How to Compile a C Program

This wikiHow teaches you how to compile your C program in Windows and macOS. If you're using Linux, check out How to Compile a C Program Using the GNU Compiler. Go to https://cygwin.com/install.html. Cygwin is a free Windows tool that...

Method 1 of 3:

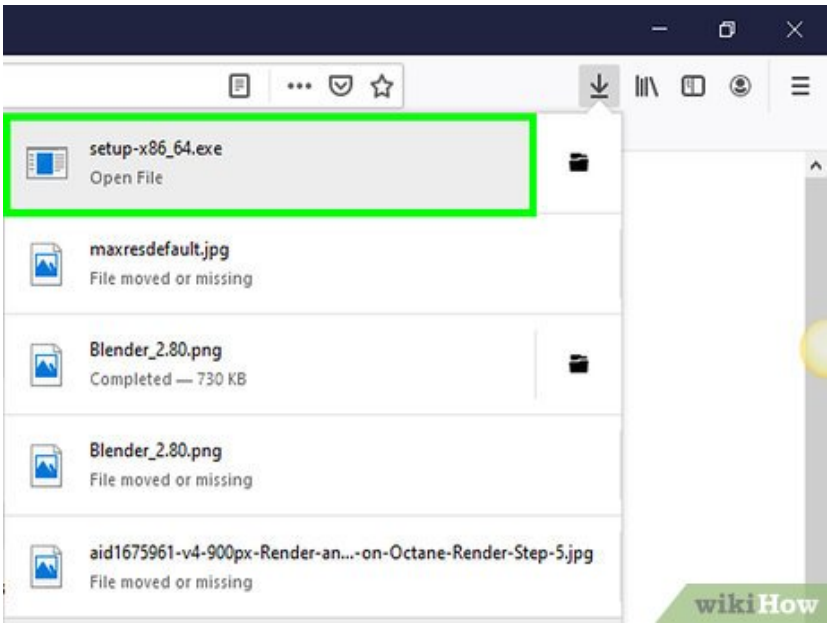
Using Cygwin for Windows

1. 

Go to https://cygwin.com/install.html. Cygwin is a free Windows tool that allows you to use the GCC C compiler from a Unix command line.

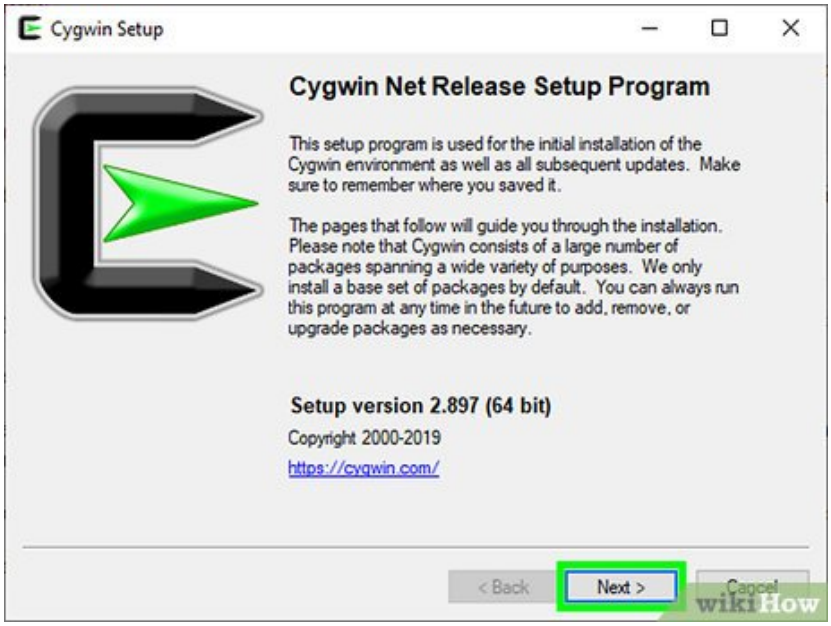
2. 

Click the `setup-x86.exe` **file for your Windows version.** If you're using the 64-bit version of Windows, download **setup-x86_64.exe**. If you have the 32-bit version, download **setup-x86.exe**.

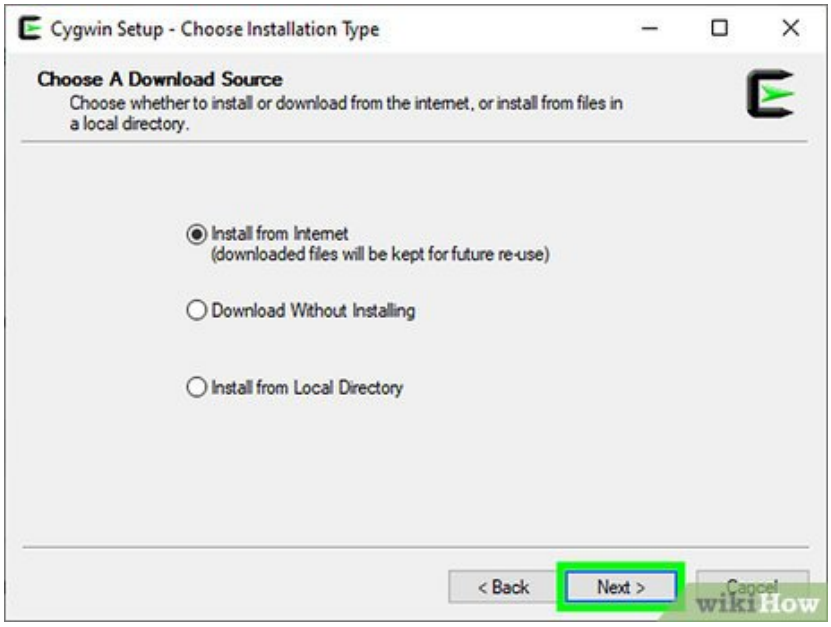
3. 

