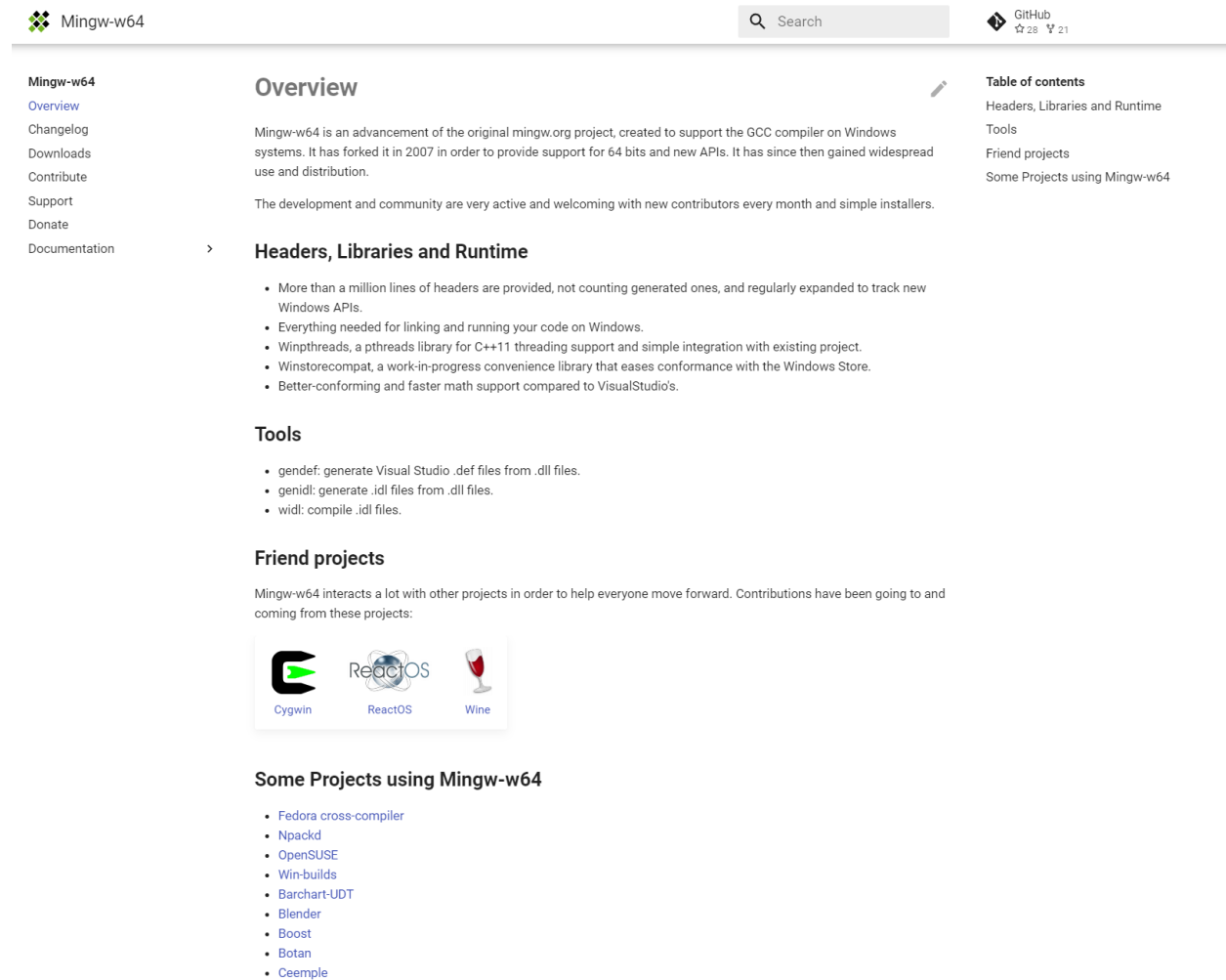


This is a basic tutorial for installing MinGW on Windows 10.

Step 1: Navigate to the [MinGW website](#) and click on Downloads



The screenshot shows the homepage of the Mingw-w64 project. At the top, there is a navigation bar with the Mingw-w64 logo, a search bar, and a GitHub repository link. The main content area is divided into several sections:

- Mingw-w64**: A sidebar menu with links for Overview, Changelog, Downloads, Contribute, Support, Donate, and Documentation.
- Overview**: A section describing Mingw-w64 as an advancement of the original mingw.org project, created to support the GCC compiler on Windows systems. It mentions that it was forked in 2007 and has since gained widespread use and distribution. It also notes that the development and community are very active and welcoming.
- Headers, Libraries and Runtime**: A section listing several features:
  - More than a million lines of headers are provided, not counting generated ones, and regularly expanded to track new Windows APIs.
  - Everything needed for linking and running your code on Windows.
  - Winthreads, a pthreads library for C++11 threading support and simple integration with existing project.
  - Winstorecompat, a work-in-progress convenience library that eases conformance with the Windows Store.
  - Better-conforming and faster math support compared to VisualStudio's.
- Tools**: A section listing several tools:
  - gendef: generate Visual Studio .def files from .dll files.
  - genidl: generate .idl files from .dll files.
  - widl: compile .idl files.
- Friend projects**: A section mentioning that Mingw-w64 interacts with other projects to help everyone move forward. It lists Cygwin, ReactOS, and Wine as friend projects, each with a small icon.
- Some Projects using Mingw-w64**: A section listing several projects that use Mingw-w64:
  - Fedora cross-compiler
  - Npackd
  - OpenSUSE
  - Win-builds
  - Barchart-UDT
  - Blender
  - Boost
  - Botan
  - Ceempler
- Table of contents**: A sidebar menu with links for Headers, Libraries and Runtime, Tools, Friend projects, and Some Projects using Mingw-w64.

