

Instruction on Windows

1. Clarification

The following instructions have been tested successfully on Windows 10 and Windows 11. They are designed specifically for homework in the Algorithms class. This document will describe how to install MingGW GCC/G++ 8.1.0 and OpenCV 3.4.13.

2. MinGW and OpenCV Installation

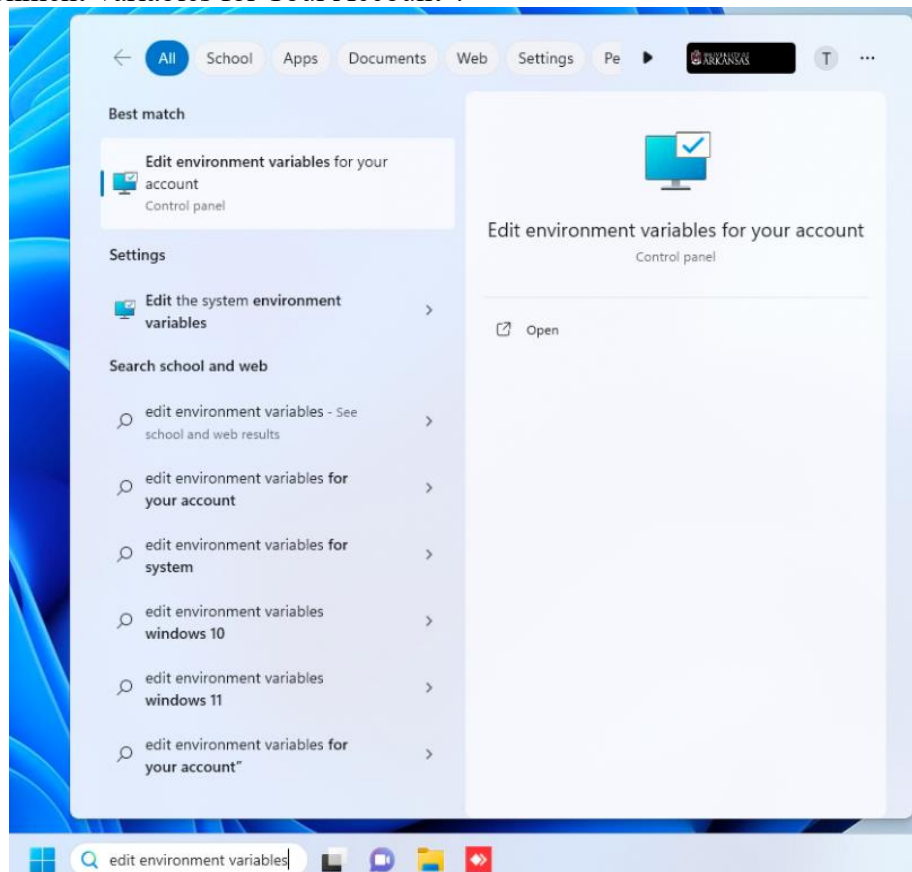
MinGW is a C/C++ compiler, a free and open-source software development environment that runs on Windows. OpenCV is an open-source library of programming functions mainly for real-time computer vision, originally developed by Intel.

Step 1: Download the pre-compiled MinGW and OpenCV from here: [MinGW-OpenCV.zip](#)

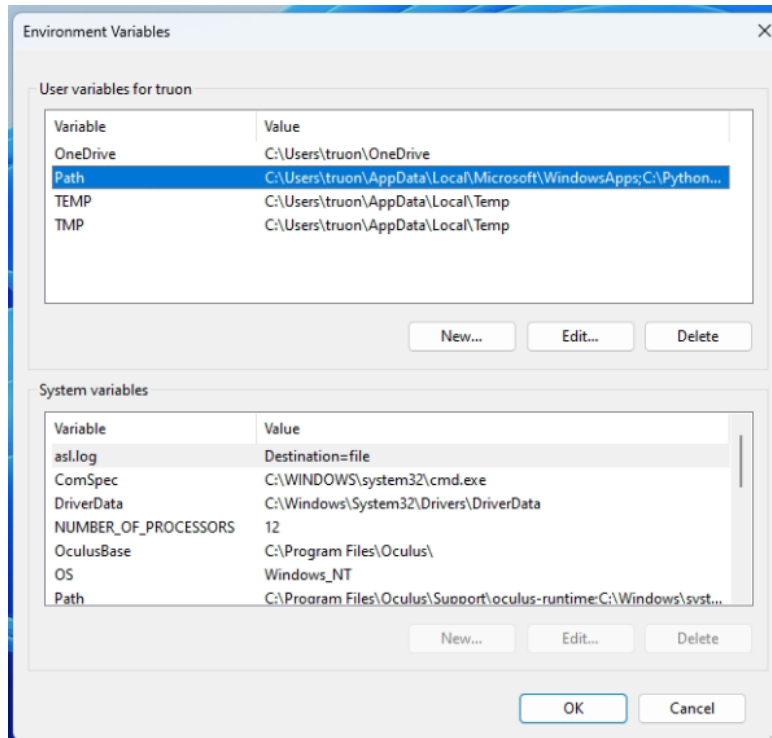
Step 2: Extract the compressed file. There are two folders named **mingw64** and **opencv**.