Run the installer. Double-click the downloaded file to open the setup wizard. Downloaded files usually save to the **Downloads** folder.

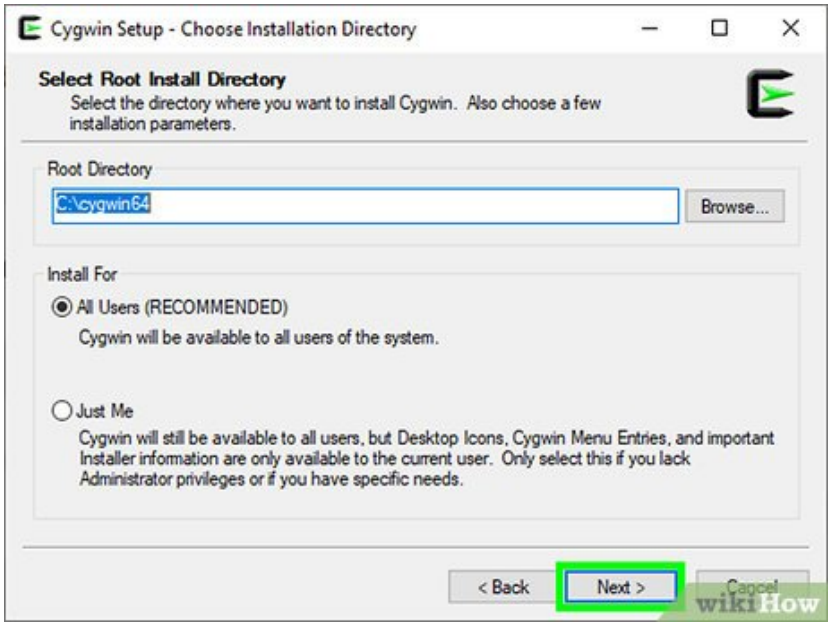
1. If prompted to give permission for the installer to run, click **Yes**.

4. 

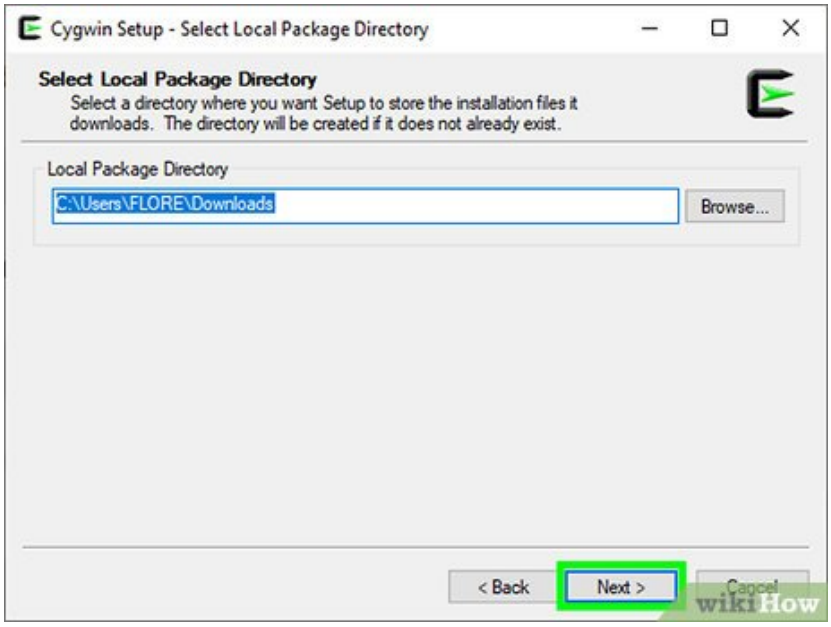
Click Next on the first screen.

5. 

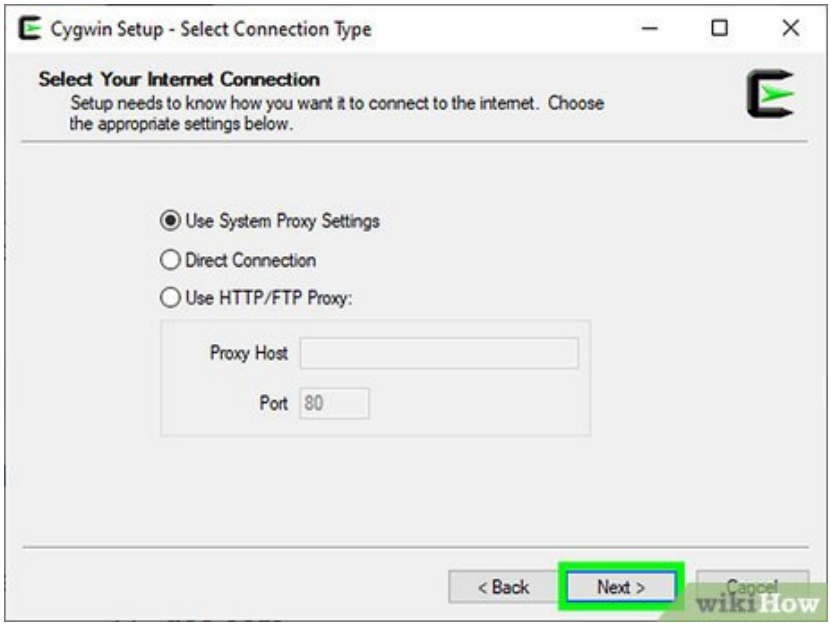
Select Install from Internet and click Next.