Step 2: Select MingW-W64-builds

## Mingw-w64









Overview  
Changelog  
[Downloads](#)  
Contribute  
Support  
Donate  
Documentation

## Downloads

The heart of the Mingw-w64 project is headers and support libraries to run the output of GCC on Windows. Since Mingw-w64 is neither the home of GCC nor of binutils, several sets of installation packages which combine them are available.

In addition, the sources are available but most people will want to grab binaries directly..

## Pre-built toolchains and packages

	Version	Host	GCC / Mingw-w64 Version	Languages	Additional Software in Package Manager
 Arch Linux	Arch Linux		11.2.0/9.0.0	Ada, C, C++, Fortran, Obj-C, Obj-C++	many
 Cygwin	Rolling	Windows	5.4.0/5.0.2	Ada, C, C++, Fortran, Obj-C	5 (bzip2, libgcrypt, libgpg-error, minizip, xz, zlib)
 Debian	Debian 7 (Wheezy)		4.6.3/2.0.3	Ada, C, C++, Fortran, Obj-C, Obj-C++, OCaml	2 (gdb, nsis)
	Debian 8 (Jessie)		4.9.1/3.2.0		
	Debian 9 (Stretch)		6.3.0/5.0.0		9 (gdb, libassuan, libgcrypt, libgpg-error, libksba, libnptl, nsis, win-iconv, zlib)
	Debian 10 (Buster)		8.3.0/6.0.0		
 Fedora	Fedora 19		4.8.1/?	Ada, C, C++, Fortran, Obj-C, Obj-C++	149+
 LLVM-MinGW	20210423	Windows, Linux	LLVM 12.0.0/trunk	C, C++	make
 MacPorts	Rolling	macOS	8.2.0/5.0.4	C, C++, Fortran, Obj-C, Obj-C++	1 (nsis)
 MingW-W64-builds	Rolling	Windows	7.2.0/5.0.3	C, C++, Fortran	4 (gdb, libiconv, python, zlib)
 Msys2	Rolling	Windows	9.2.0/trunk	Ada, C, C++, Fortran, Obj-C, Obj-C++, OCaml	many

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## Pre-built toolchains and packages

Arch Linux  
Ubuntu  
Cygwin  
Debian  
Fedora  
LLVM-MinGW  
MacPorts  
Mingw-builds  
MSYS2  
Win-Builds

## Sources

## Unsorted complementary list

Darwin/Mac OS X  
OpenSUSE  
Rubenvb  
GCC with the MCF thread model  
Store of binaries on SourceForge

Step 3: Click on the Sourceforge link. Note that when this page opens it will prompt you to save the installer.

**Downloads** Search GitHub

**Mingw-w64**

- Overview
- Changelog
- Downloads**
- Contribute
- Support
- Donate
- Documentation

**Mingw-builds**

Installation: [Sourceforge](#)

**MSYS2**

Installation: [GitHub](#)

**Win-Builds**

Win-builds is a cross-platform project that makes building for Windows easy. It supports building from both Windows and Linux systems and provides many pre-built libraries which can be installed through a graphical package manager.

It aims for stability while still providing recent versions of software packages.

Installation: <http://win-builds.org>.

**Sources**

Tarballs for the mingw-w64 sources are hosted on [SourceForge](#). The latest version from the 6.x series is **6.0.0**. The latest version from the 5.x series is **5.0.4**. The latest version from the 4.x series is **4.0.6**. The latest version from the 3.x series is **3.3.0**. Winthreads has been merged into the main tarball as of 3.1.0.

The old wiki has instructions for building [native](#) and [cross](#) toolchains.

Details on how to get the mingw-w64 code from Git and an Git-web viewer are available on [SourceForge](#).

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Pre-built toolchains and packages

- Arch Linux
- Ubuntu
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- Debian
- Fedora
- LLVM-MinGW
- MacPorts**
- Mingw-builds
- MSYS2
- Win-Builds

Sources

Unsorted complementary list

- Darwin/Mac OS X
- OpenSUSE
- Rubenvb
- GCC with the MCF thread model
- Store of binaries on

