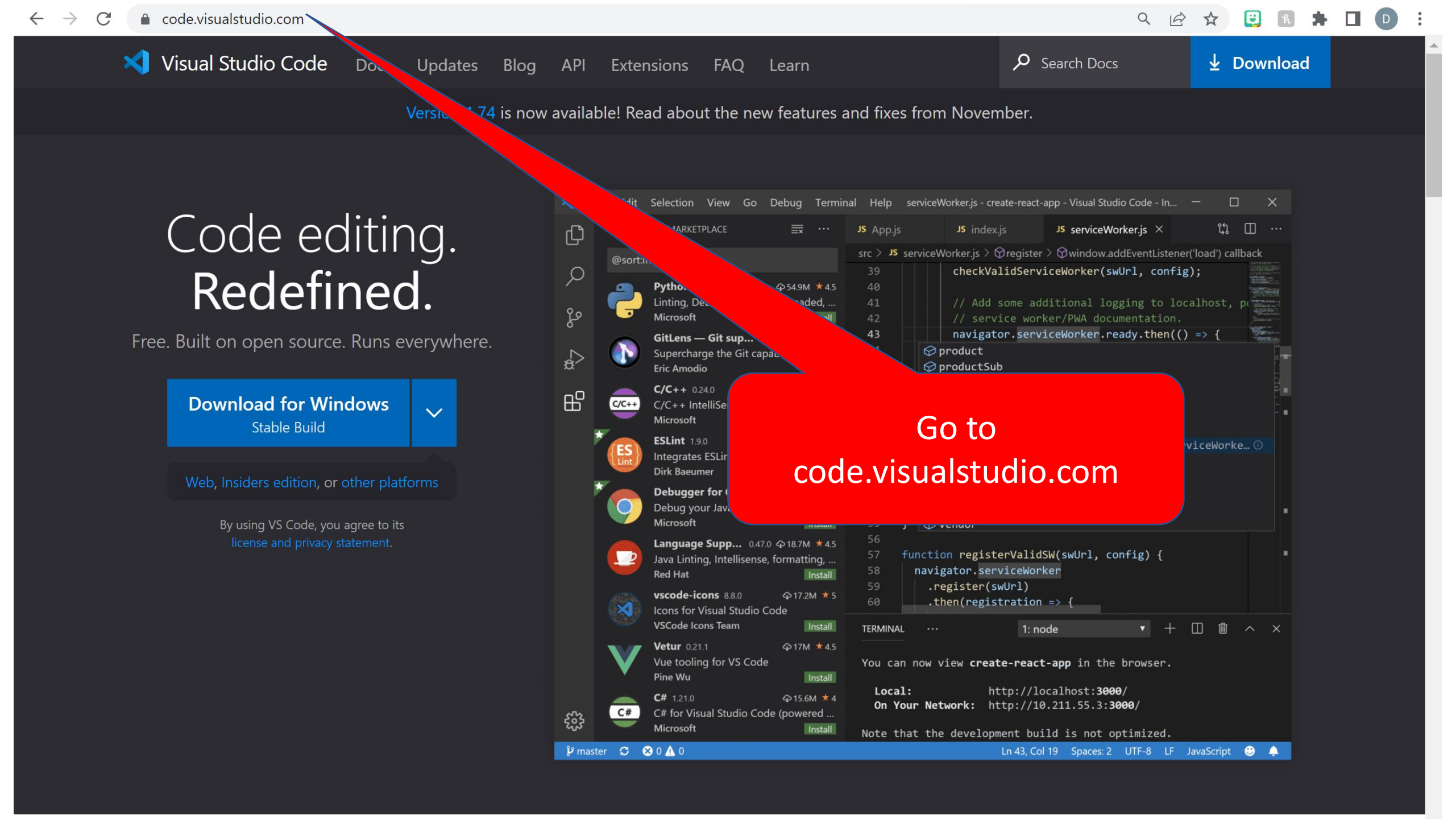
Installing Visual Studio Code using an Ubuntu Terminal for compiling

February 2024

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


code.visualstudio.com
Visual Studio Code
Updates
Blog
API
Extensions
FAQ
Learn
Search Docs
Download
is now available! Read about the new features and fixes from November.
Code editing.
Redefined.
Free. Built on open source. Runs everywhere.
Download for Windows
Stable Build
Web, Insiders edition, or other platforms
By using VS Code, you agree to its
license and privacy statement.
Go to
code.visualstudio.com
checkValidServiceWorker(swUrl, config);
// Add some additional logging to localhost,
// service worker/PWA documentation.
navigator.serviceWorker.ready.then(() => {
function registerValidSW(swUrl, config) {
navigator.serviceWorker
.register(swUrl)
.then(registration => {
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.

code.visualstudio.com

Visual Studio Code Docs Updates Blog API Extensions FAQ Learn Search Docs Download

Version 1.74 is now available! Read about t

Code editing. Redefined.

Free. Built on open source. Runs everywhere.

Download for Windows
Stable Build

		Stable	Insiders
macOS	Universal	↓	↓
Windows x64	User Installer	↓	↓
Linux x64	.deb	↓	↓
	.rpm	↓	↓

Other downloads
or open on web

Click on the down arrow to see other choices for OS

Pick your OS
Mac, Windows, Linux

Note for Macs with ARM architecture

Use the ARM64 option called Apple Silicon

Overview
SETUP
GET STARTED
USER GUIDE
SOURCE CONTROL
TERMINAL
LANGUAGES
NODE.JS / JAVASCRIPT
TYPESCRIPT
PYTHON
JAVA
C++
DOCKER
DATA SCIENCE
AZURE
REMOTE
DEV CONTAINERS

Thanks for downloading VS Code for Windows!

Download not starting? Try this direct download link.

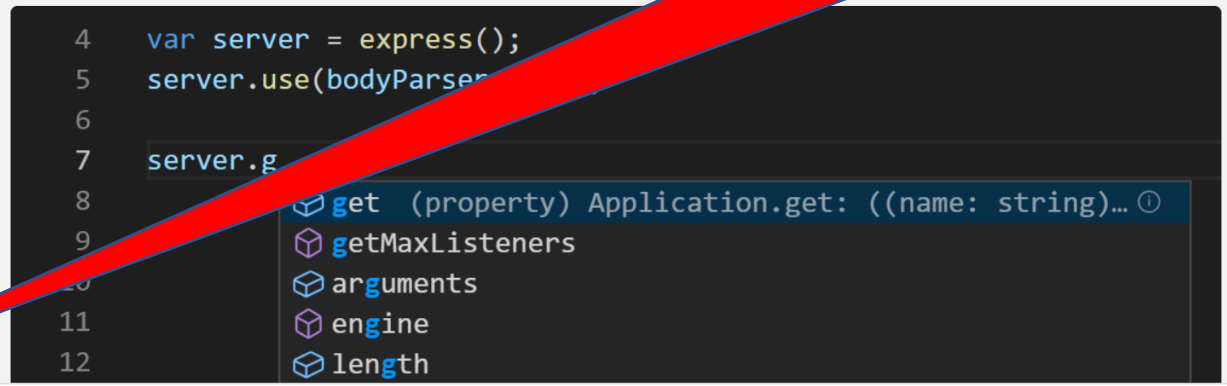
Please take a few seconds and help us improve ... click to take survey.

Getting Started

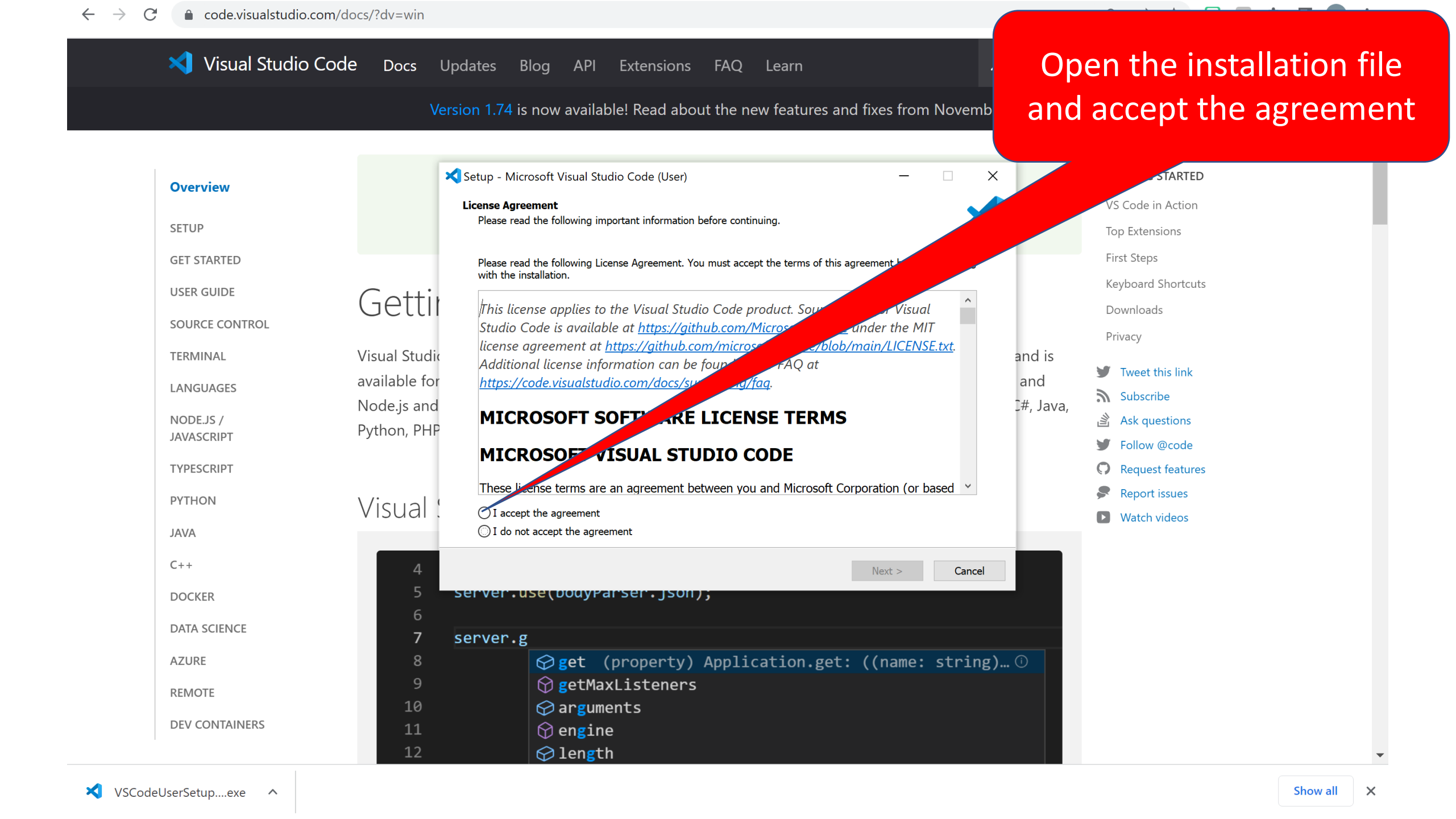
Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux. It comes wit
Node.js and has a rich ecosystem of extensions for o
Python, PHP, Go, .NET). Begin your journey with VS C

GETTING STARTED
VS Code in Action
Top Extensions
First Steps
Keyboard Shortcuts
Downloads
Privacy
Tweet this link
ons
ode
eatures
ues
deos