6. 

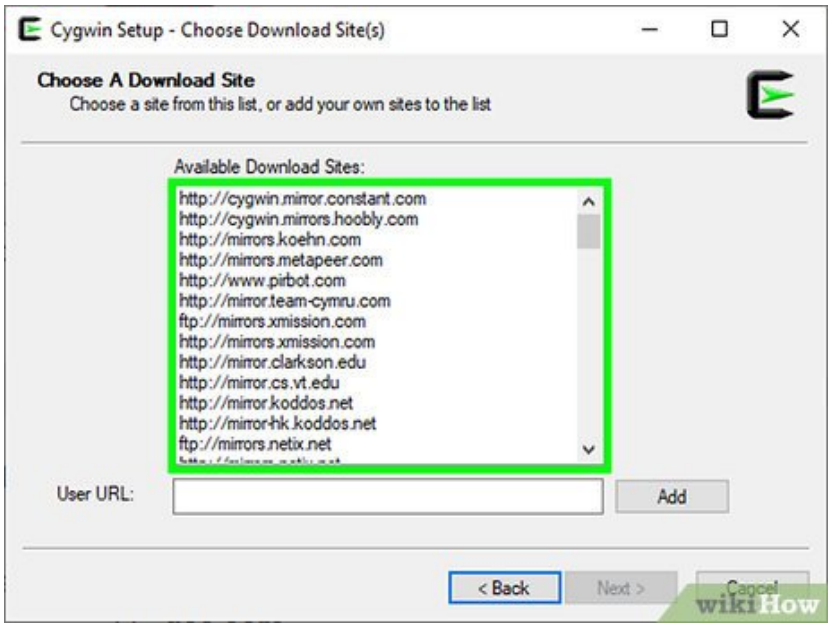
Choose where to install the app and click Next.

7. 

Select local package directory and click Next. This is where packages you download will be saved.

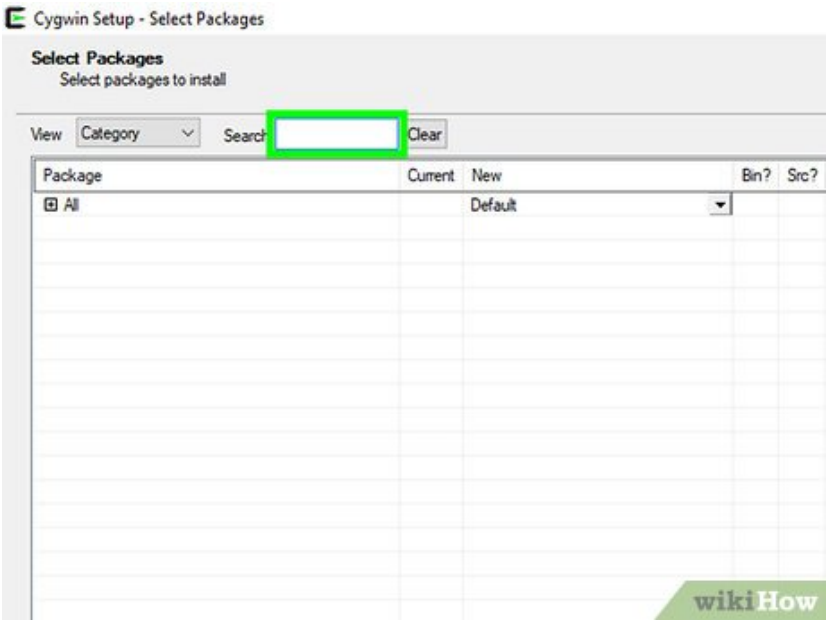
8. 

Choose your internet settings and click **Next** **.** The installer will connect to the internet and then display a list of download sites.

9. 

