Ghidra Setup

Dr. Colin O'Flynn

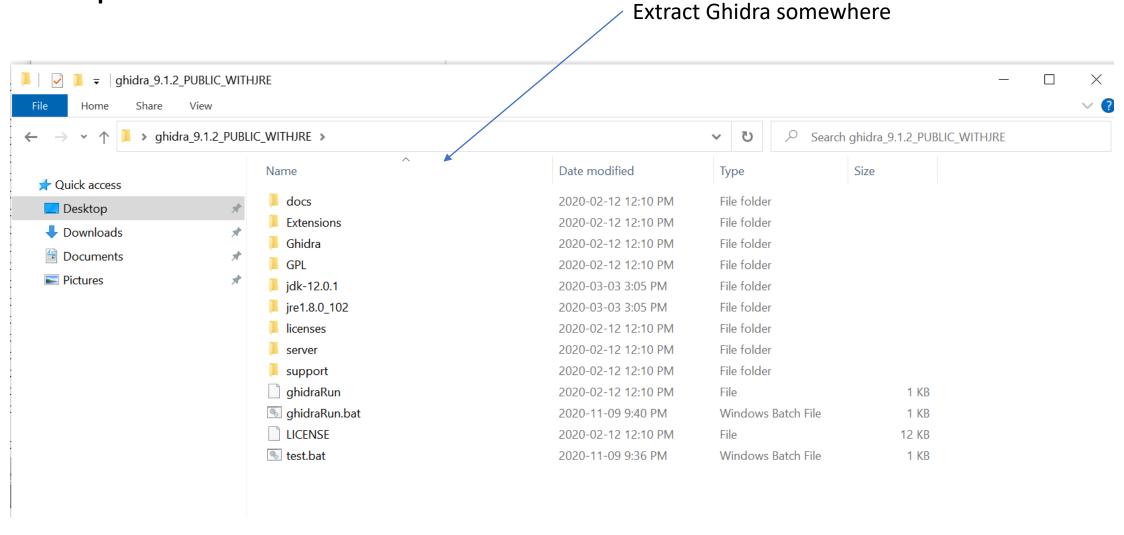
ECED4406 – Dalhousie University

Step #1: Install Ghidra

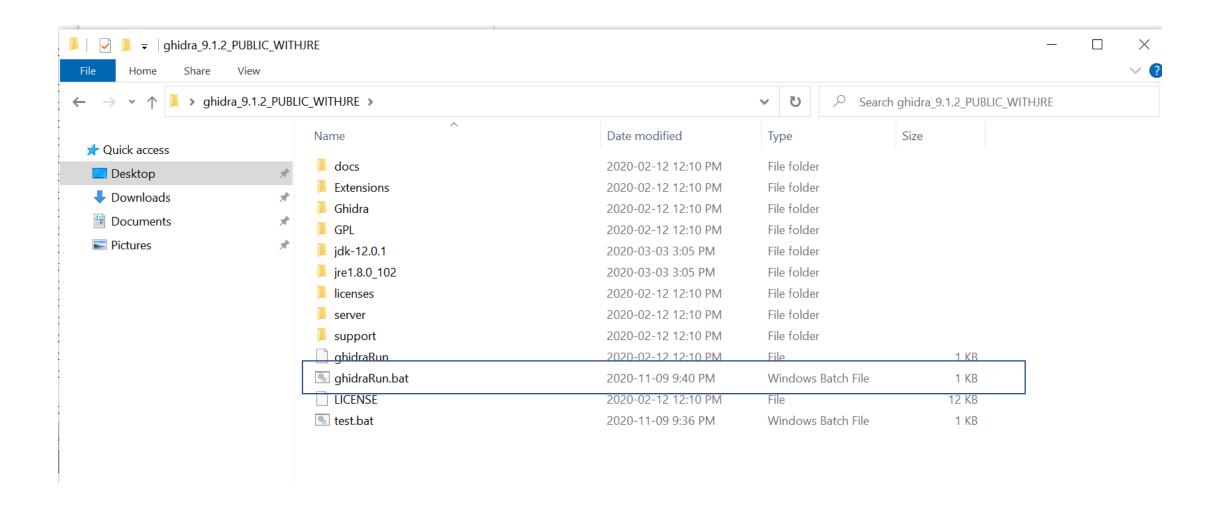
- Ghidra runs on Windows/Mac/Linux
 - I've only run on Windows see installation instructions for other platforms.
- On Windows download the following which includes the Java runtime built-in:

https://github.com/colinoflynn/eced4406/releases/download/0.0/ghidra 9.1.2 PUBLIC WITHJRE.zip