Visual Studio Code in Action



Installation file should download


code.visualstudio.com/docs/?dv=win
Visual Studio Code
Docs
Updates
Blog
API
Extensions
FAQ
Learn
Version 1.74 is now available! Read about the new features and fixes from Novemb
Open the installation file and accept the agreement
Setup - Microsoft Visual Studio Code (User)
License Agreement
Please read the following important information before continuing.
Please read the following License Agreement. You must accept the terms of this agreement b
with the installation.
This license applies to the Visual Studio Code product. Sou
Visual Studio Code is available at https://github.com/Micros
under the MIT license agreement at https://github.com/micros
/blob/main/LICENSE.txt.
Additional license information can be fou
FAQ at https://code.visualstudio.com/docs/su
/faq.
MICROSOFT SOFT
RE LICENSE TERMS
MICROSOF
VISUAL STUDIO CODE
These license terms are an agreement between you and Microsoft Corporation (or based
I accept the agreement
I do not accept the agreement
Next >
Cancel
Overview
SETUP
GET STARTED
USER GUIDE
SOURCE CONTROL
TERMINAL
LANGUAGES
NODE.JS / JAVASCRIPT
TYPESCRIPT
PYTHON
JAVA
C++
DOCKER
DATA SCIENCE
AZURE
REMOTE
DEV CONTAINERS
STARTED
VS Code in Action
Top Extensions
First Steps
Keyboard Shortcuts
Downloads
Privacy
Tweet this link
Subscribe
Ask questions
Follow @code
Request features
Report issues
Watch videos
Getti
Visual Studi
available for
Node.js and
Python, PHP
and is
and
#, Java,
Visual
server.use(bodyParser.json());
server.g
get (property) Application.get: ((name: string)…
getMaxListeners
arguments
engine
length
VSCodeUserSetup....exe
Show all

Overview

SETUP

GET STARTED

USER GUIDE

SOURCE CONTROL

TERMINAL

LANGUAGES

NODE.JS / JAVASCRIPT

TYPESCRIPT

PYTHON

JAVA

C++

DOCKER

DATA SCIENCE

AZURE

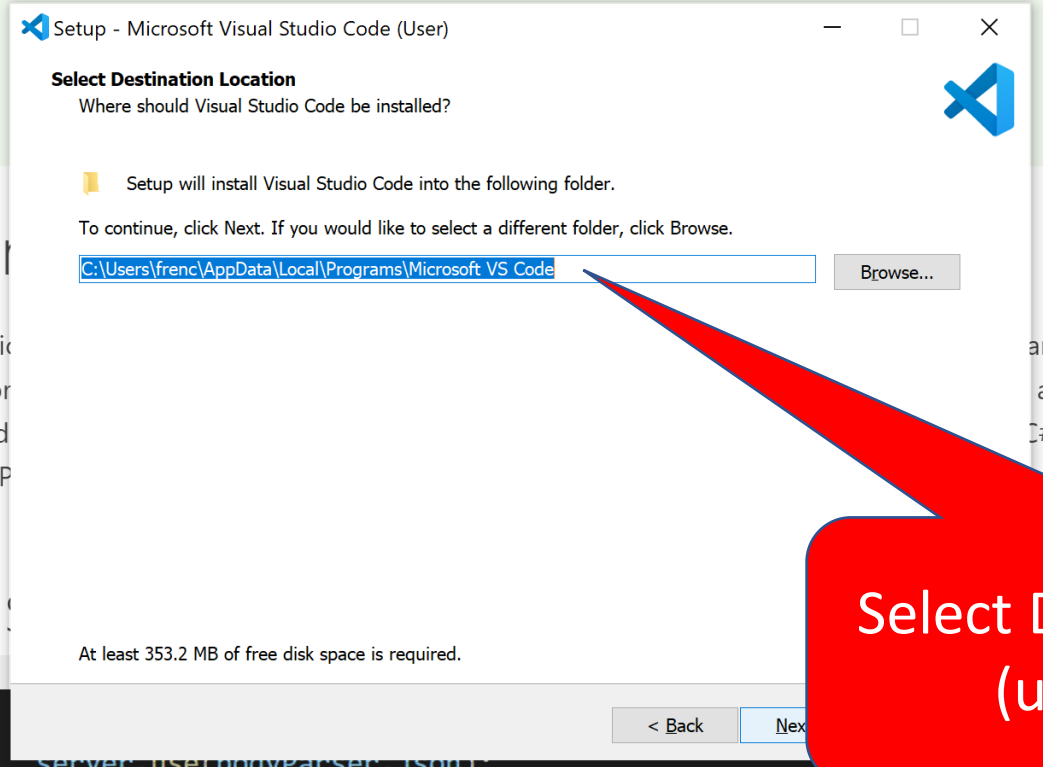
REMOTE

DEV CONTAINERS

Getti

Visual Studi and is
available for and
Node.js and C#, Java,
Python, PHP

Visual



Select Destination Location
(use the default)

```
4
5   server.use(bodyParser.json());
6
7   server.g
8           get  (property) Application.get: ((name: string)…
9           getMaxListeners
10          arguments
11          engine
12          length
13          merge
14          purge
```

GETTING STARTED

VS Code in Action

Top Extensions

First Steps

Keyboard Shortcuts

Downloads

Privacy

Tweet this link

Subscribe

Ask questions

Follow @code

Overview

SETUP

GET STARTED

USER GUIDE

SOURCE CONTROL

TERMINAL

LANGUAGES

NODE.JS / JAVASCRIPT

TYPESCRIPT

PYTHON

JAVA

C++

DOCKER

DATA SCIENCE

AZURE

REMOTE

DEV CONTAINERS

Keyboard Shortcuts

Increase your productivity with VS Code's keyboard shortcuts

Keyboard Sh

Keymap Exte

Customize K

Downlo

Download V Linux)

Privacy

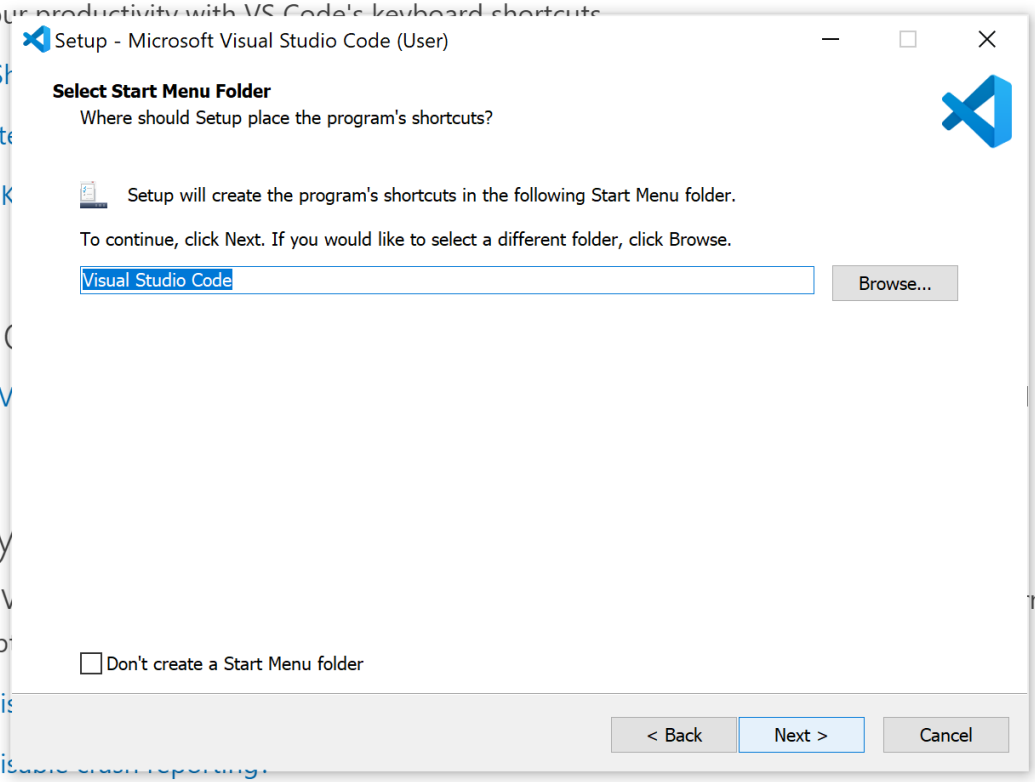
By default, V mation.

You may opt

How do I dis

How do I disable crash reporting?

How do I disable usage reporting?



Was this documentation helpful?

Yes No

GETTING STARTED

VS Code in Action

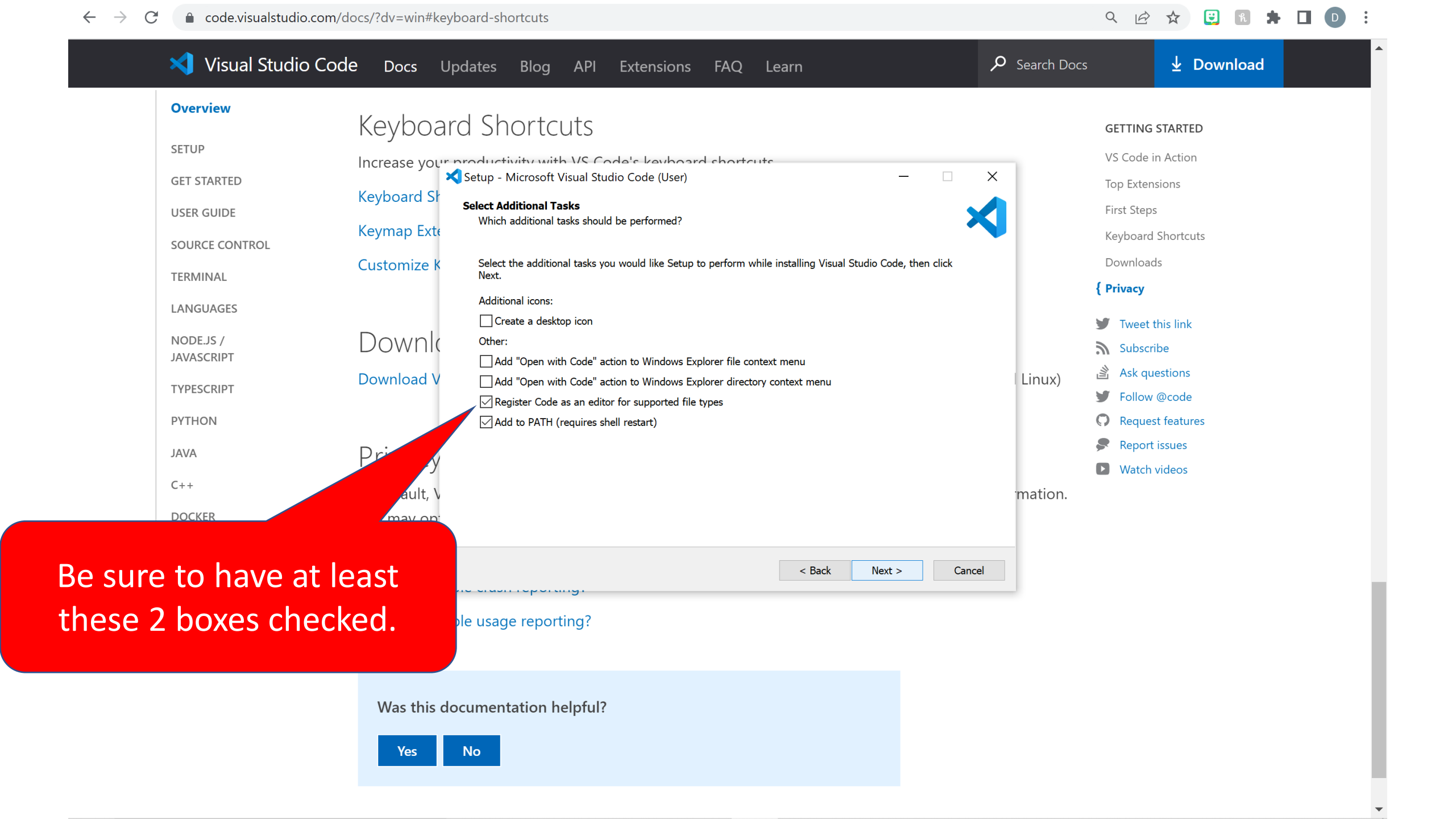
Top Extensions

First Steps

Keyboard Shortcuts

Downloads

{ Privacy


code.visualstudio.com/docs/?dv=win#keyboard-shortcuts
Visual Studio Code
Docs
Updates
Blog
API
Extensions
FAQ
Learn
Search Docs
Download
Overview
SETUP
GET STARTED
USER GUIDE
SOURCE CONTROL
TERMINAL
LANGUAGES
NODE.JS / JAVASCRIPT
TYPESCRIPT
PYTHON
JAVA
C++
DOCKER
Keyboard Shortcuts
Increase your productivity with VS Code's keyboard shortcuts
Keyboard Sh
Keymap Exte
Customize K
Downl
Download V
Linux)
Pri y
ault, V
may op
mation.
le usage reporting?
Was this documentation helpful?
Yes
No
GETTING STARTED
VS Code in Action
Top Extensions
First Steps
Keyboard Shortcuts
Downloads
{ Privacy
Tweet this link
Subscribe
Ask questions
Follow @code
Request features
Report issues
Watch videos
Setup - Microsoft Visual Studio Code (User)
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)
< Back
Next >
Cancel
Be sure to have at least these 2 boxes checked.