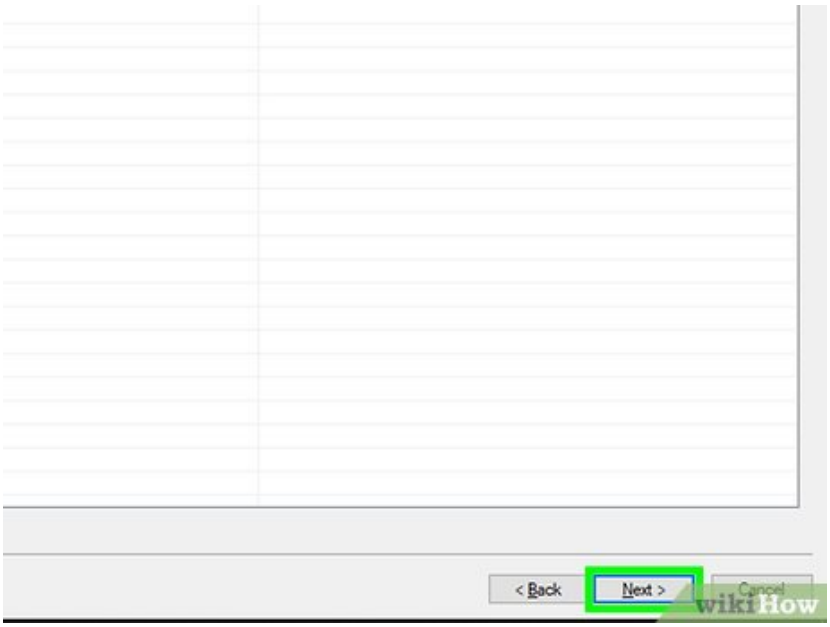
Select a download site and click **Next** **.** These sites all host the same files. This downloads the installation files to your computer.

1. If there's a problem with one site, try another on the list.

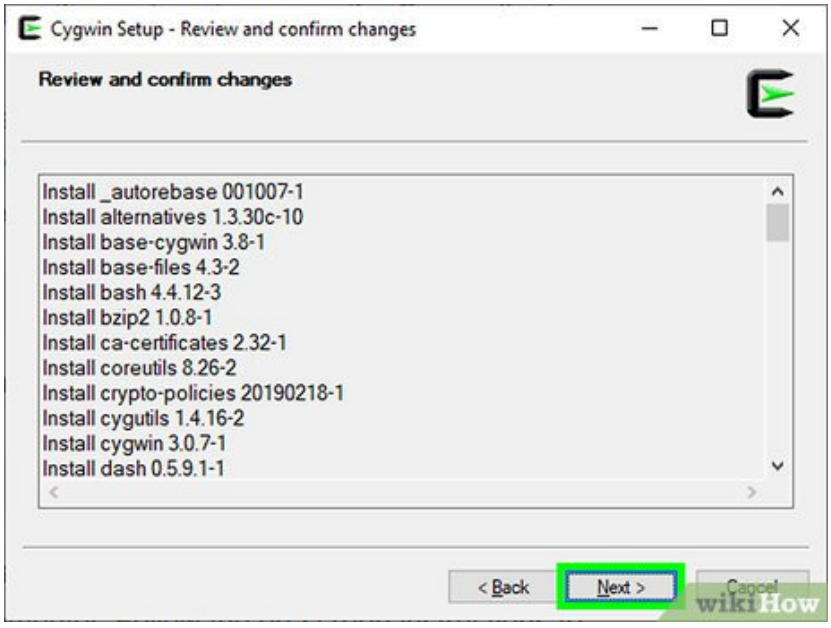
10. 

Select packages to install. Follow these steps to ensure the C compiler is installed:

1. Click the + next to "Devel" to expand the options.
2. Scroll down and click the down-arrow next to **gcc core**.
3. Click the most recent (highest) version number.

11. 

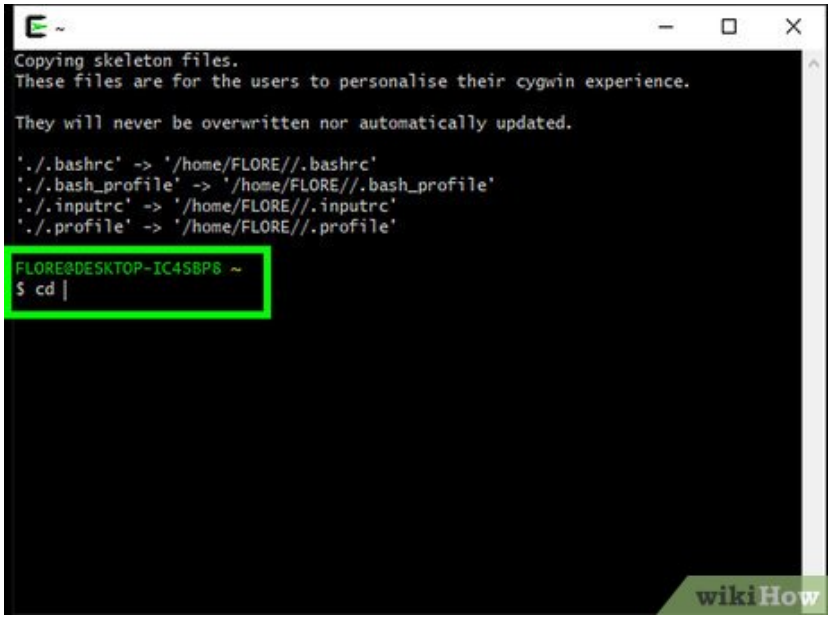
Click **Next** **.** It's at the bottom-right corner. A confirmation message will appear.

12. 

Click Next to start the installation. Cygwin will now download all selected tools and install them on your computer. Follow the on-screen instructions to complete the installation.