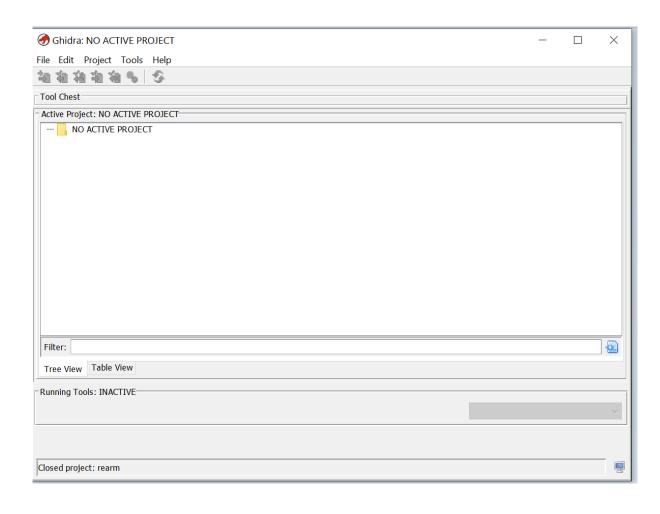
Step #1: Install Cont'd



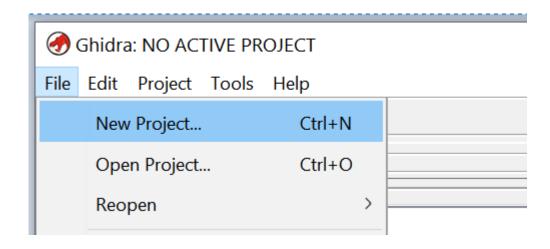
Running Install

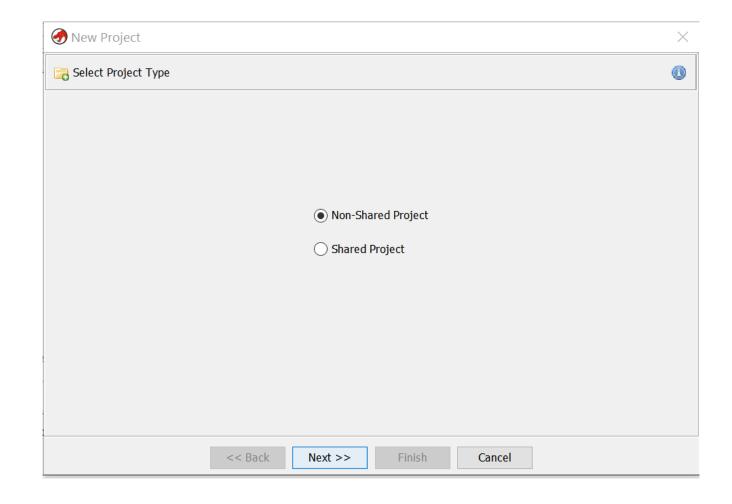


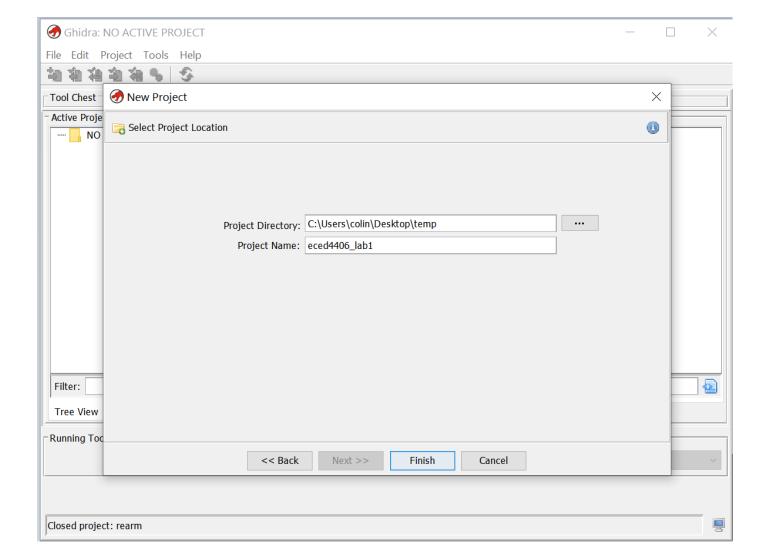
Step #1 Complete – Ghidra Online!