Overview

SETUP

GET STARTED

USER GUIDE

SOURCE CONTROL

TERMINAL

LANGUAGES

NODE.JS / JAVASCRIPT

TYPESCRIPT

PYTHON

JAVA

C++

DOCKER

Keyboard Shortcuts

Increase your productivity with VS Code's keyboard shortcuts

Keyboard Sh

Keymap Exte

Customize K

Downlo

Download V

Linux)

Privacy

By default, V

You may opt

mation.

le usage reporting?

GETTING STARTED

VS Code in Action

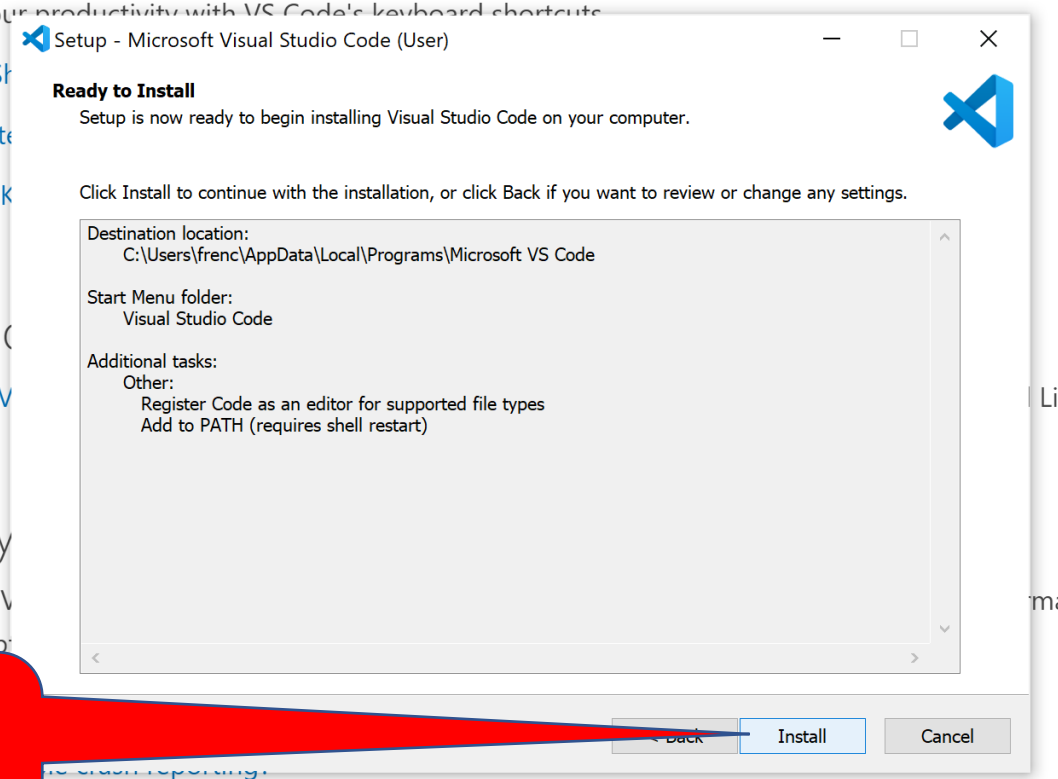
Top Extensions

First Steps

Keyboard Shortcuts

Downloads

{ Privacy



Click "Install"

Was this documentation helpful?

Yes No

Overview
SETUP
GET STARTED
USER GUIDE
SOURCE CONTROL
TERMINAL
LANGUAGES
NODE.JS / JAVASCRIPT
TYPESCRIPT
PYTHON
JAVA
C++
DOCKER
DATA SCIENCE
AZURE
REMOTE
DEV CONTAINERS

Keyboard Shortcuts

Increase your productivity with VS Code's keyboard shortcuts

Keyboard Sh

Keymap Exte

Customize K

Downl

Download V

Linux)

Privacy

By default, V

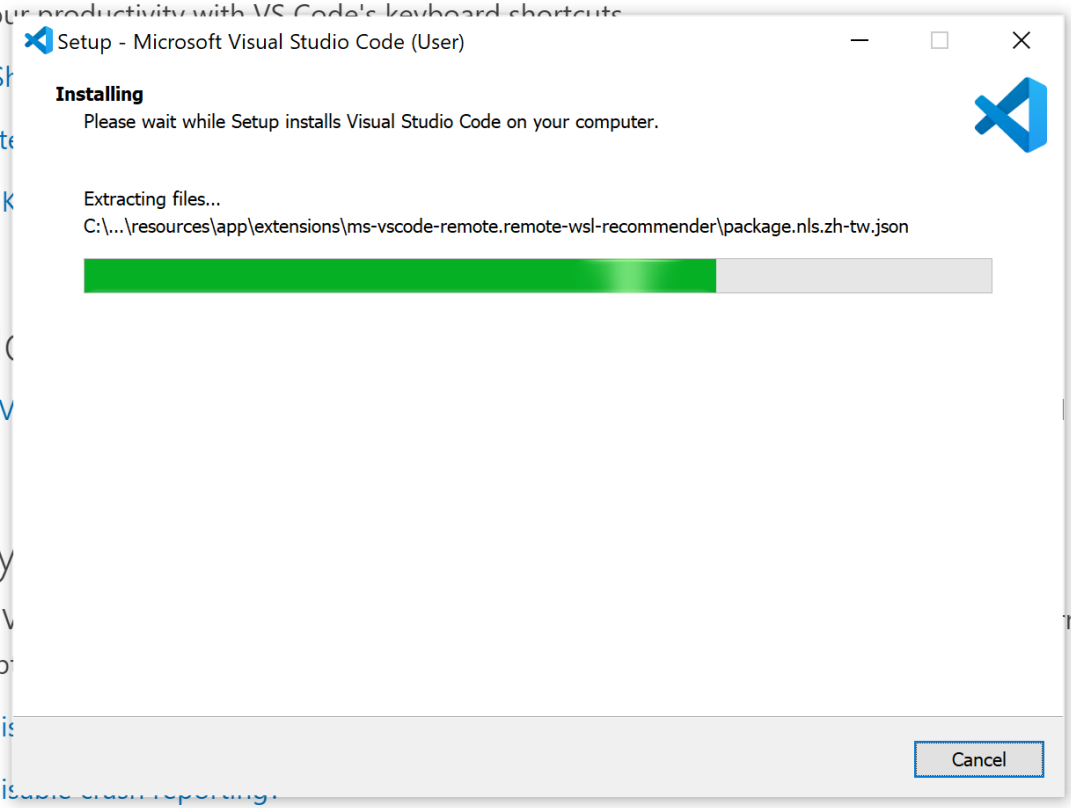
You may op

mation.

How do I dis

How do I disable crash reporting?

How do I disable usage reporting?

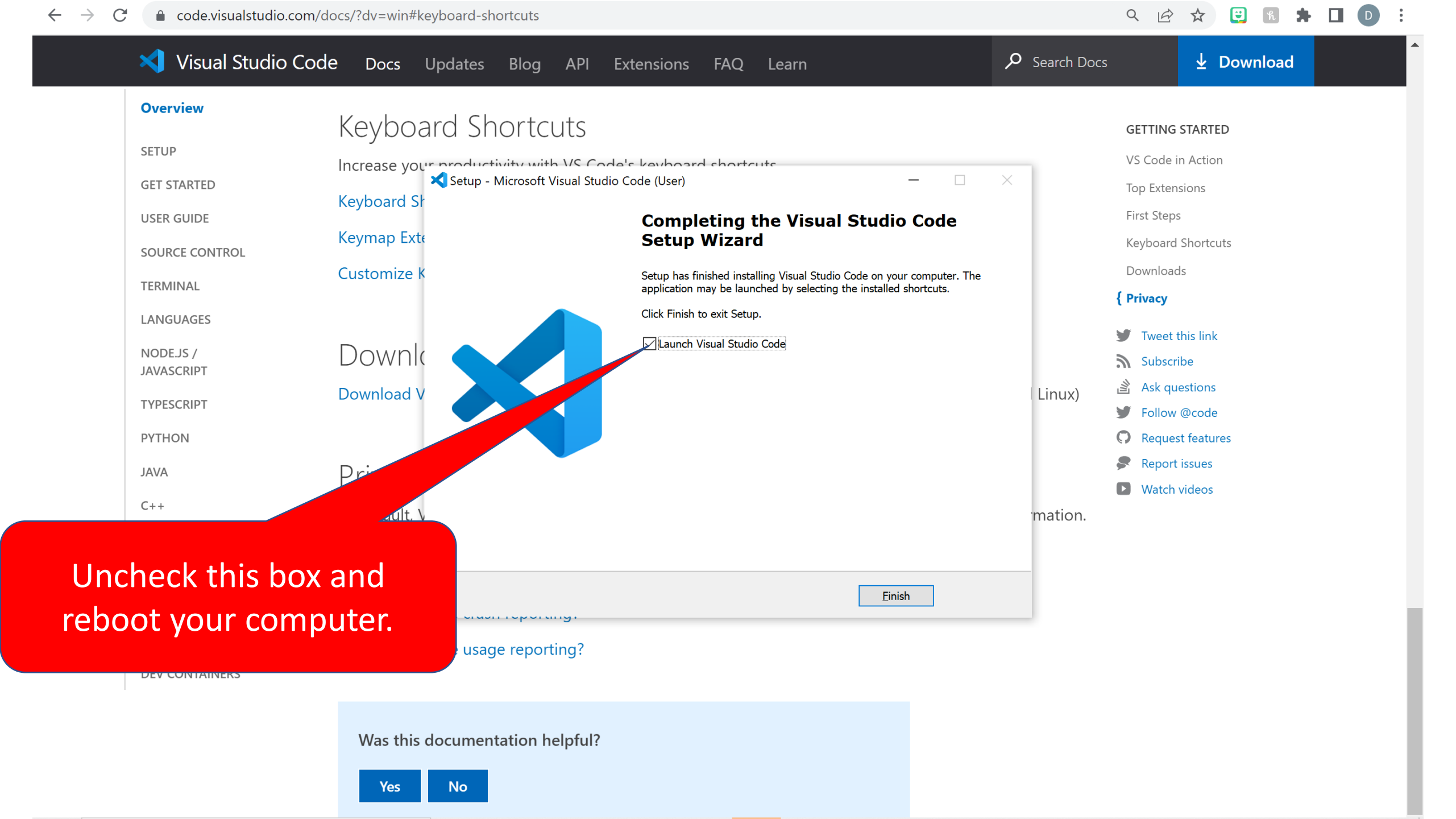


GETTING STARTED
VS Code in Action
Top Extensions
First Steps
Keyboard Shortcuts
Downloads
{ Privacy

Tweet this link
Subscribe
Ask questions
Follow @code
Request features
Report issues
Watch videos

Was this documentation helpful?