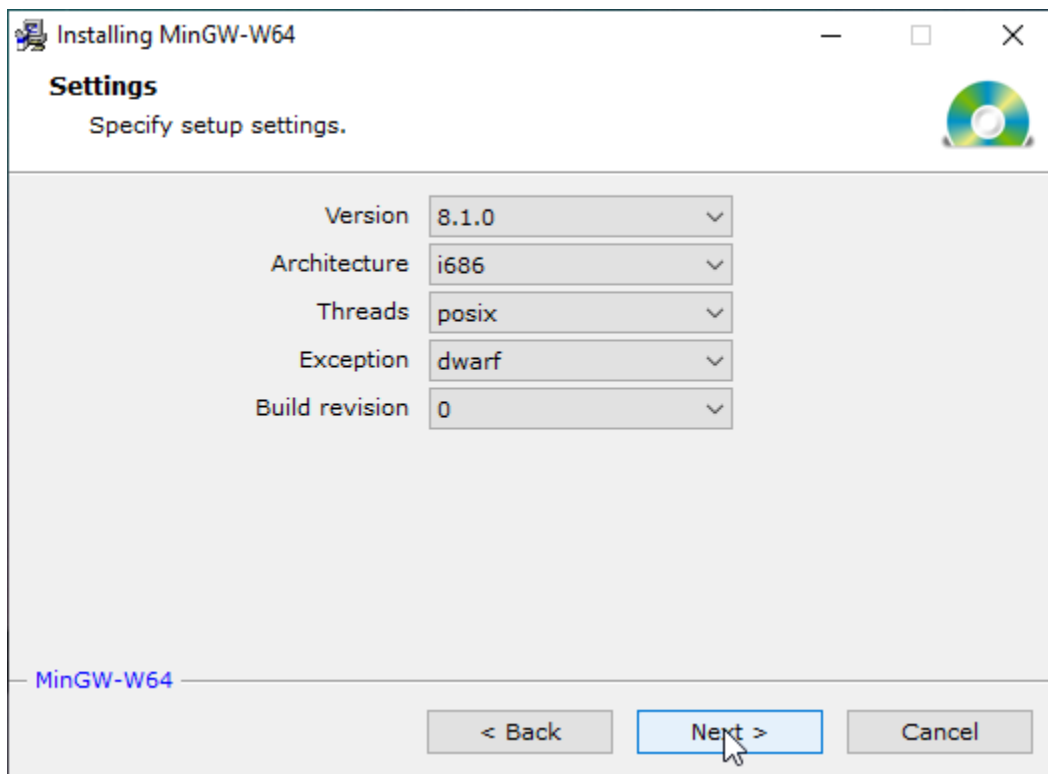
The screenshot shows a Windows File Explorer window with the following table of files:

Name	Date modified	Type	Size
Yesterday (1)			
CheatEngine72.exe	3/20/2021 9:42 PM	Application	3,391 KB
Last month (1)			
Mechvibes.Setup.2.3.1.exe	2/20/2021 8:11 PM	Application	63,288 KB
Earlier this year (11)			
nvidia_broadcast_v1.1.0.20.exe	1/27/2021 10:27 AM	Application	240,005 KB
VoiceChanger64f(1.42).exe	1/26/2021 8:36 PM	Application	1,142 KB
VoiceModSetup_2.5.0.6.exe	1/26/2021 8:33 PM	Application	65,902 KB
OpenVR-SpaceCalibrator1-2.exe	1/22/2021 6:34 PM	Application	1,173 KB
UnityHubSetup.exe	1/21/2021 6:17 PM	Application	52,756 KB
LOOT.Installer.exe	1/20/2021 12:58 PM	Application	73,454 KB
UnitySetup64-2020.1.17f1.exe	1/19/2021 6:00 PM	Application	2,012,463 KB
nvidia_broadcast_v1.0.0.33.exe	1/13/2021 12:59 PM	Application	238,326 KB
hwi_640.exe	1/7/2021 9:54 PM	Application	8,233 KB
qbittorrent_4.3.2_x64_setup.exe	1/7/2021 5:33 PM	Application	25,782 KB
jre-8u271--windows-x64.exe	1/1/2021 8:59 PM	Application	81,411 KB
A long time ago (40)			
Mod Organizer 2 (Installer)-6194-2-3-2-1...	12/31/2020 2:52 PM	Application	82,003 KB
EasyBCD 2.4.exe	12/25/2020 11:57 AM	Application	2,237 KB
CurseForge - LP-Installer.exe	12/9/2020 3:10 PM	Application	1,355 KB
HandBrake-1.3.3-x86_64-Win_GUI.exe	11/23/2020 11:25 AM	Application	13,218 KB
SideQuest-Setup-0.10.18-x64-win.exe	11/20/2020 10:29 AM	Application	58,991 KB
Wireshark-win64-3.2.8.exe	11/3/2020 2:07 PM	Application	58,569 KB

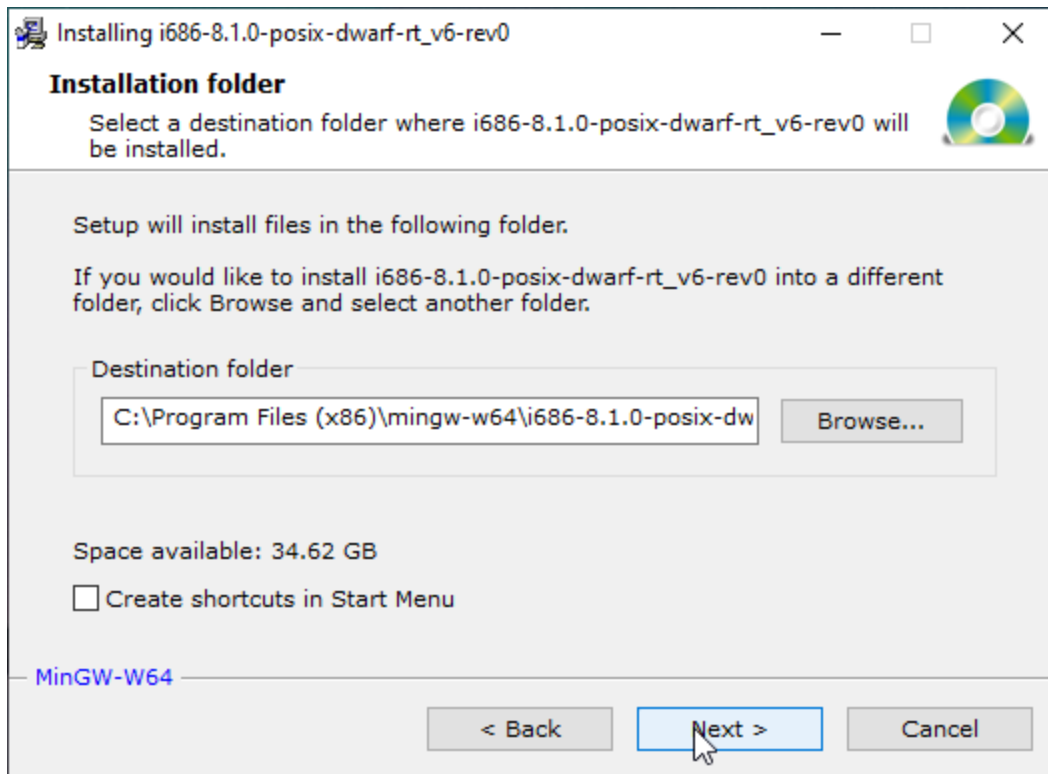
File name:  Save as type: Application (\*.exe)