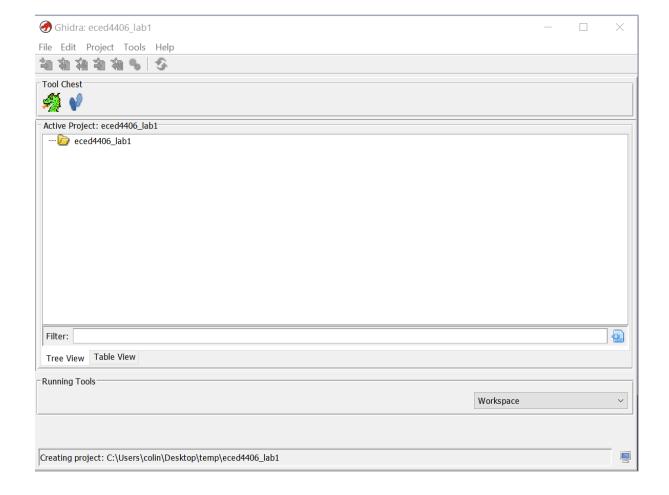


Step #2: Make a new project

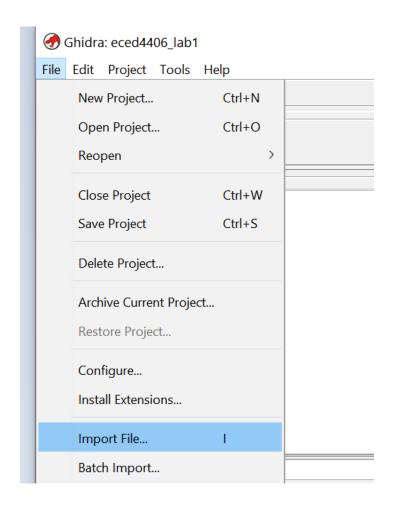


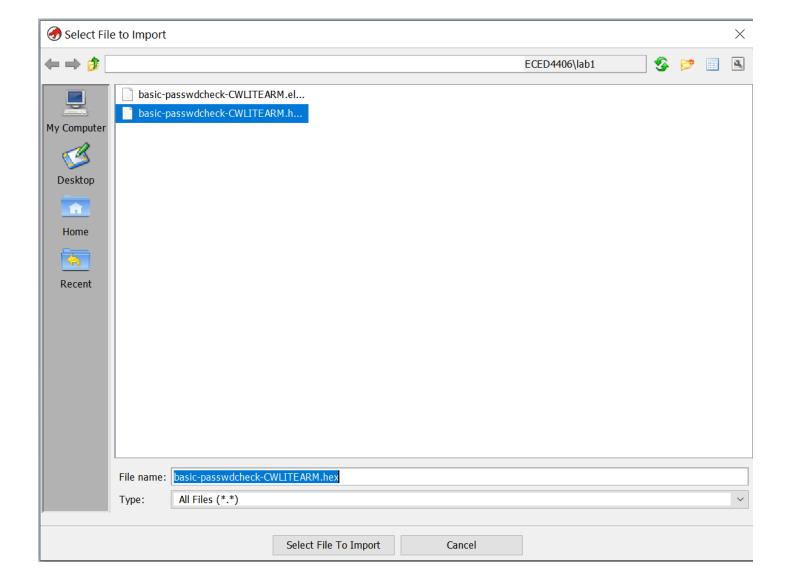


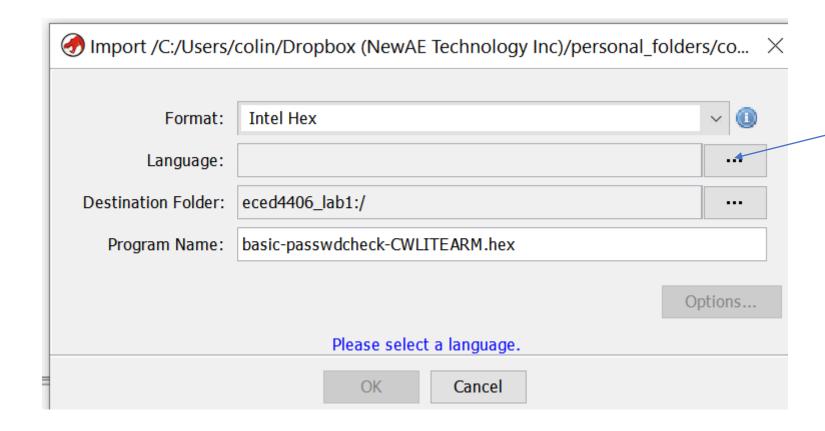