Step 3: Copy these two folders into C:\

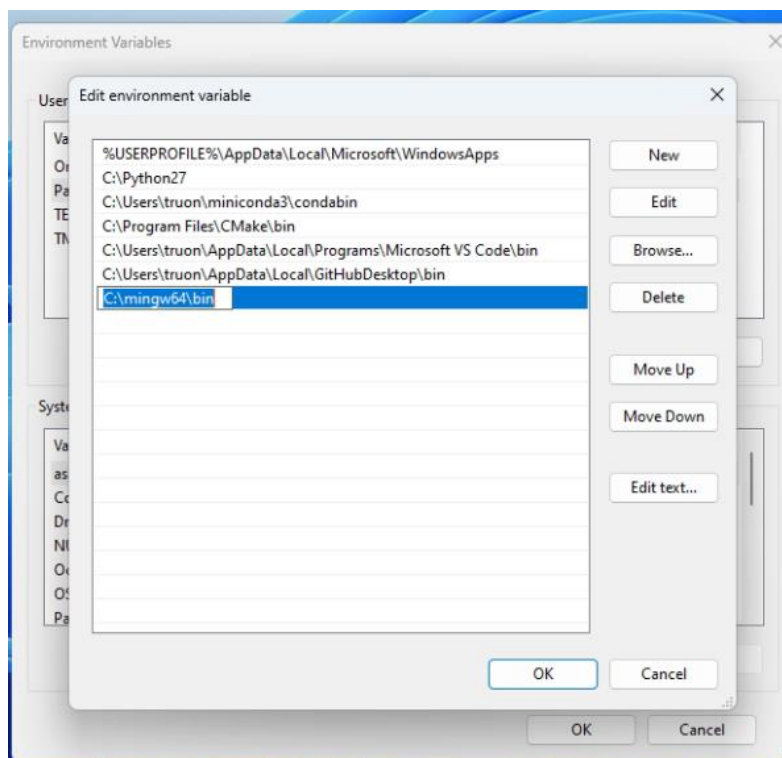
Step 4: Search “Edit Environment Variables for Your Account” in the search bar. Then, click on “Edit Environment Variables for Your Account”.



Step 5: Select Path and click Edit.



Step 6: Click New and type `C:\mingw64\bin`. Then, Click OK on the current window.

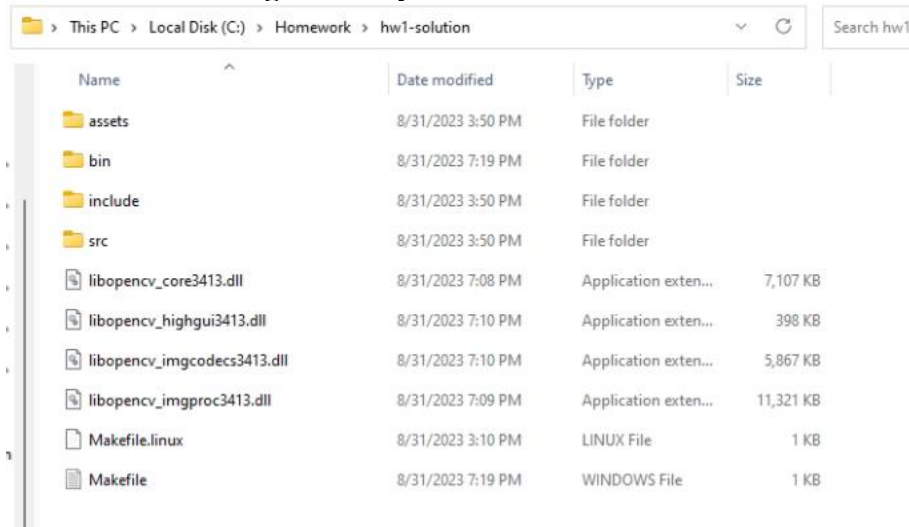


Step 7: Click OK on the current window.

Step 8: Modify the Makefile in your homework as follows:

```
MINGW_BIN=C: /mingw64/bin
CFLAGS=-I${PROJECT_DIR}/include/
CC=${MINGW_BIN}/gcc.exe
CXX=${MINGW_BIN}/g++.exe
OPENCV_DIR=C: /opencv/build/install
```

Step 9: Copies the following files **libopencv_imgcodecs3413.dll**, **libopencv_core3413.dll**, **libopencv_highgui3413.dll**, and **libopencv_imgproc3413.dll** from **C:\opencv\build\install\x64\mingw\bin** to your homework folder.



Step 10: Compile your homework. Open terminal and go to your homework folder. Then, type **mingw32-make**.