Buttons: Save, Cancel

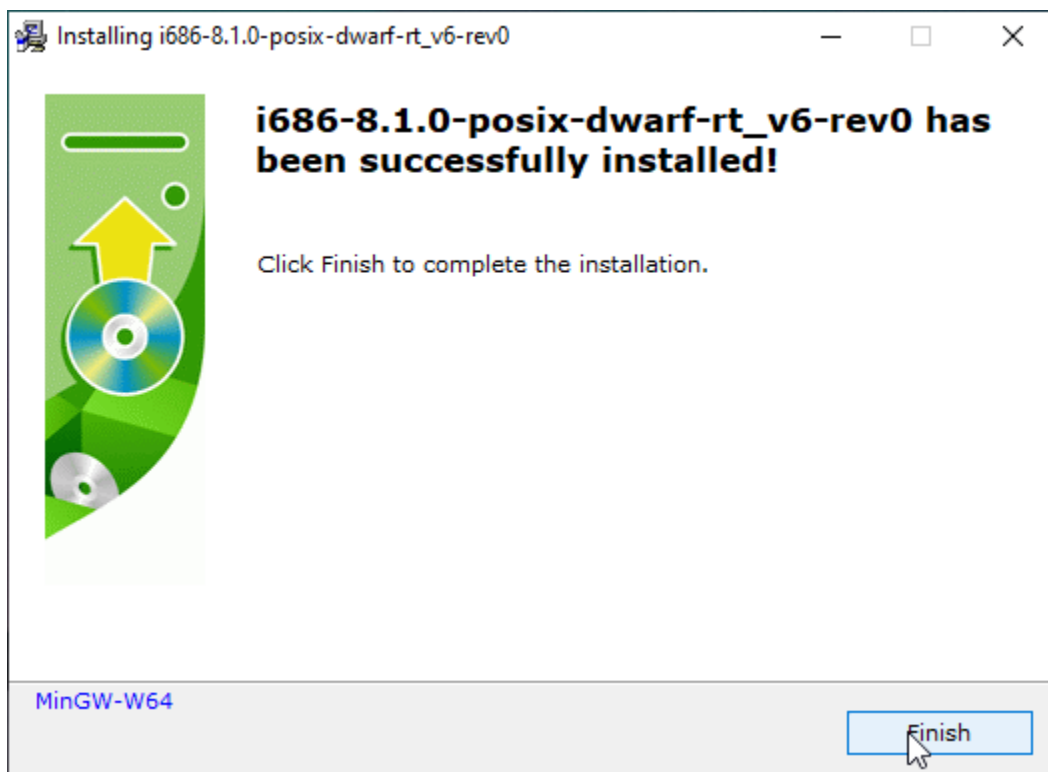
Step 4: Install MinGW-W64



For this tutorial, we'll be going with the default settings. Architecture can be switched to x86\_64, but dwarf is the best exception handler available with MinGW right now so we'll be sticking with i686.