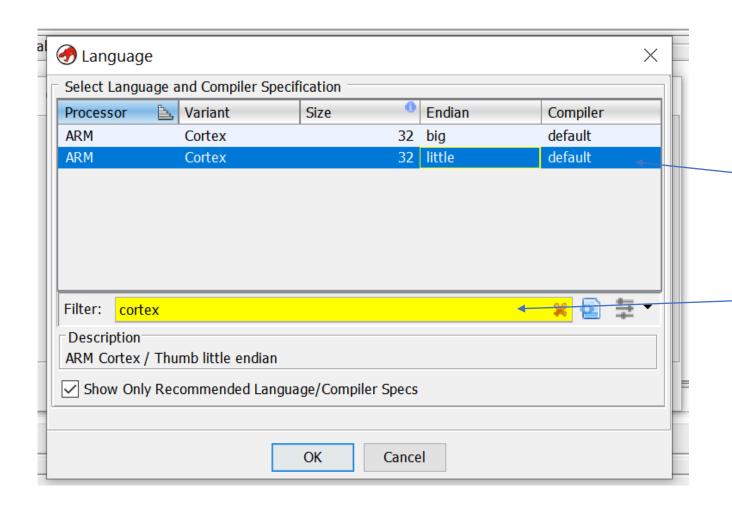


Step #3: Import file



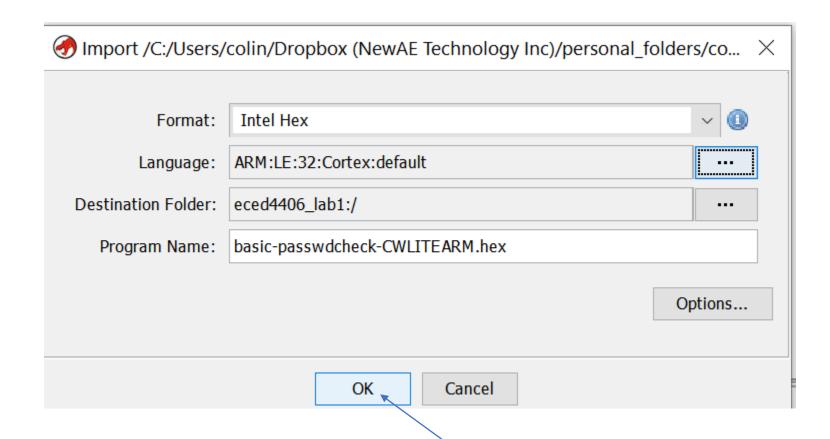


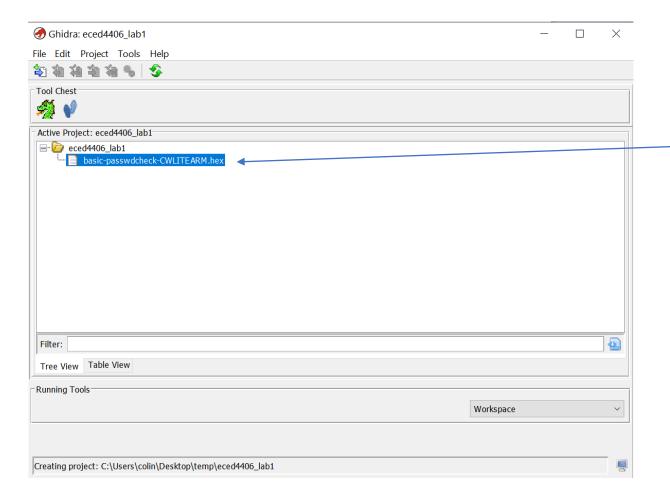