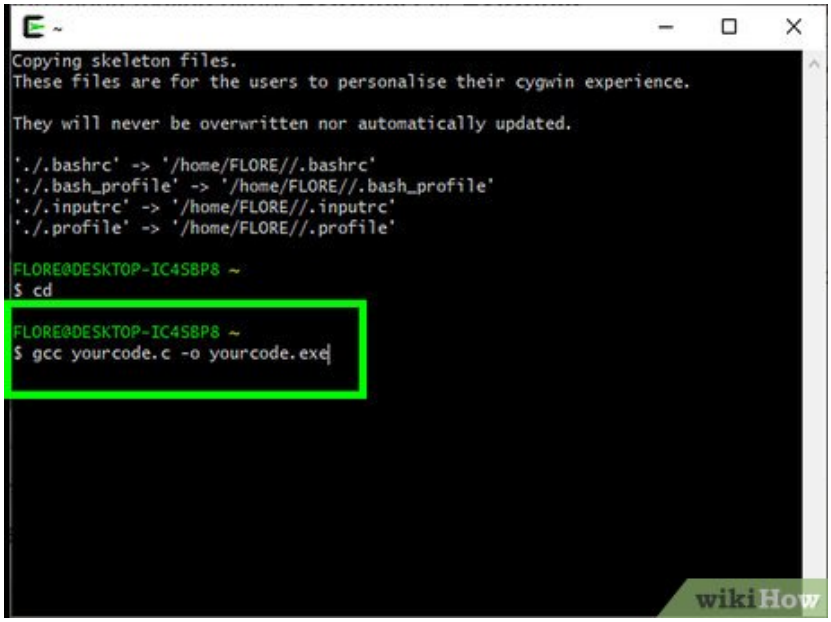
13. 

Open Cygwin. It'll be in the Start menu (called either **Cygwin64** or **Cygwin32**, depending on your version).

14. 

Use the `cd` command to navigate to the location of your C code. You're looking for the file you coded with ".c" at the end. For example, if your code is located in your **Documents** folder, you would type `cd c:Users(yourusername)Documents` and press ? Enter.[1]

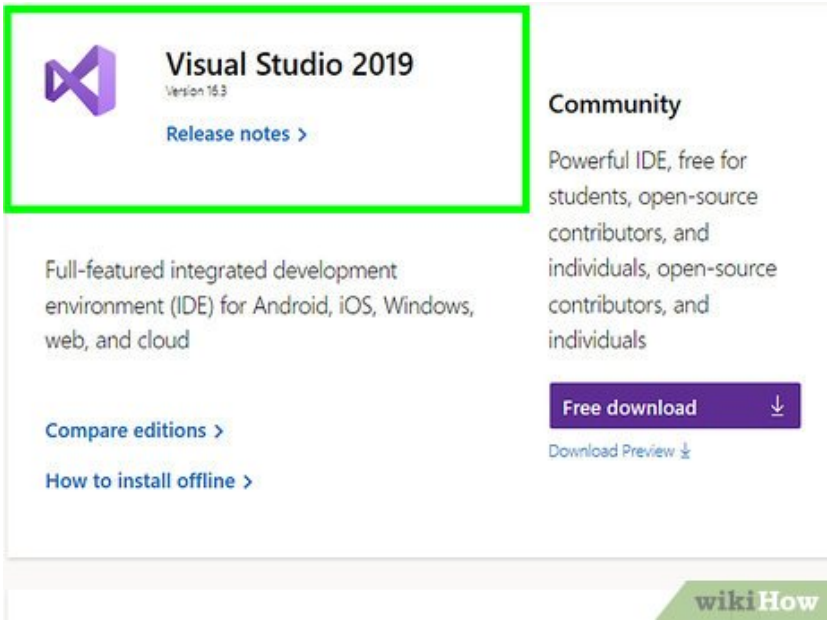
1. A quick way to find the full path to your file: Press ? Win + E to open the File Explorer, go to the folder that contains your file, click the file once to select it, then click **Copy Path** at the top of the screen. Now you can right-click the Cygwin command line and select **Paste**.

15. 

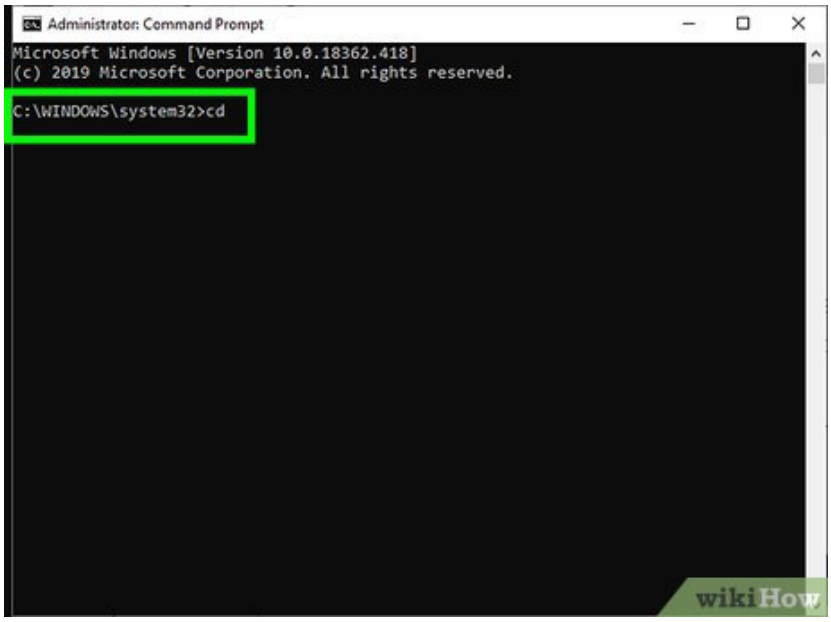
Type `gcc yourcode.c -o yourcode.exe` and press ? Enter. Replace "yourcode.c" with the name of the file, and "yourcode.exe" with the name of your program.[2] Your code is now compiled.