Yes No


code.visualstudio.com/docs/?dv=win#keyboard-shortcuts
Visual Studio Code
Docs
Updates
Blog
API
Extensions
FAQ
Learn
Search Docs
Download
Overview
SETUP
GET STARTED
USER GUIDE
SOURCE CONTROL
TERMINAL
LANGUAGES
NODE.JS / JAVASCRIPT
TYPESCRIPT
PYTHON
JAVA
C++
DEV CONTAINERS
Keyboard Shortcuts
Increase your productivity with VS Code's keyboard shortcuts
Keyboard Sh
Keymap Exte
Customize K
Downlo
Download V
Linux)
mation.
usage reporting?
Was this documentation helpful?
Yes
No
GETTING STARTED
VS Code in Action
Top Extensions
First Steps
Keyboard Shortcuts
Downloads
{ Privacy
Tweet this link
Subscribe
Ask questions
Follow @code
Request features
Report issues
Watch videos
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
Uncheck this box and reboot your computer.

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
```

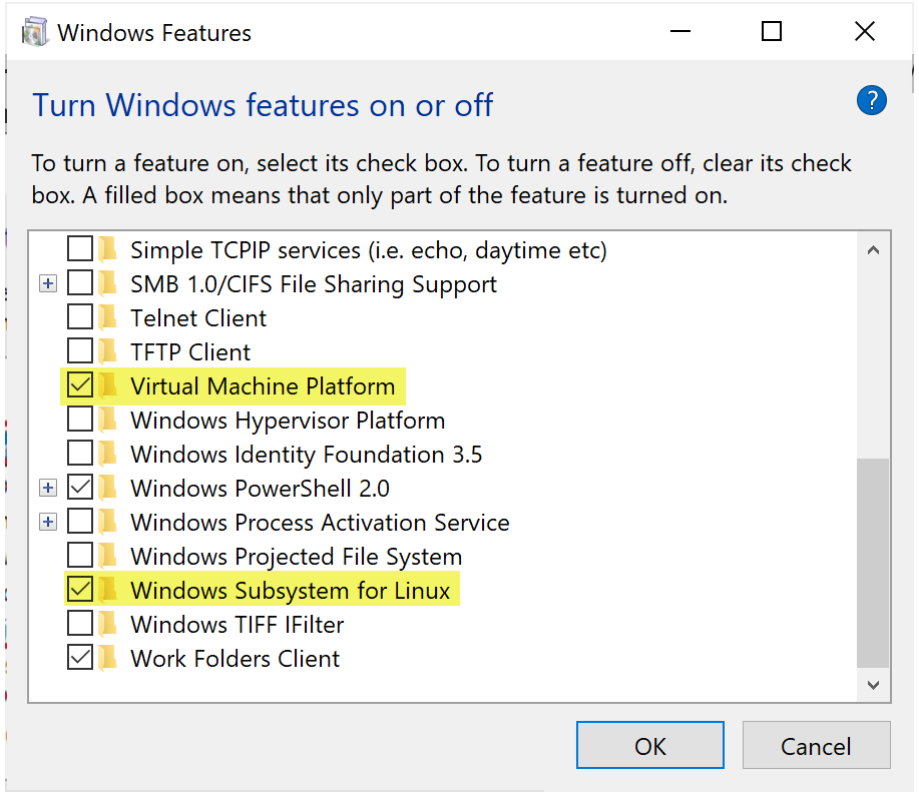
at your command prompt.

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.

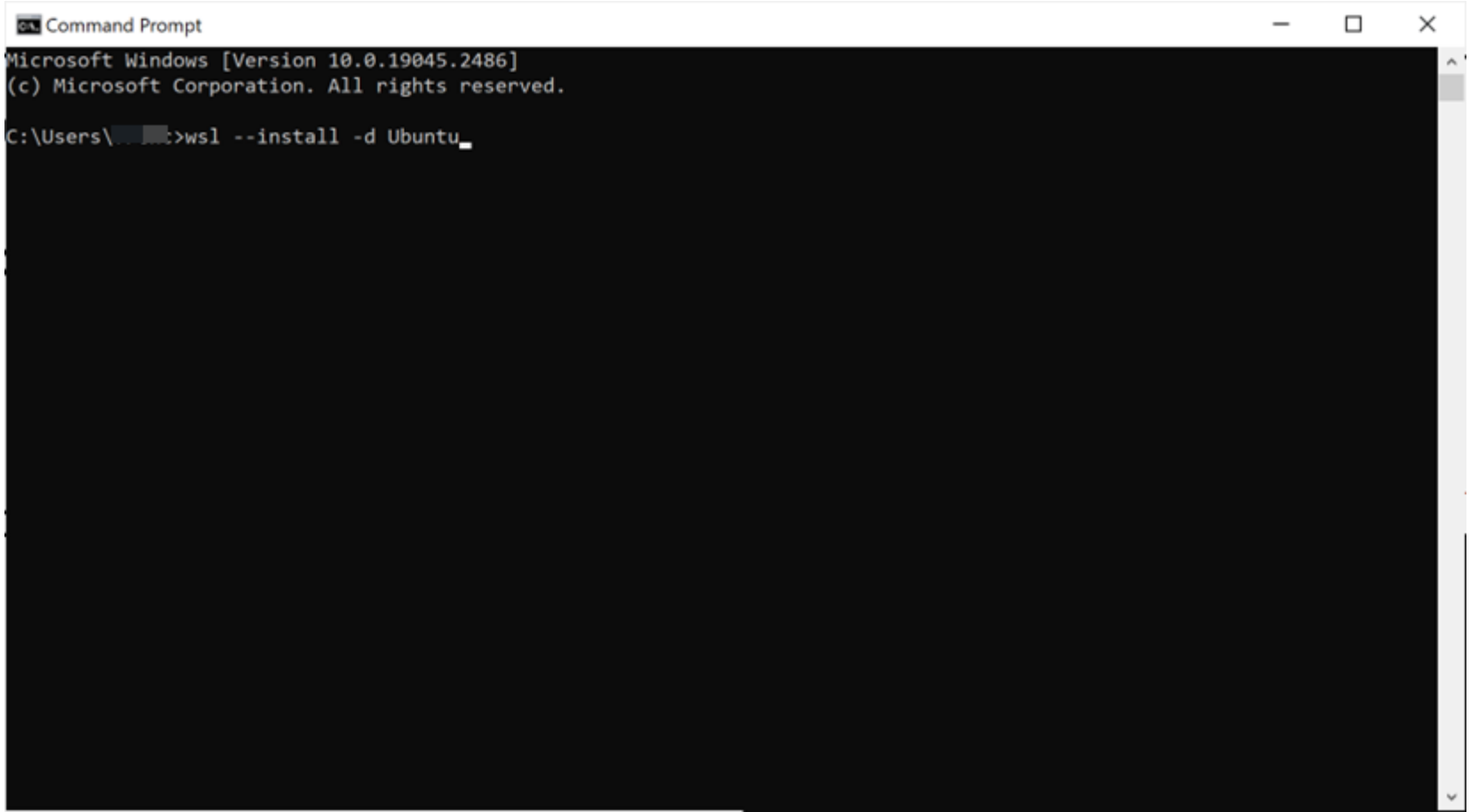


For Windows users, go to the Command Prompt and install WSL – Windows Subsystem for Linux

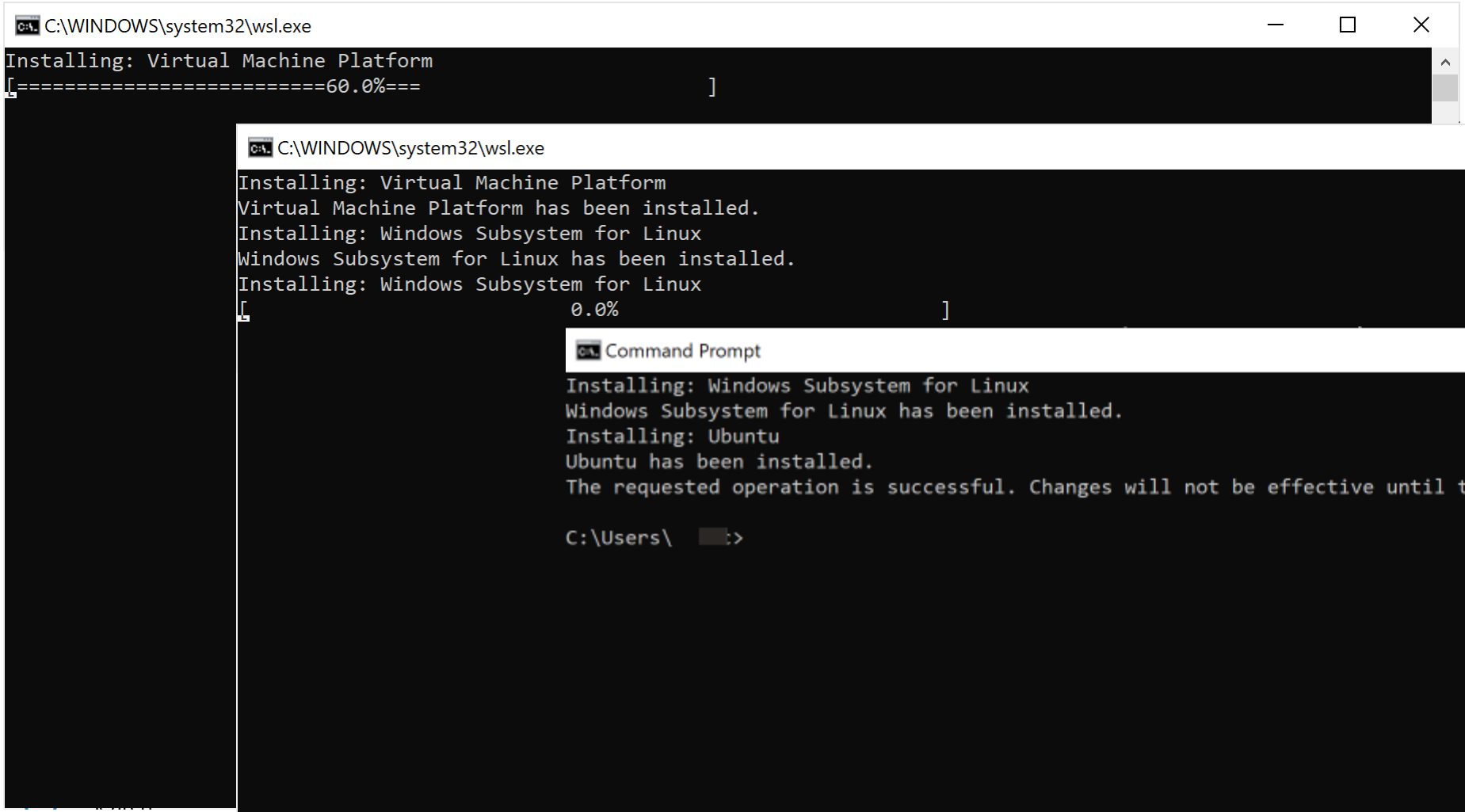
Type

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

at the prompt



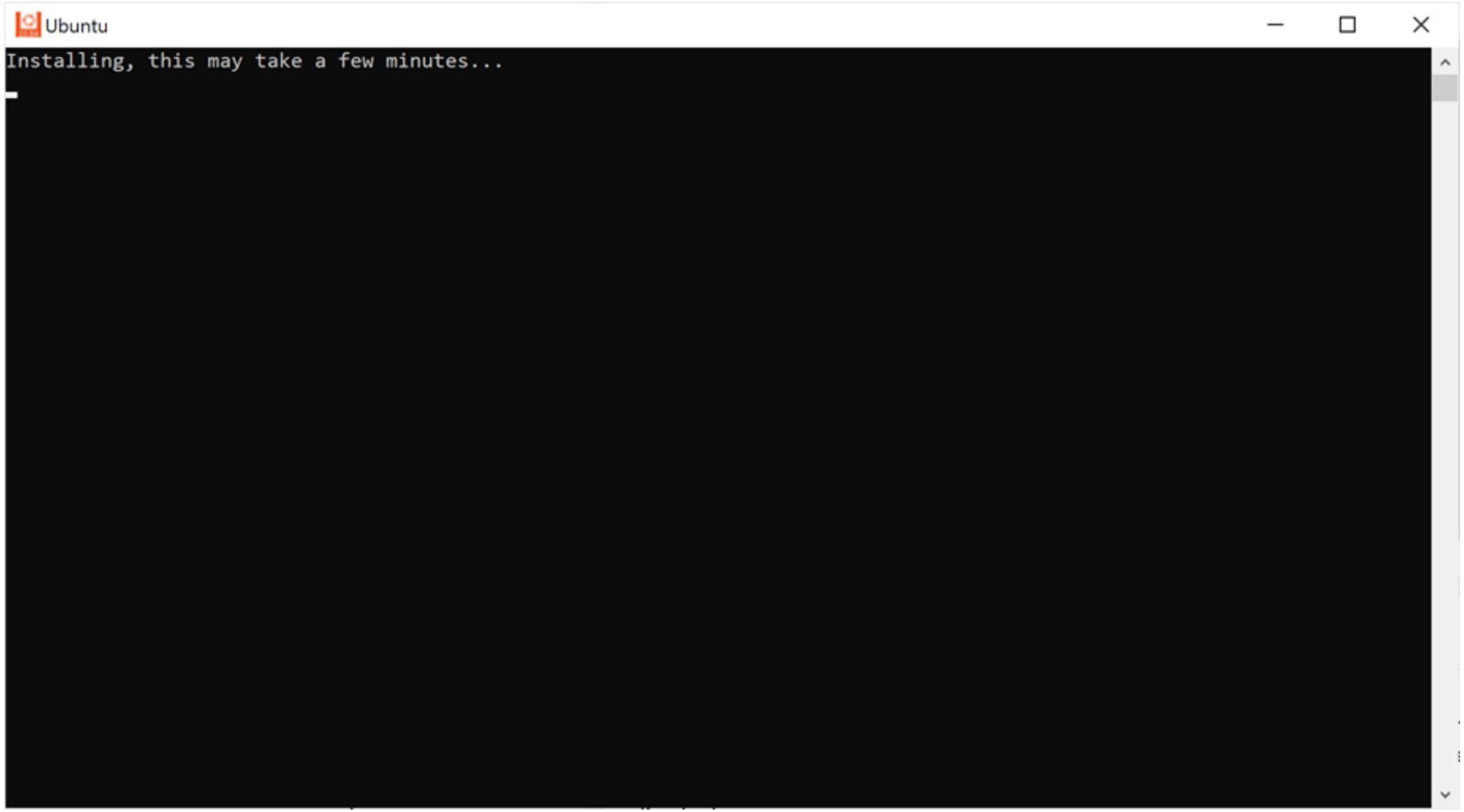
Windows only



Reboot your computer now.

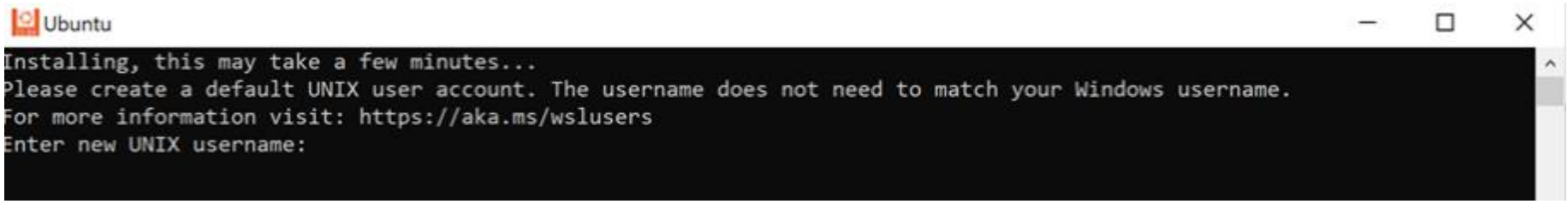
Windows only

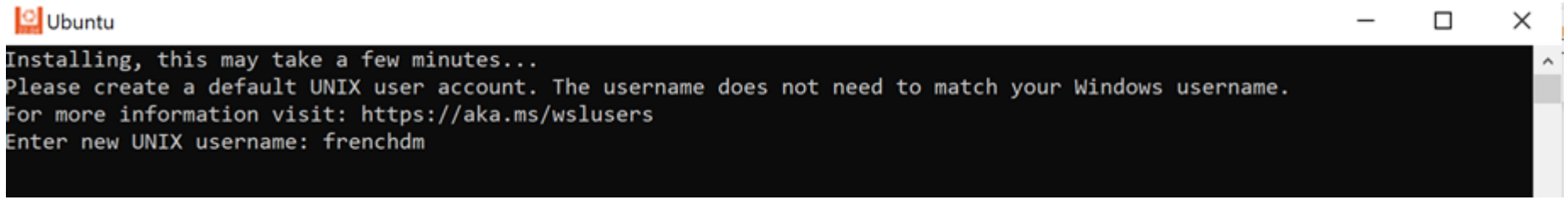
When your computer restarts, give it a moment and the Ubuntu window should open back up.



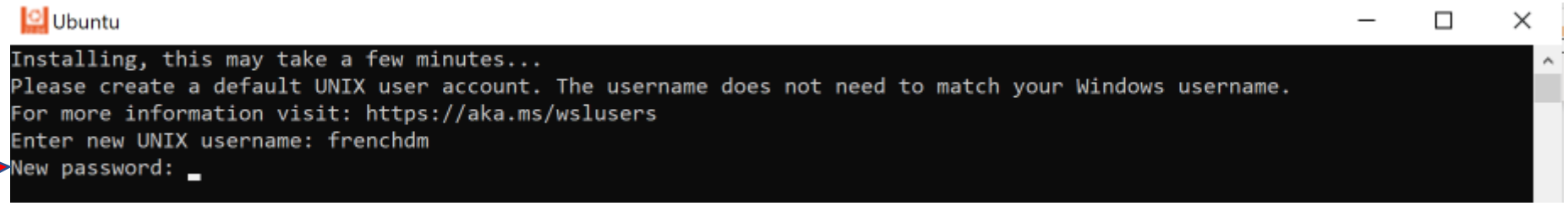
Windows only

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

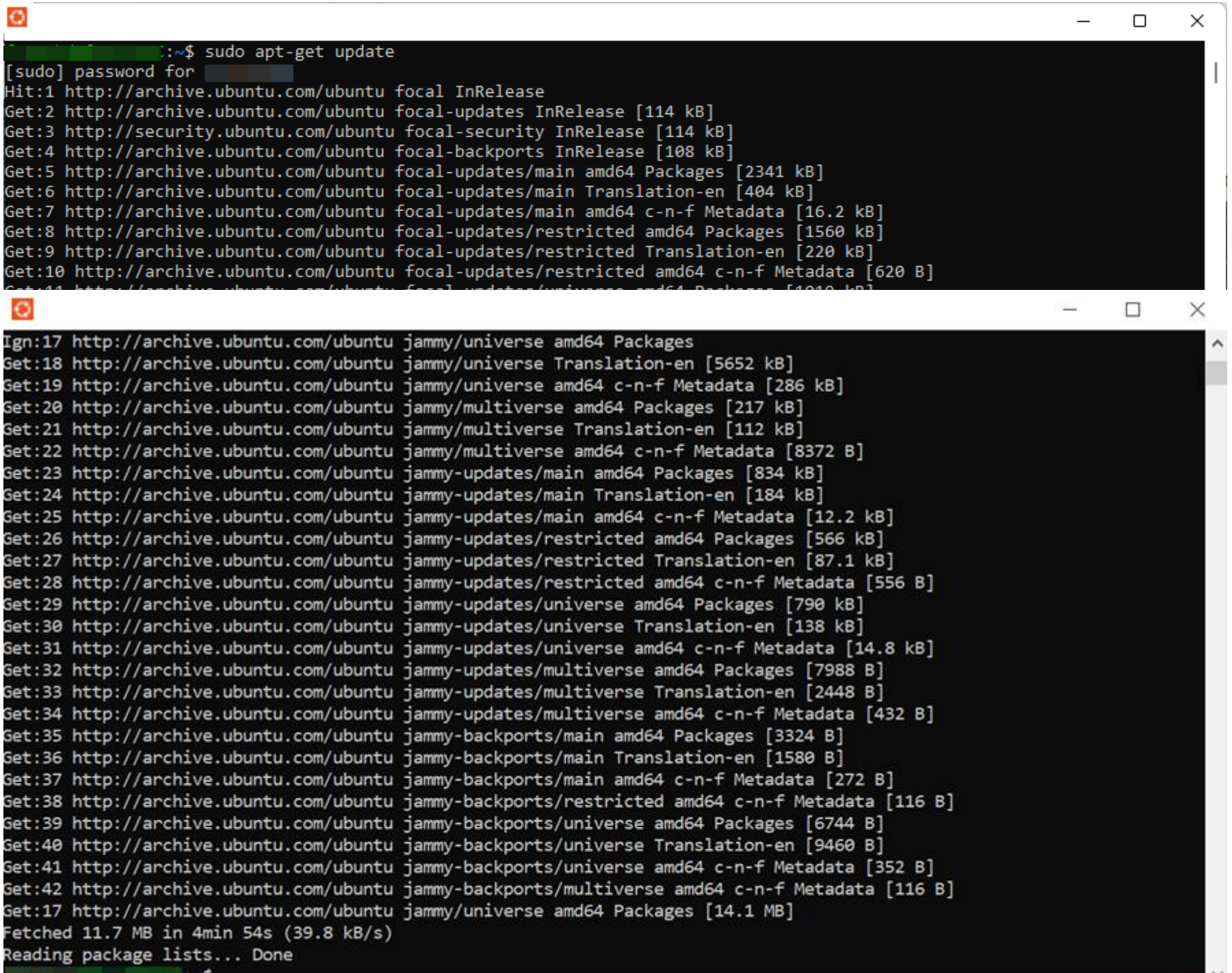