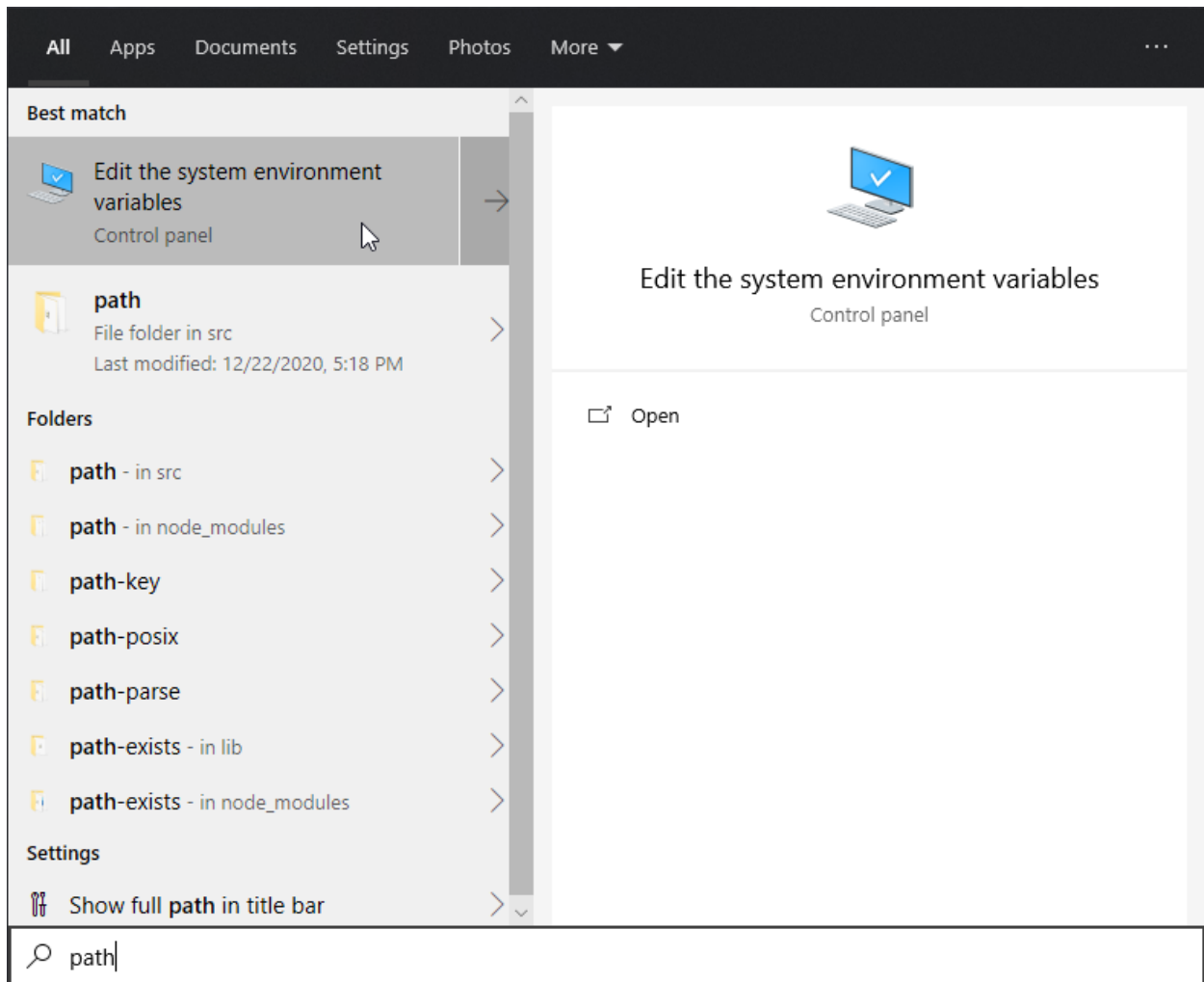


Pick whatever installation path is desired, but make sure to note where it's installed for later.

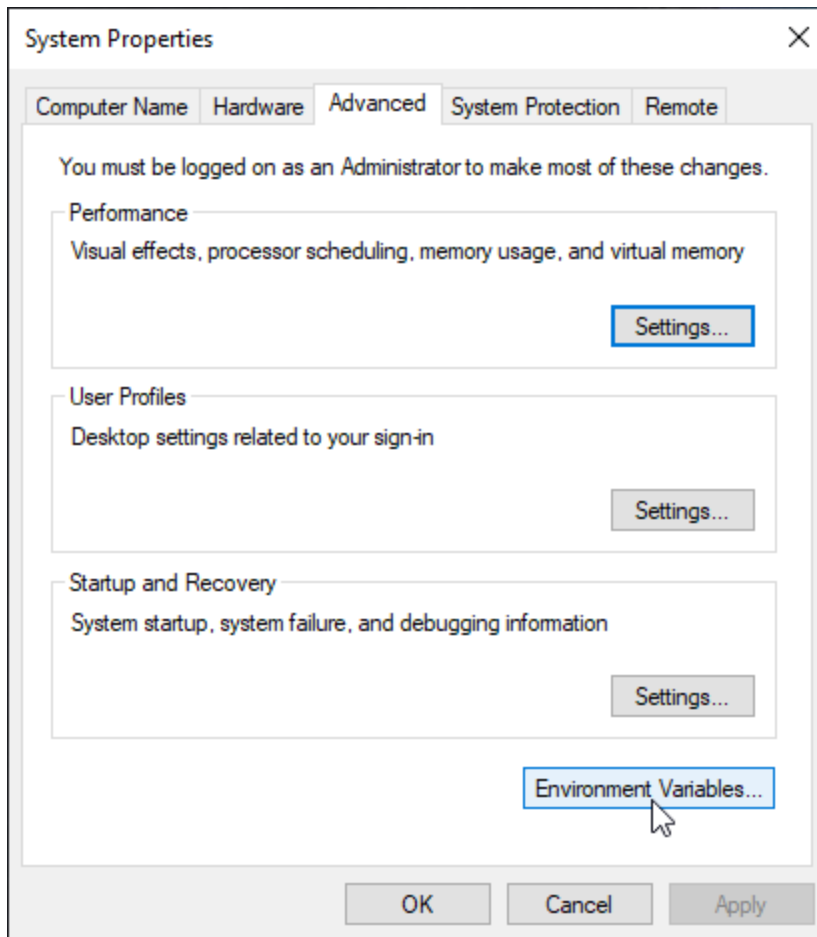


Let it run and it should finish without errors.

