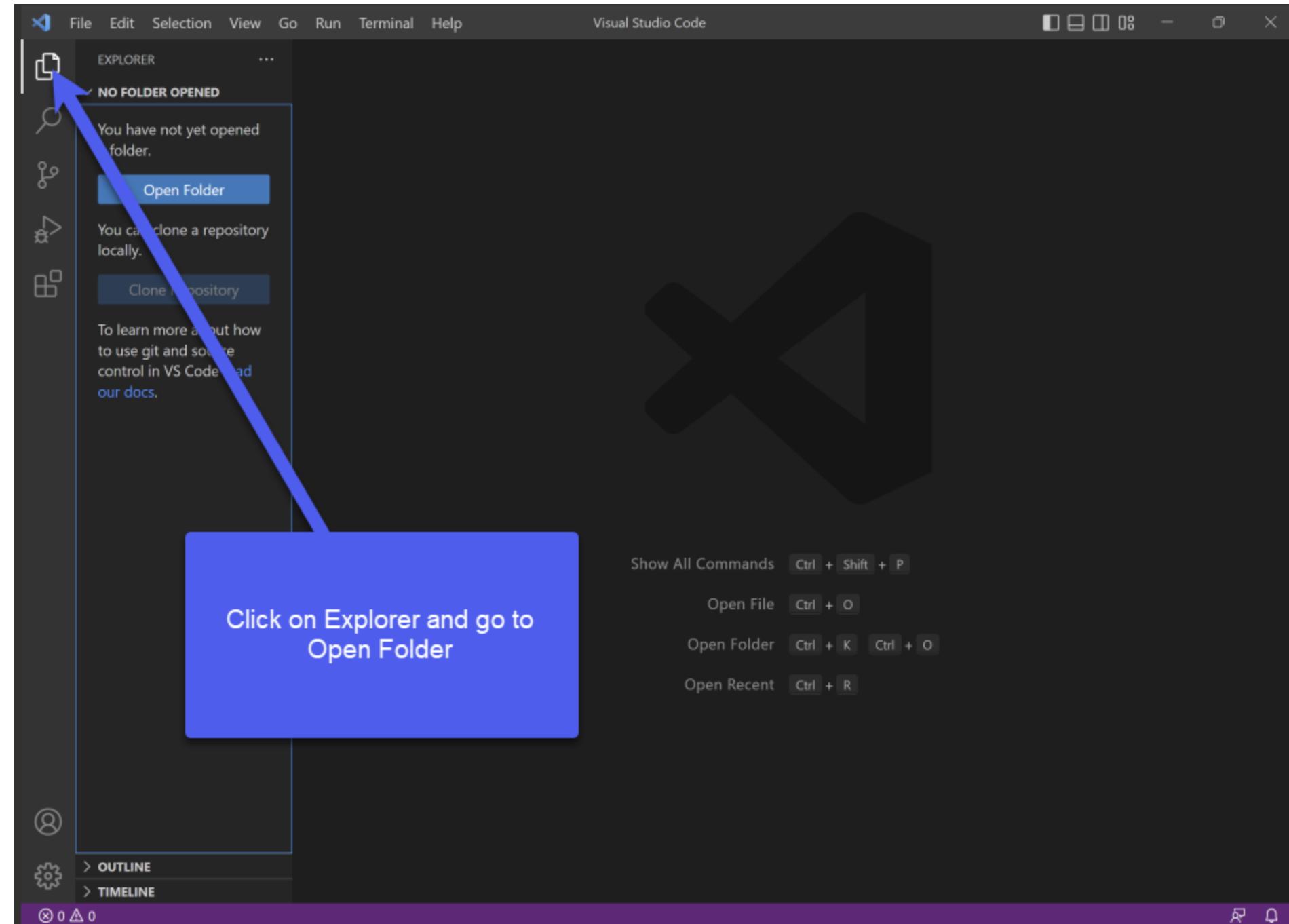
Windows only

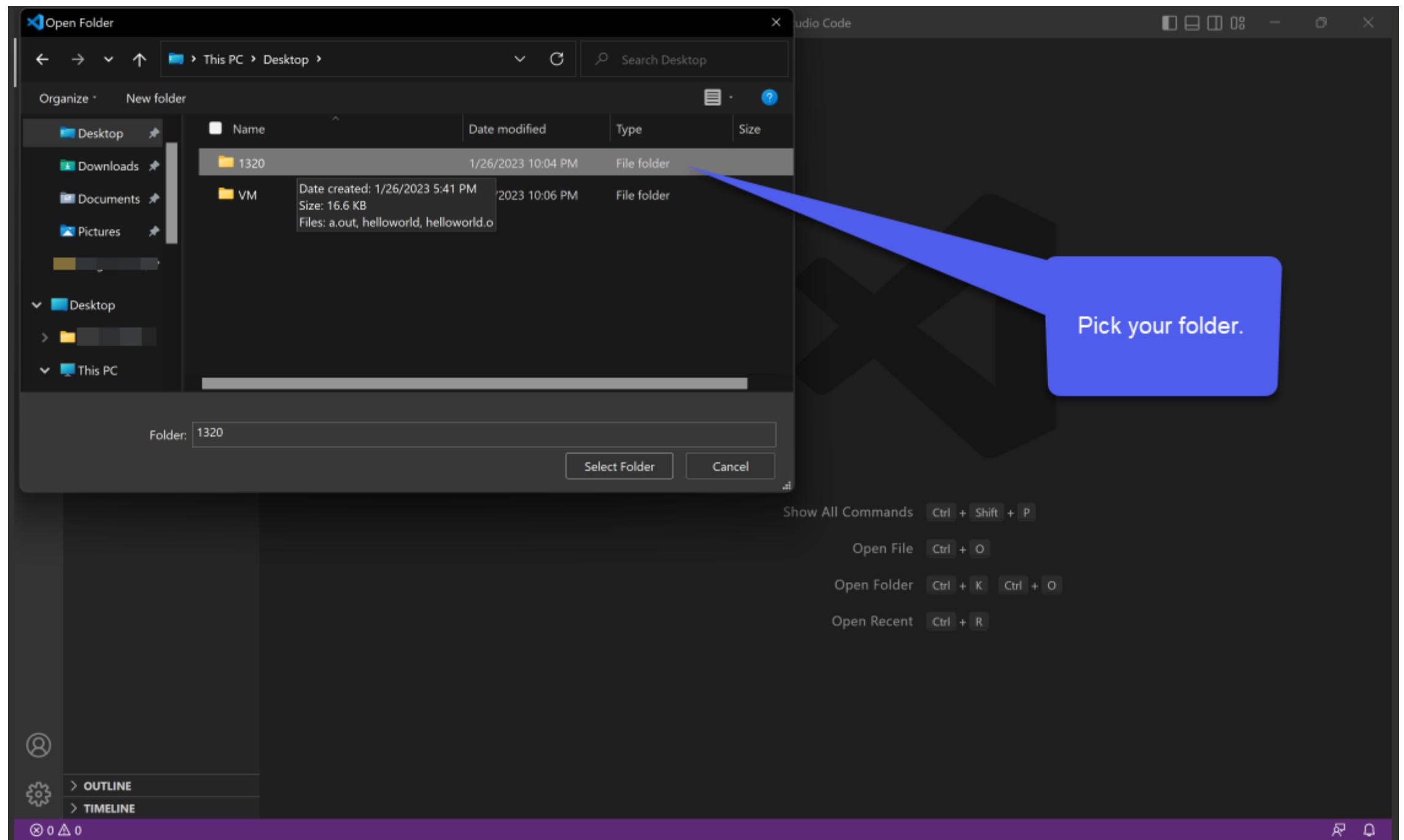
Now you have a Linux terminal where you can compile and run your code as needed for this class.

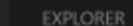
```
gcc HelloWorld.c
./a.out
```

You can set up Visual Studio Code to use a particular folder as its default.

Click on Explorer and go to Open Folder.



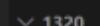




EXPLORER



Get Started X



1320



a.out



helloworld.c



helloworld.o



# Visual Studio Code

Editing evolved

Start

New File...

Open File...

Open Folder...

Recent

You have no recent fol



Do you trust the authors of the files in this folder?

Code provides features that may automatically execute files in this folder.

If you don't trust the authors of these files, we recommend to continue in restricted mode as the files may be malicious. See our docs to learn more.

C:\Users\maber\Desktop\1320

S

with JavaS

Productivity

More...

Yes, I trust the authors

Trust folder and enable all features

No, I don't trust the authors

Browse folder in restricted mode

You are the author  
so you can trust this  
folder.

Show welcome page on startup



&gt; OUTLINE

&gt; TIMELINE



# Troubleshooting

If you get this...



A screenshot of a terminal window titled "Ubuntu". The window contains the following text:  
Installing, this may take a few minutes...  
WslRegisterDistribution failed with error: 0x800701bc  
Error: 0x800701bc WSL 2 requires an update to its kernel component. For information please visit <https://aka.ms/wsl2kernel>  
Press any key to continue...

Go here

<https://learn.microsoft.com/en-us/windows/wsl/install-manual#step-4---download-the-linux-kernel-update-package>

And download the latest package

## Step 4 - Download the Linux kernel update package

1. Download the latest package:

- WSL2 Linux kernel update package for x64 machines ↗

# Installing gdb

At the Ubuntu prompt, type

```
sudo apt-get update
```

and then type

```
sudo apt-get install gdb
```