When you type the password, the cursor will not move and you will not see anything. Just keep typing.



Windows only



At the prompt in your WSL command window, type

`sudo apt-get update`

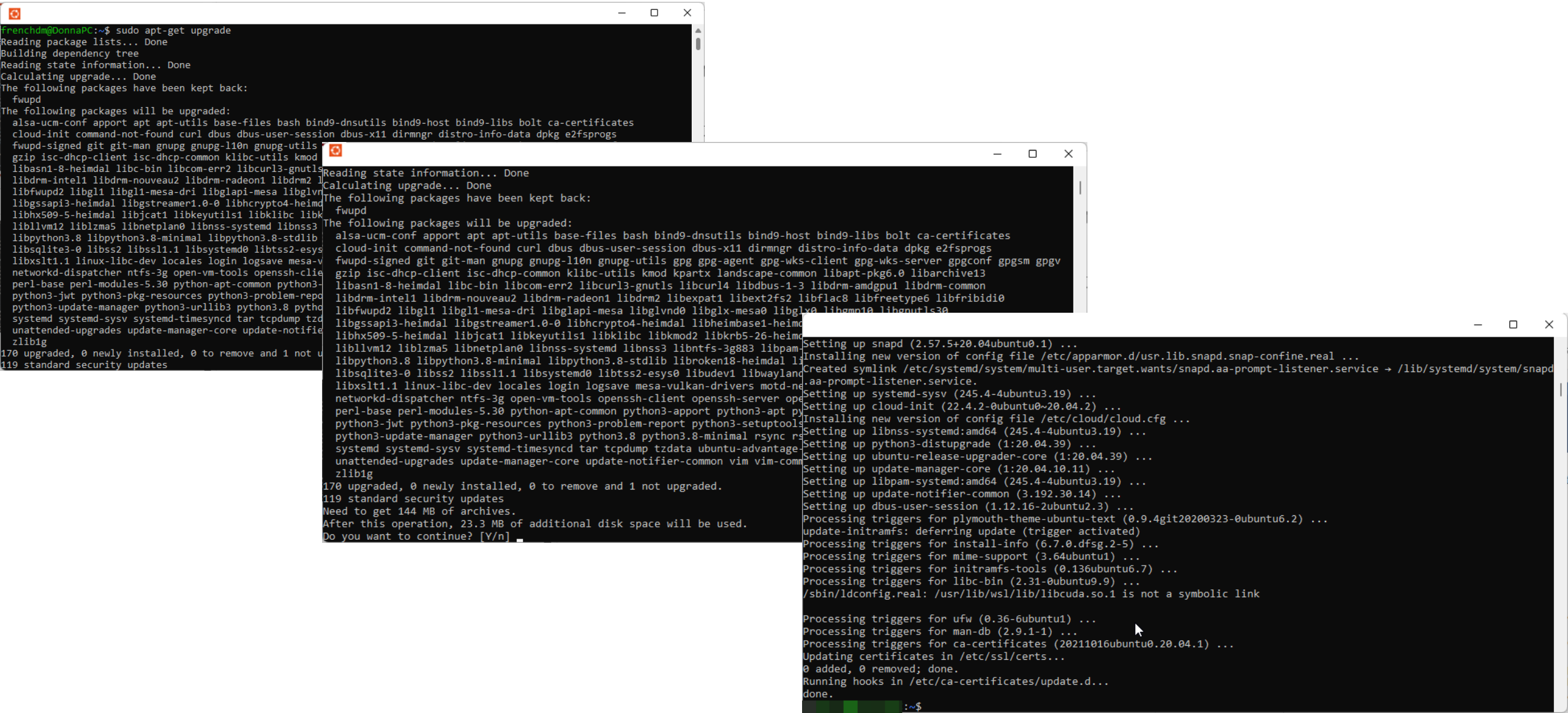
Anytime you use a `sudo` command, you will be asked for your password.

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

At the prompt in your WSL command window, type

Windows only

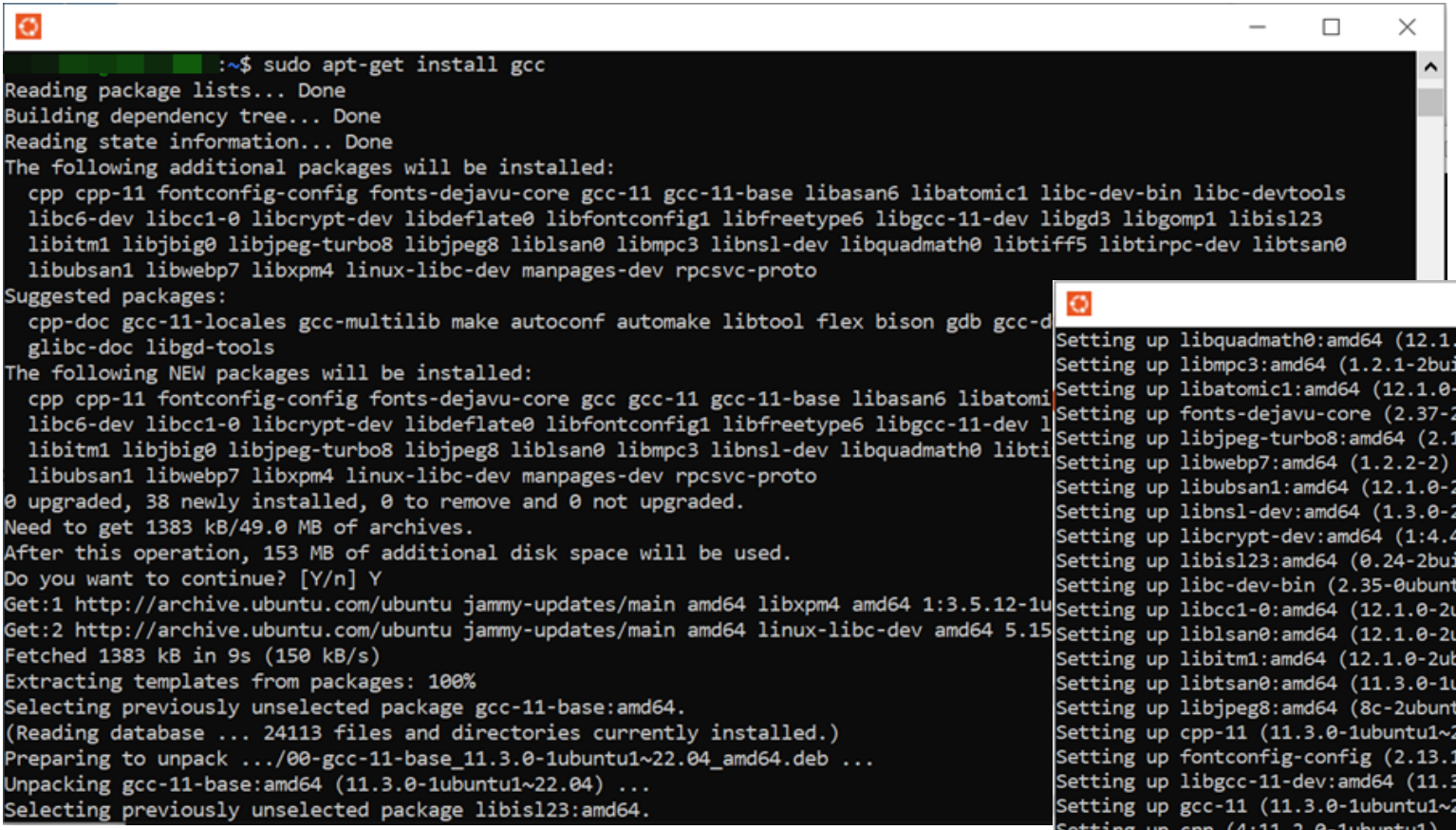
```
sudo apt-get upgrade
```

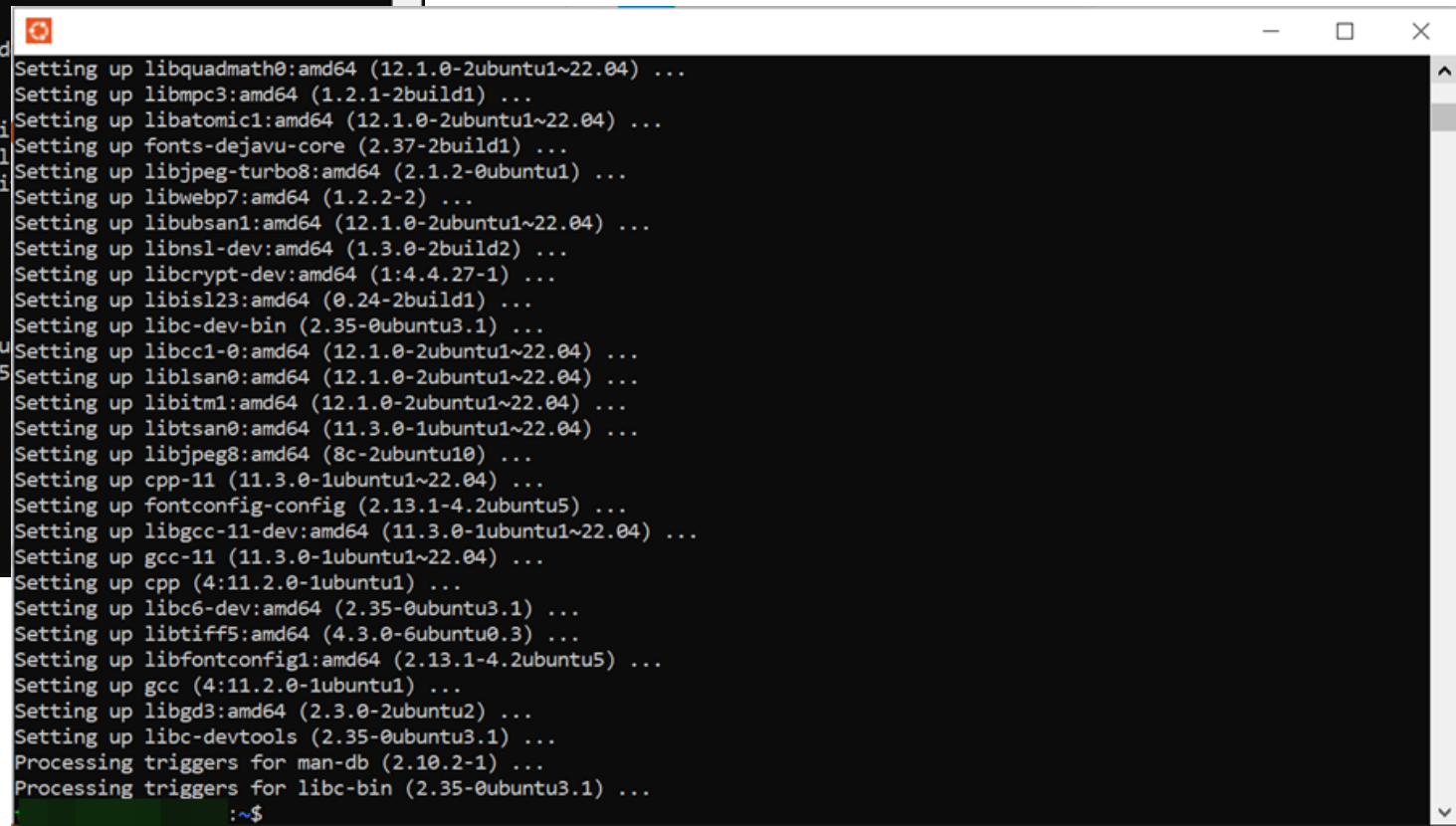


Windows only

Now install the C compiler `gcc`

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





Windows only

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

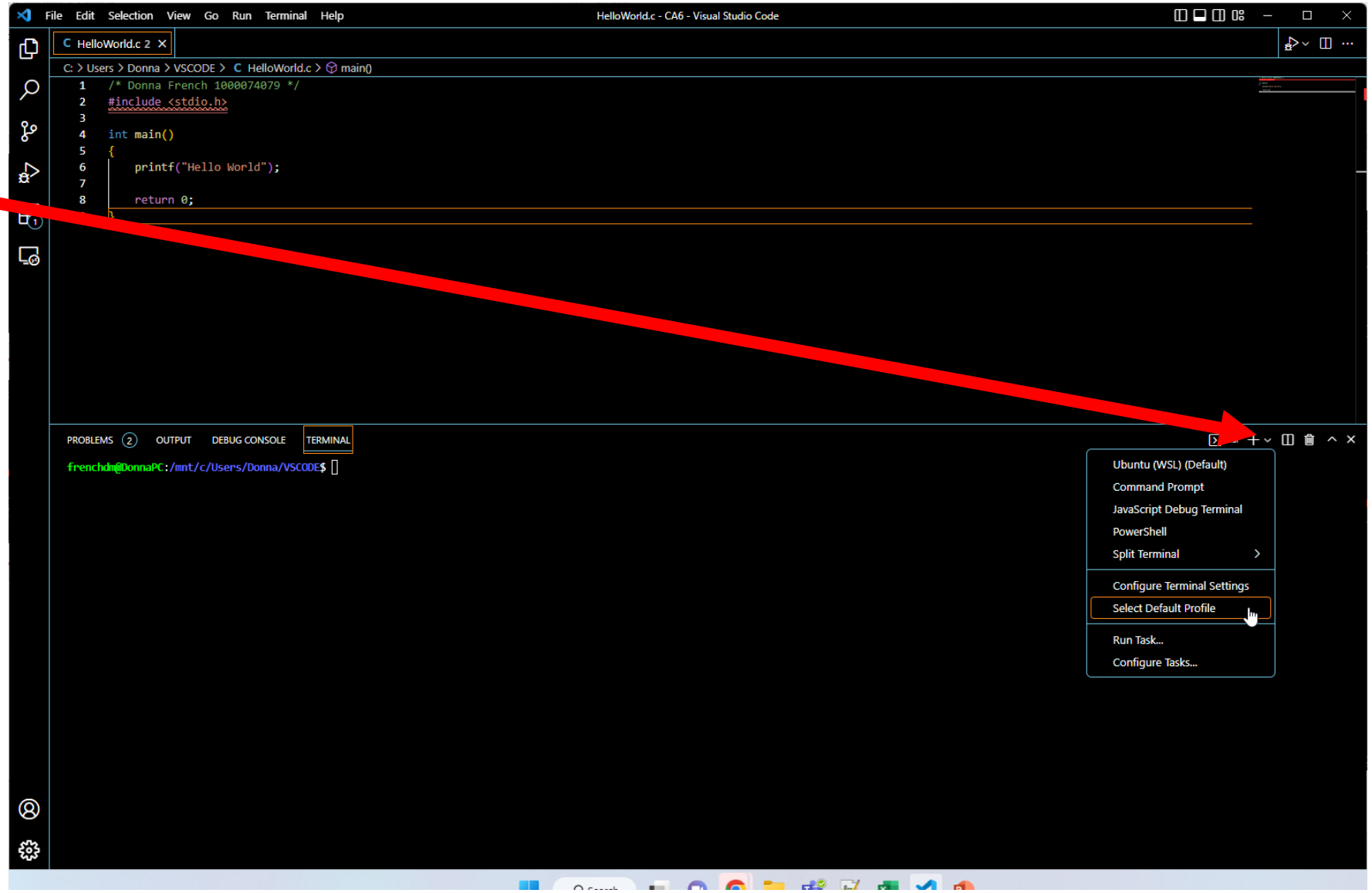
Windows only

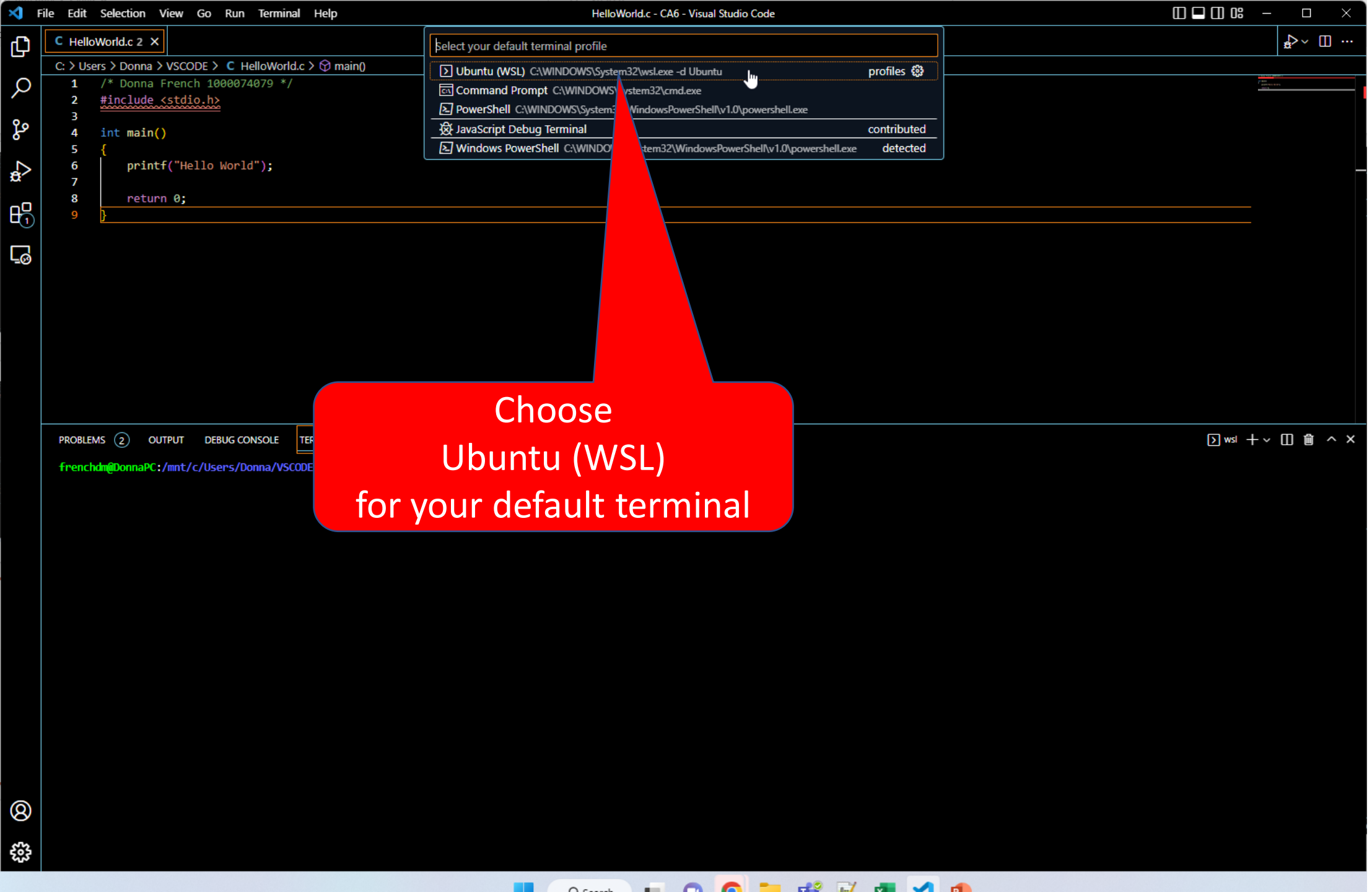
In the Terminal window,

click on the down arrow