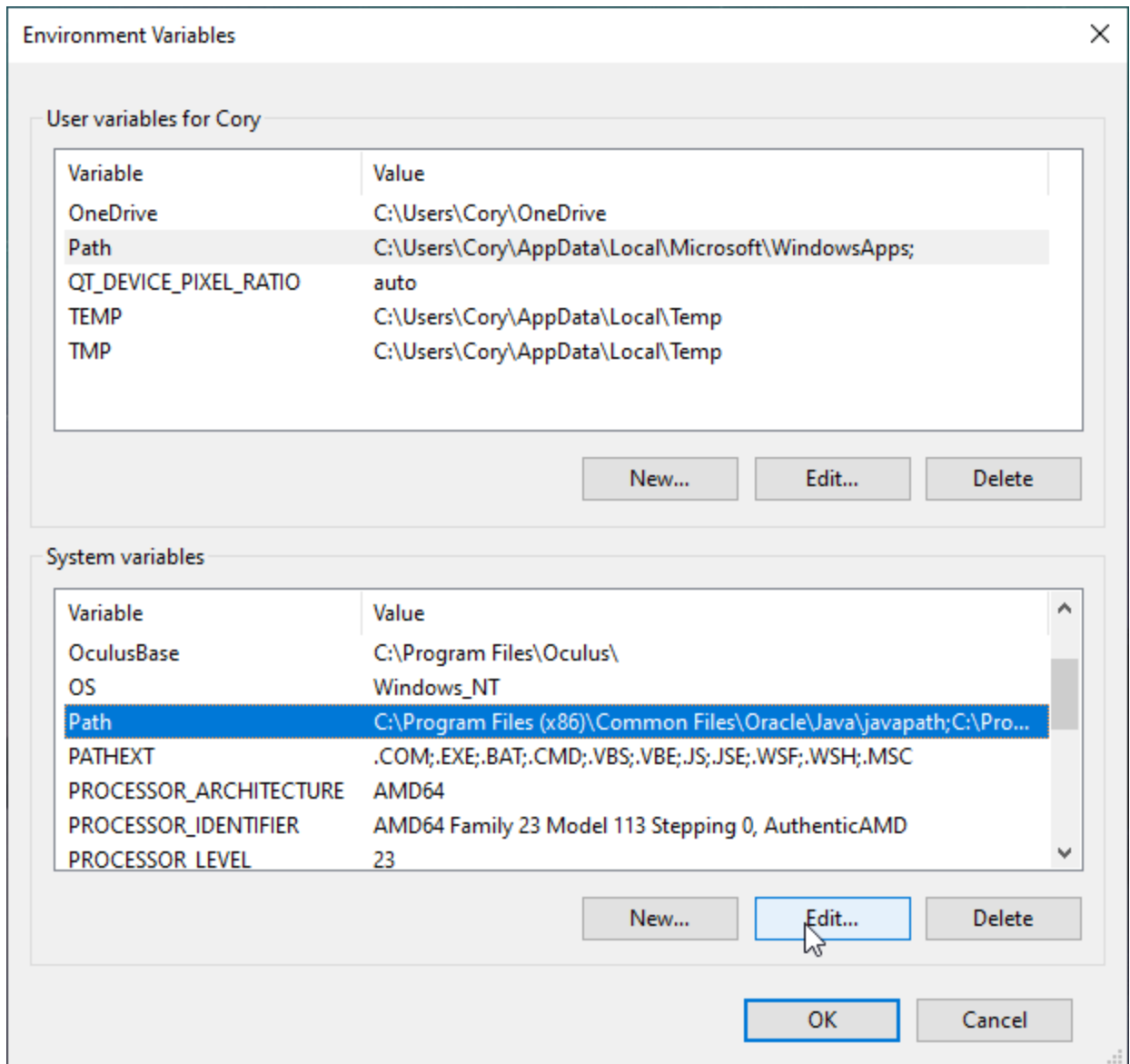
Step 5: Add the bin to the environment variables (the PATH)



Go into your search bar and type in 'path', then select the "Edit the system environment variables" option.

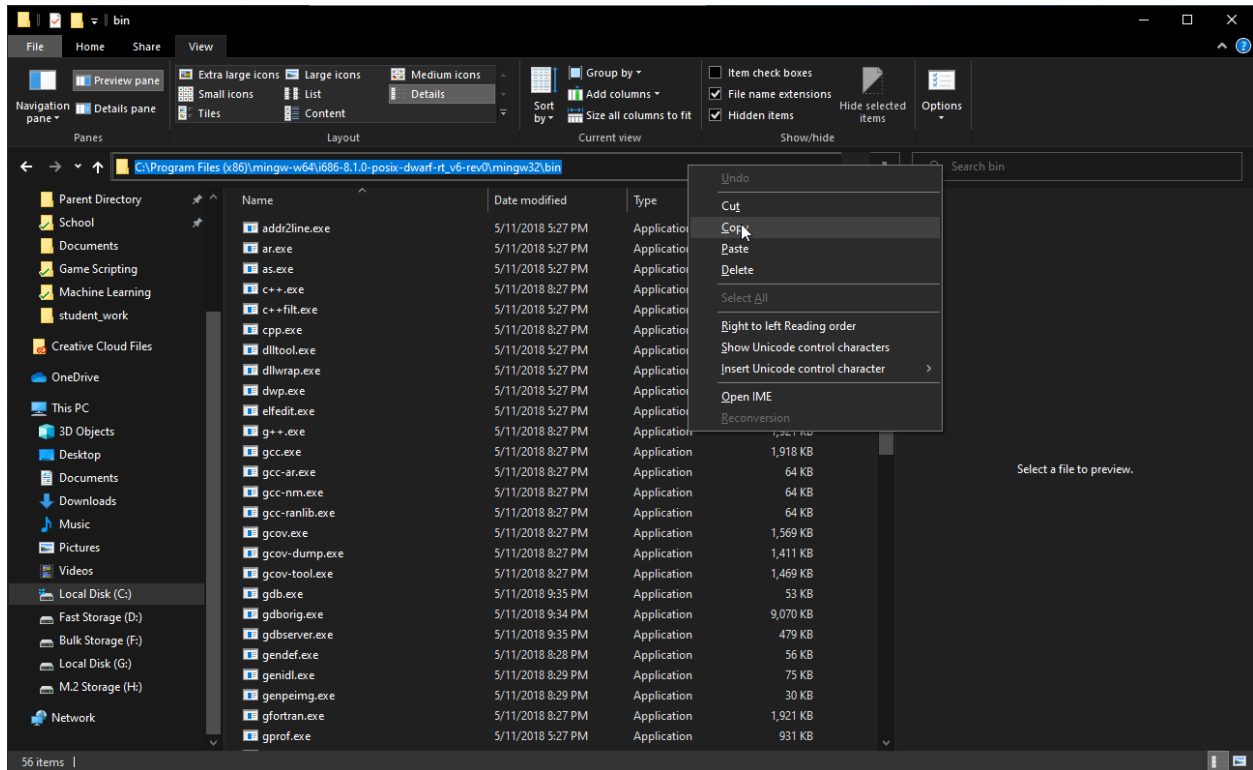


A window like this should pop up. Select "Environment Variables"