Method 2 of 3:

Using Visual Studio for Windows

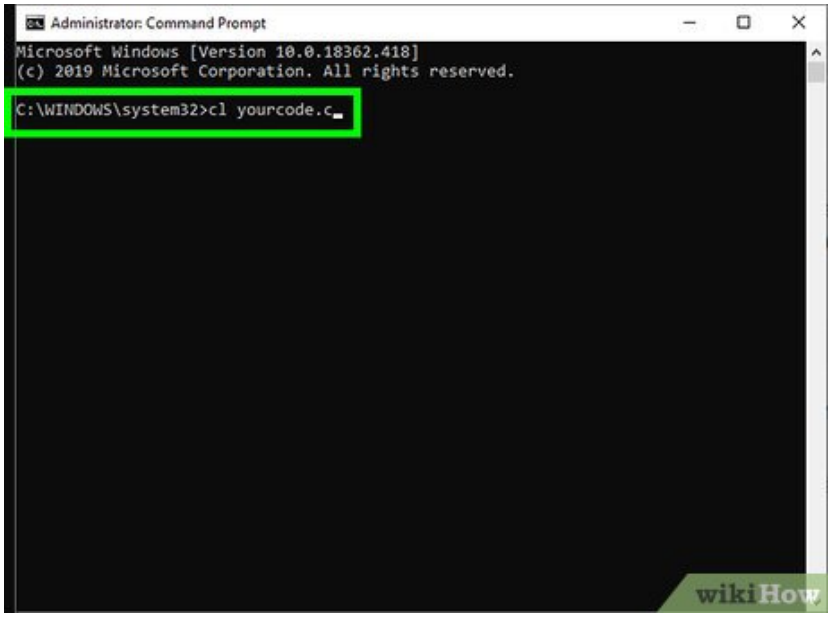
1. 

Open Developer Command Prompt for VS. This app is separate than the main Visual Studio app. To find it, click the Start menu, expand the **Visual Studio 2017** folder, then click **Developer Command Prompt for VS 2017** (or your version number).[3]

2. 

Use the `cd` command to navigate to the location of your C code. You're looking for the file you coded with ".c" at the end. For example, if your code is located in your **Documents** folder, you would type `cd c:Users(yourusername)Documents` and press ? Enter

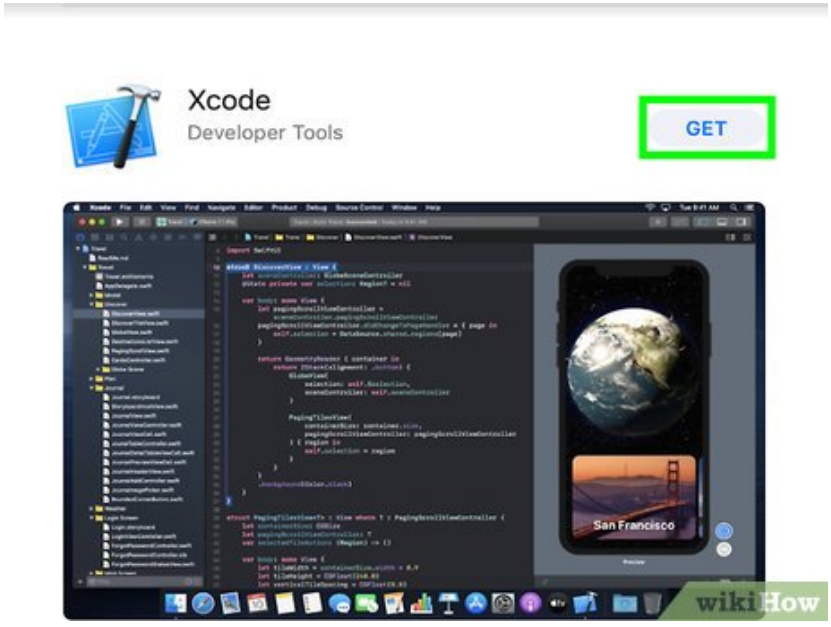
1. Your code must be in a file that ends with the ".c" extension to use this method.

3. 

Type `cl yourcode.c` and press ? Enter. Replace "yourcode.c" with the name of your file. This creates a file called *yourcode.exe* from your code file.

Method 3 of 3:

Using Xcode for macOS

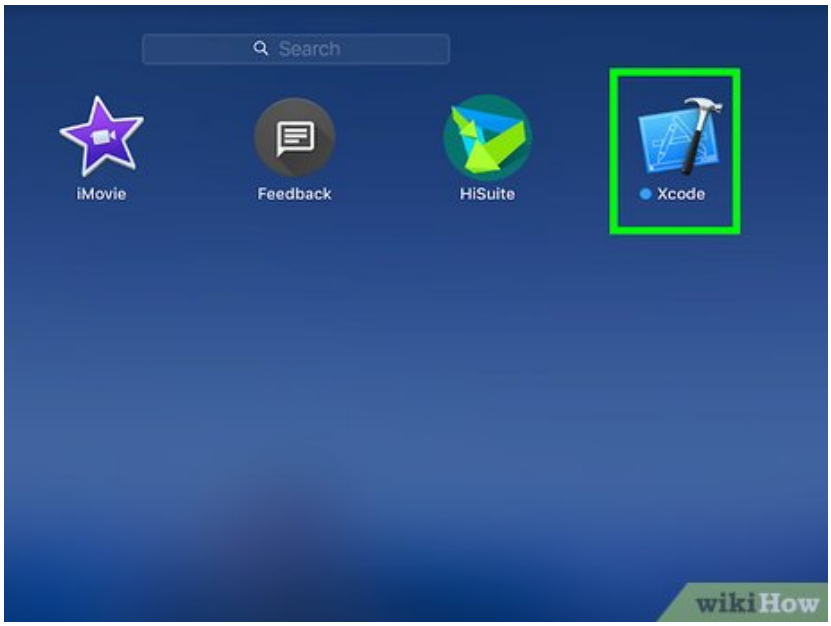
1. 

Install Xcode on your Mac.[4]

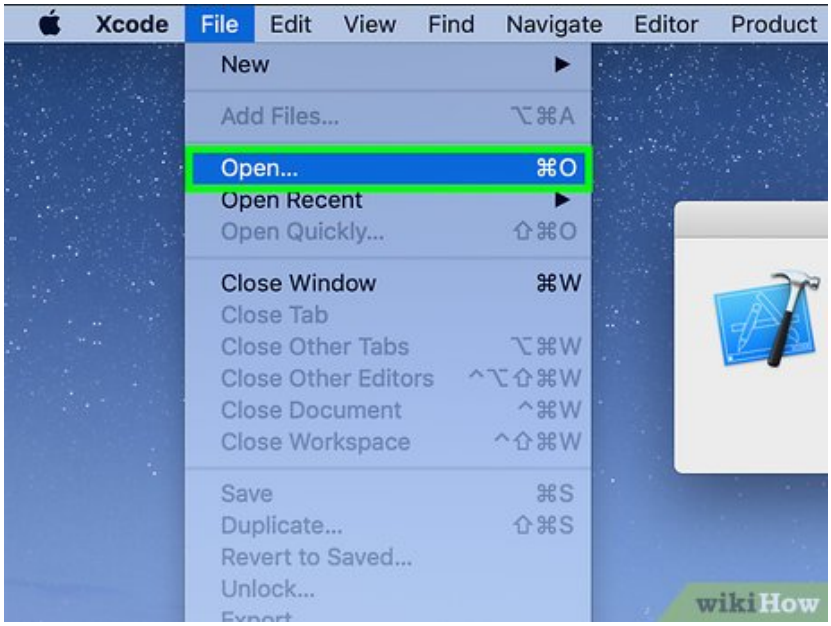
1. *Mavericks (10.9) and later:* Open the **App Store**

and search for `xcode`. Click **GET** to install, and follow any on-screen instructions.

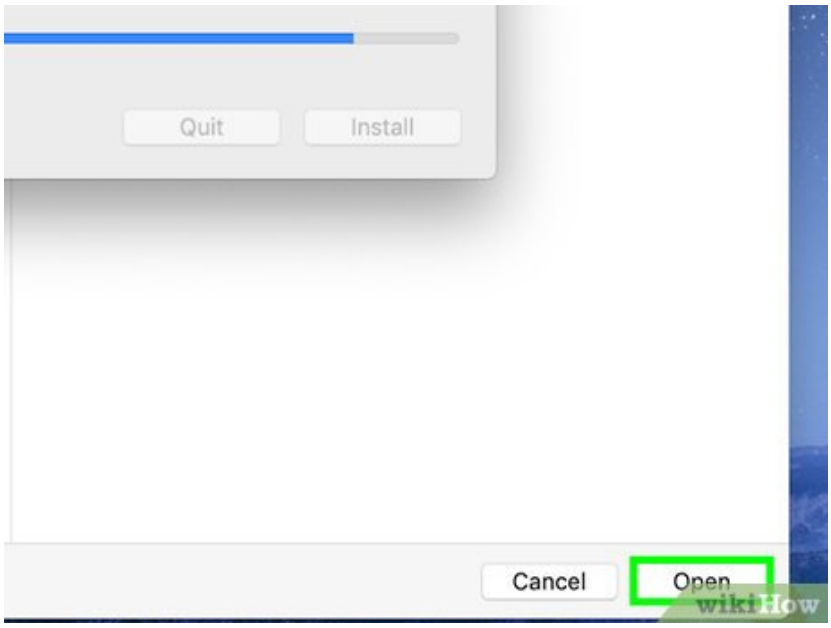
2. *Lion and Mountain Lion (10.7 and 10.8):* Follow the instructions for Mavericks and later. Once installed, open the app (it's in the **Applications** folder), click the **File** menu and then **Preferences**. Click the **Downloads** tab, then click **Install** next to "Command Line Tools."

2. 