and choose

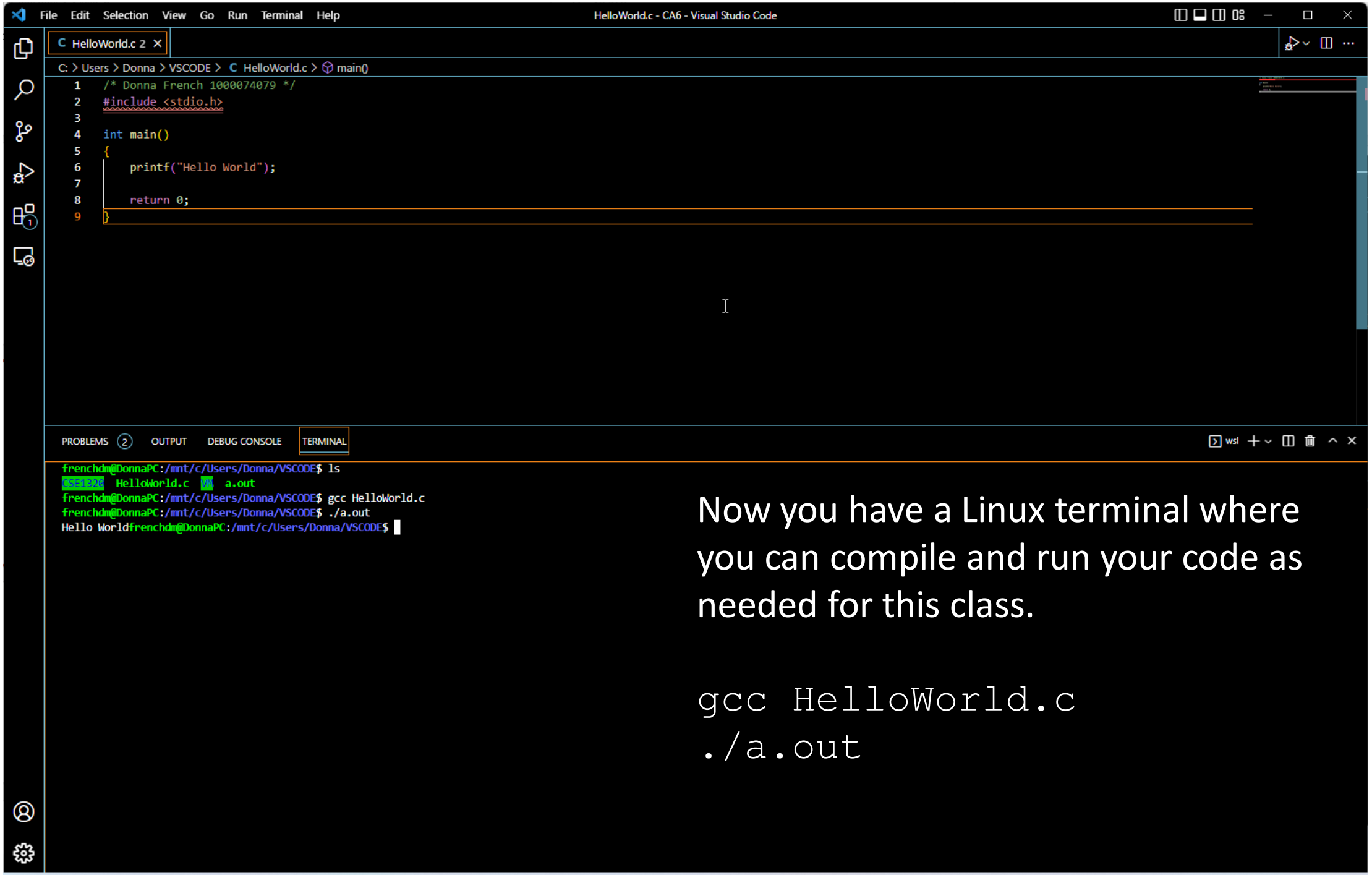
Select Default Profile





Windows only

Windows only

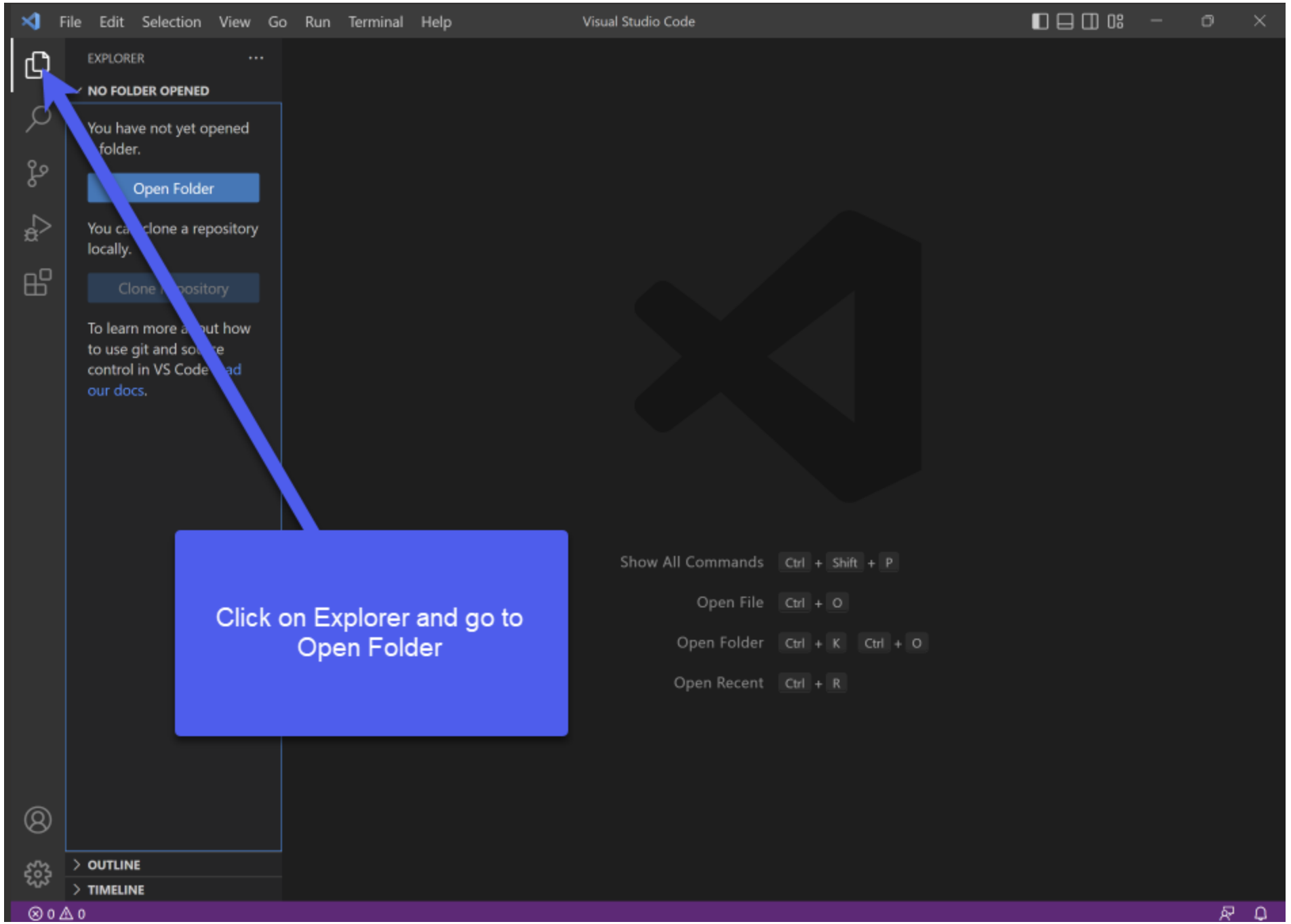


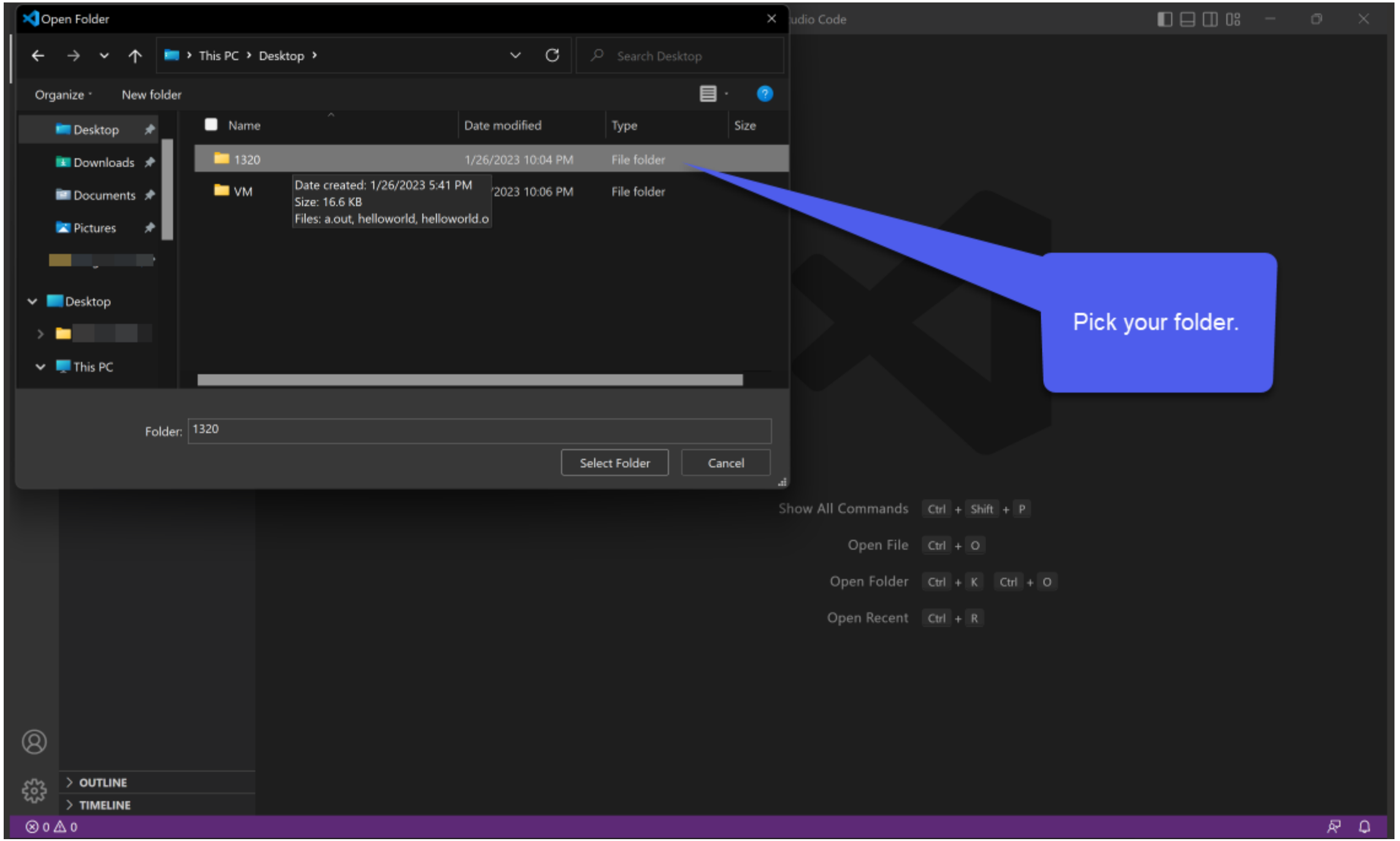
Now you have a Linux terminal where you can compile and run your code as needed for this class.

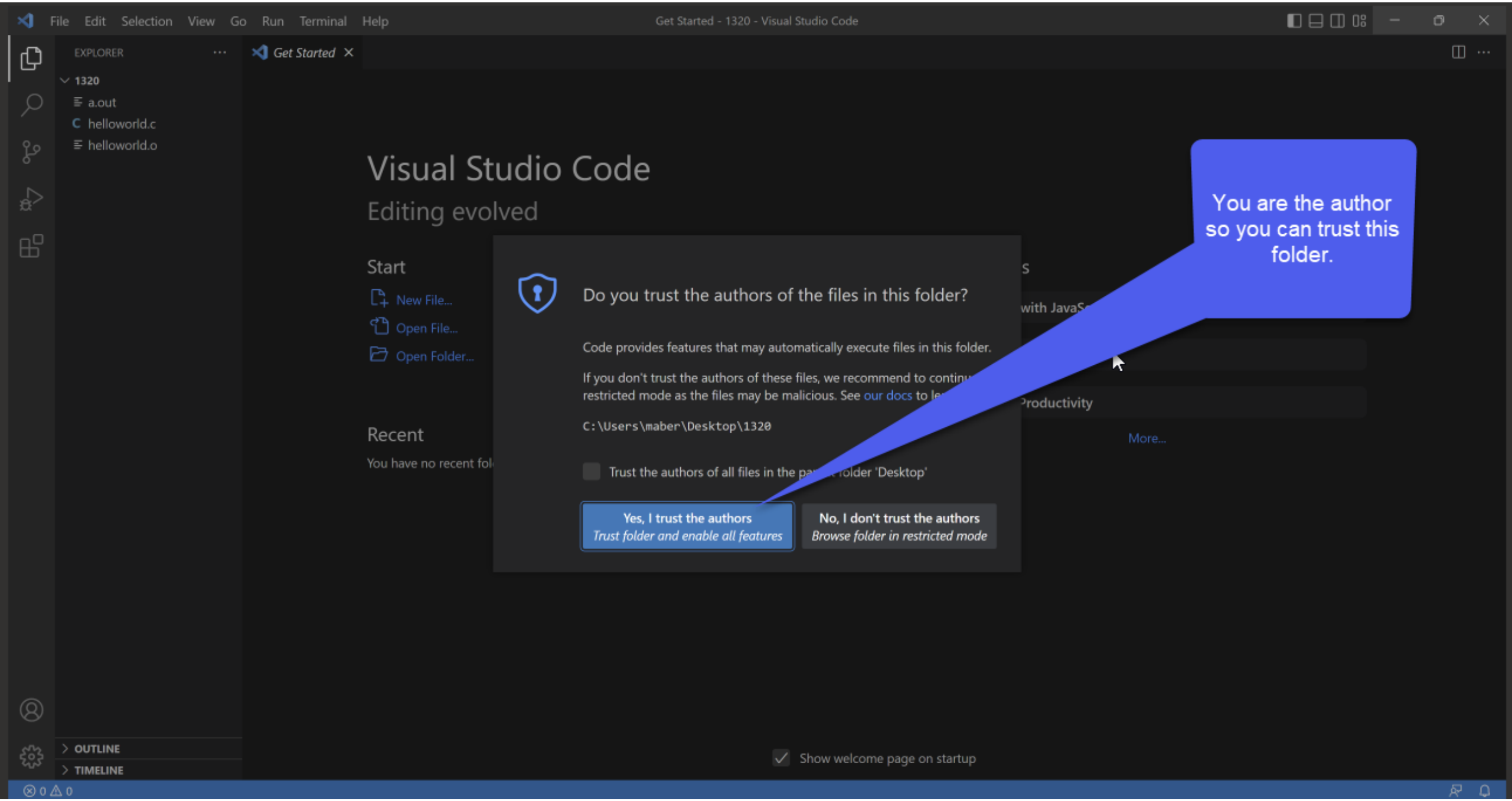
```
gcc HelloWorld.c
./a.out
```

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

Click on Explorer and go to Open Folder.




Open Folder
This PC › Desktop ›
Search Desktop
Organize
New folder
Desktop
Downloads
Documents
Pictures
Desktop
This PC
Name
Date modified
Type
Size
1320
1/26/2023 10:04 PM
File folder
VM
2023 10:06 PM
File folder
Date created: 1/26/2023 5:41 PM
Size: 16.6 KB
Files: a.out, helloworld, helloworld.o
Folder:
1320
Select Folder
Cancel
Pick your folder.
Show All Commands Ctrl + Shift + P
Open File Ctrl + O
Open Folder Ctrl + K Ctrl + O
Open Recent Ctrl + R
OUTLINE
TIMELINE
0 0


File Edit Selection View Go Run Terminal Help
Get Started - 1320 - Visual Studio Code
EXPLORER
1320
a.out
helloworld.c
helloworld.o
Get Started
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 continu
restricted mode as the files may be malicious. See our docs to le
C:\Users\maber\Desktop\1320
Trust the authors of all files in the pa folder 'Desktop'
Yes, I trust the authors
Trust folder and enable all features
No, I don't trust the authors
Browse folder in restricted mode
with JavaS
Productivity
More...
You are the author so you can trust this folder.
Show welcome page on startup
OUTLINE
TIMELINE

Troubleshooting

Windows only

If you get this…

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
```