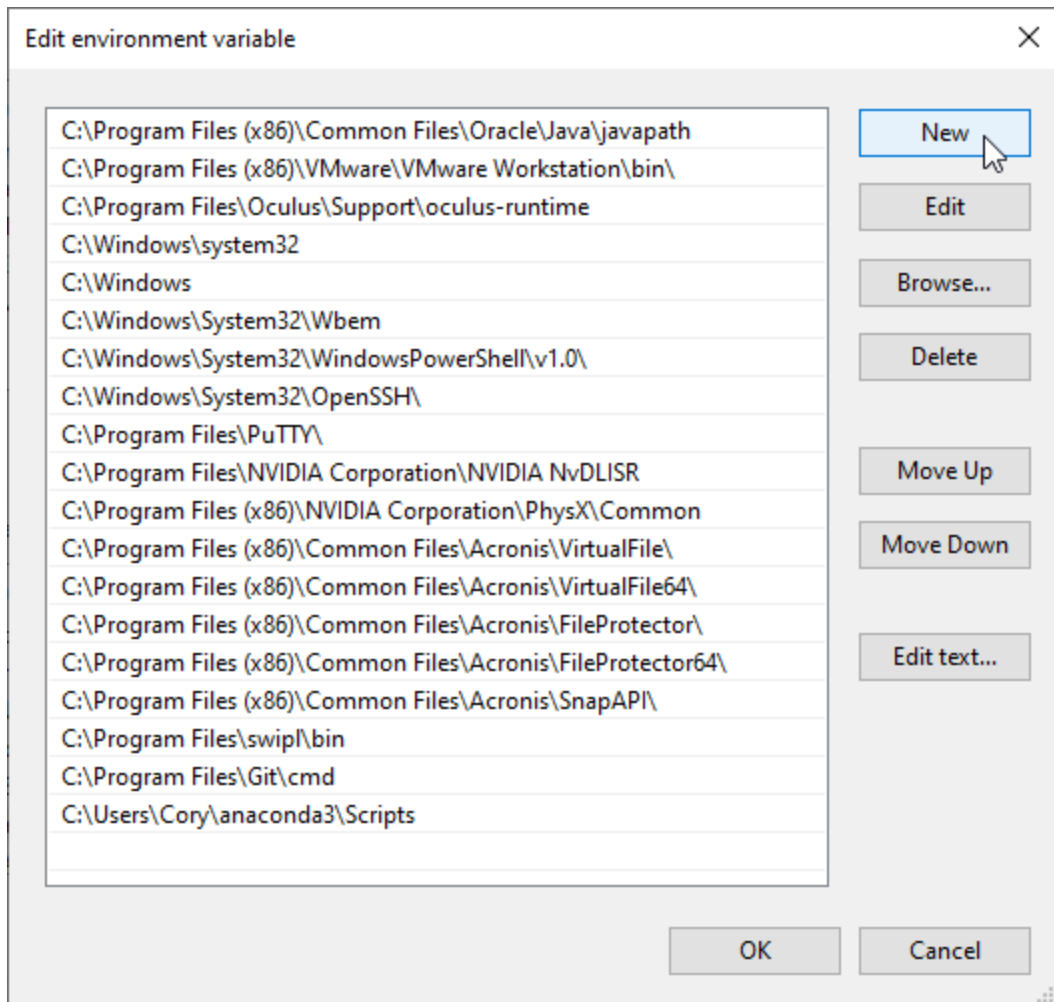


Select the "Path" category in the system variables and click "Edit"