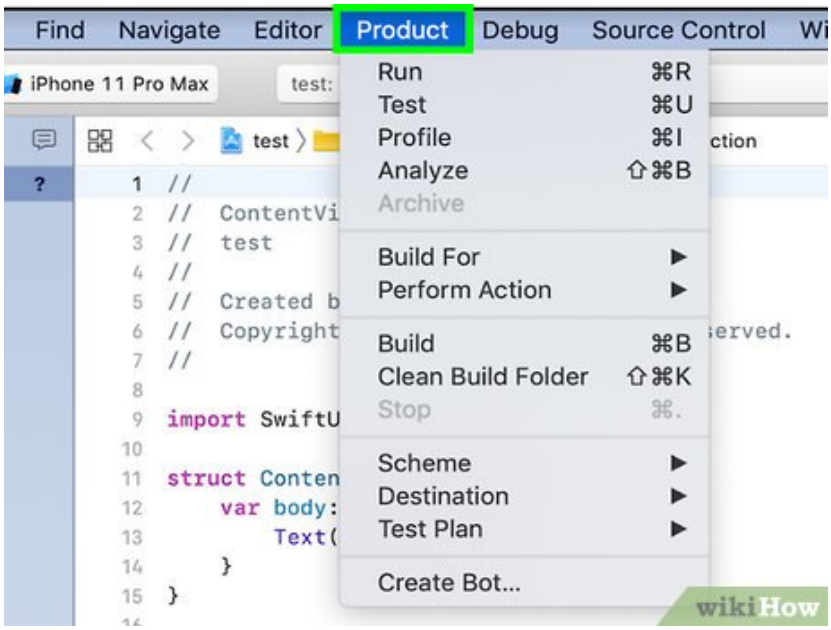
Open Xcode. Now that it's installed, you'll find it in the Applications folder.

3. 

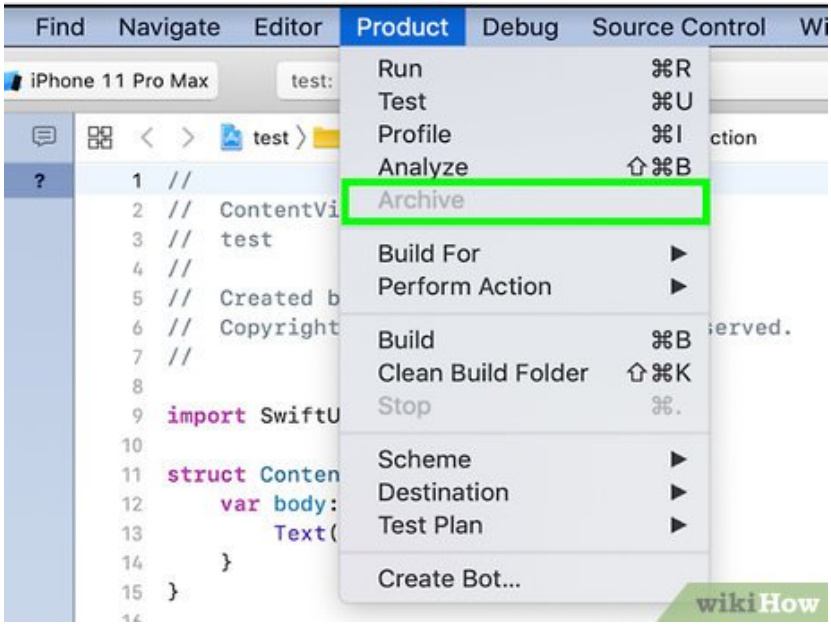
Click the File and select Open.

4. 

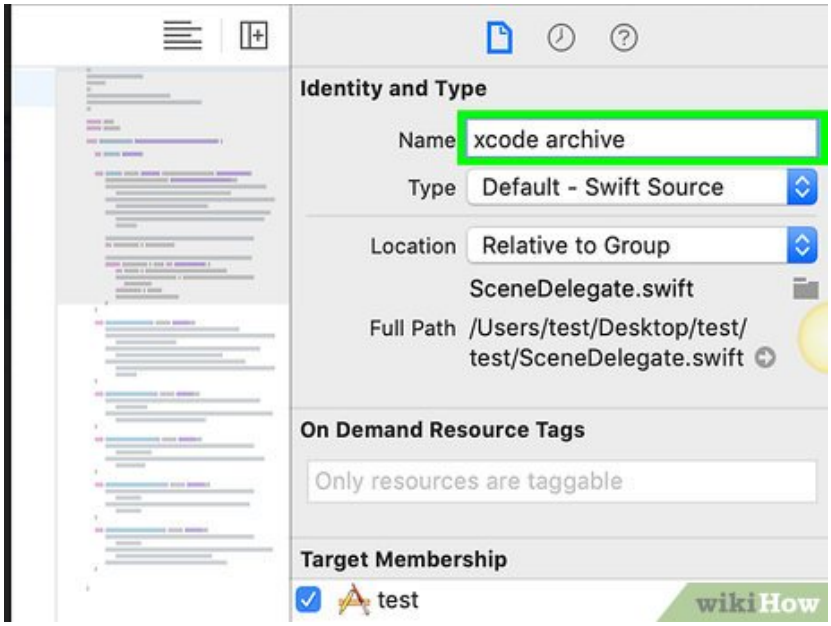
Select your code file and click Open. The contents of your code will appear.[5]

5. 

Click the Product menu. It's at the top of the screen.

6. 

Click Archive. This compiles and links your C code. When it's ready to be exported, a window containing options will appear.

7. 

Select **Export as an Xcode Archive** **and click** **Next** **.** Xcode will create a new folder (inside the folder where your code is saved) and place the executable file inside.