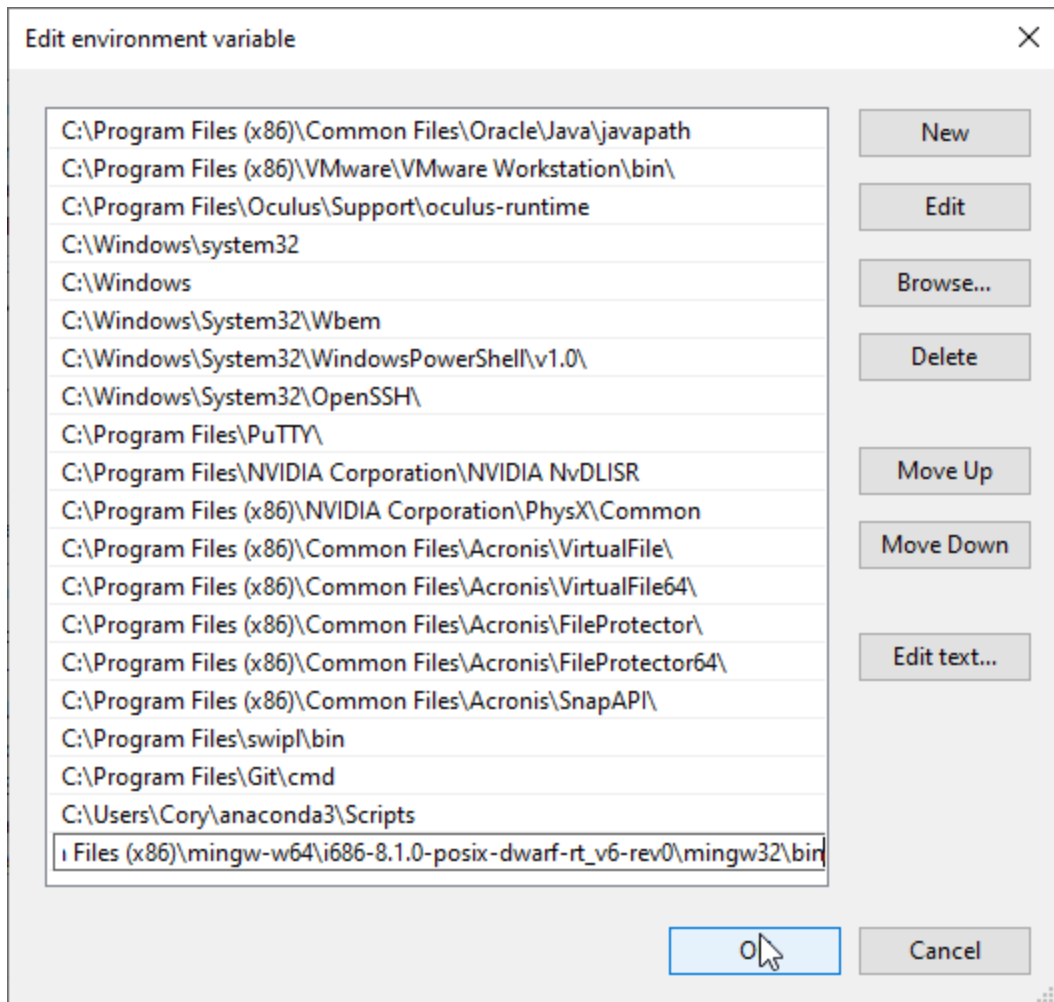




Navigate to where you installed MinGW-W64 in File Explorer and copy the entire directory path from the bin folder inside of the mingw32 folder

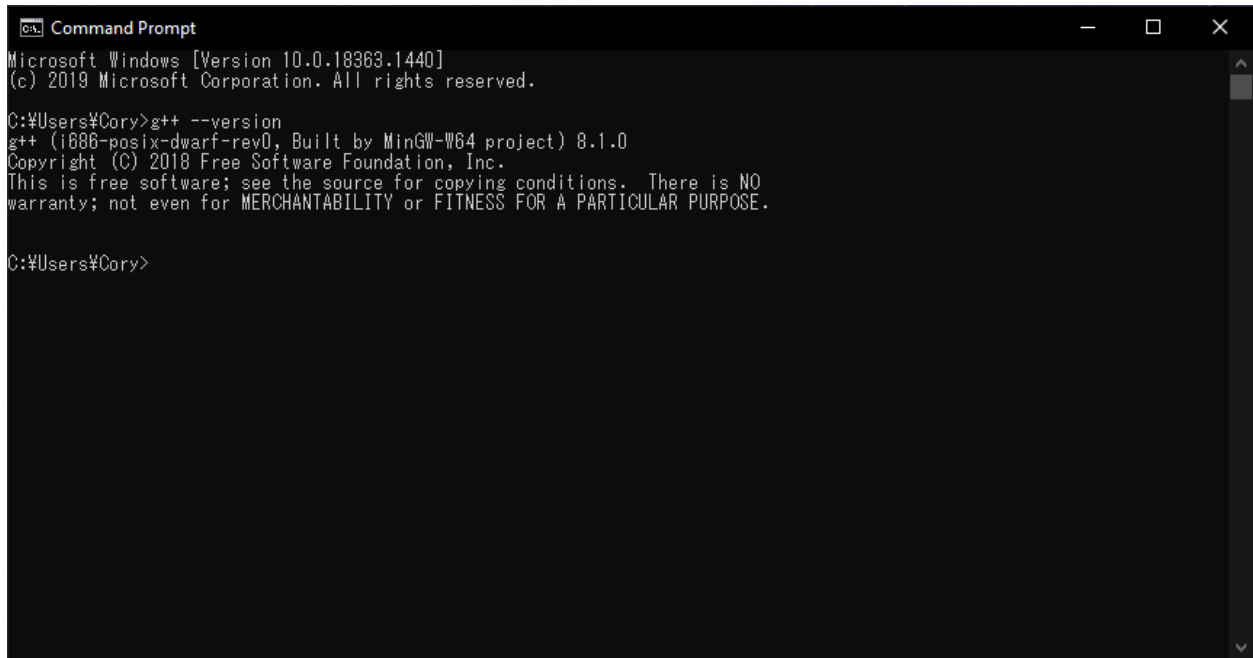


Click on New



Paste the full path to the bin directory in the text box that appeared and click "OK"

Step 6: Test

A screenshot of a Windows Command Prompt window. The title bar reads "Command Prompt". The window content shows the following text:

```
Microsoft Windows [Version 10.0.18363.1440]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Cory>g++ --version
g++ (i686-posix-dwarf-rev0, Built by MinGW-W64 project) 8.1.0
Copyright (C) 2018 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

C:\Users\Cory>
```

Type in `g++ --version`. If the version appears, you've successfully installed MinGW! The same commands can be used as in any compilation tutorial and programs compiled work on all platforms.