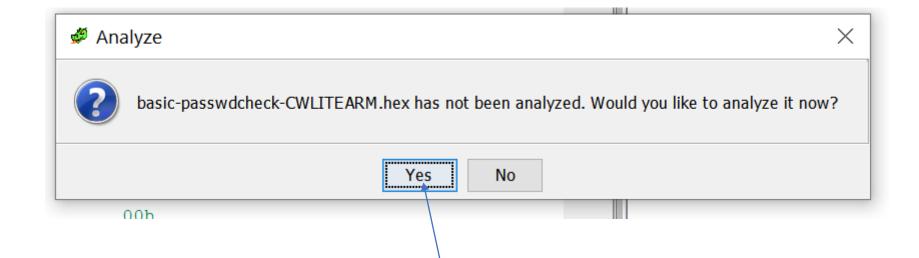
2. Select 'little endian'

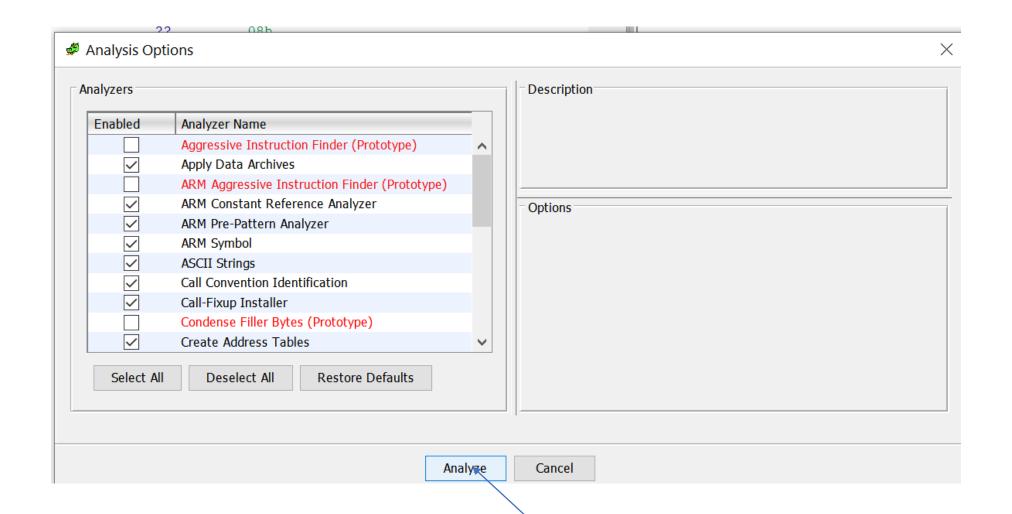
1. Type 'cortex'



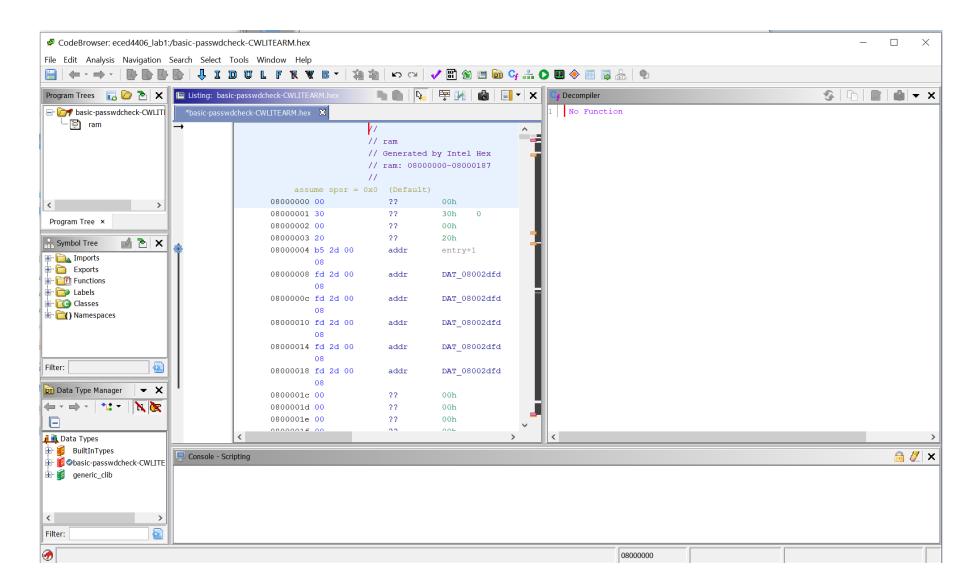


Double click on this

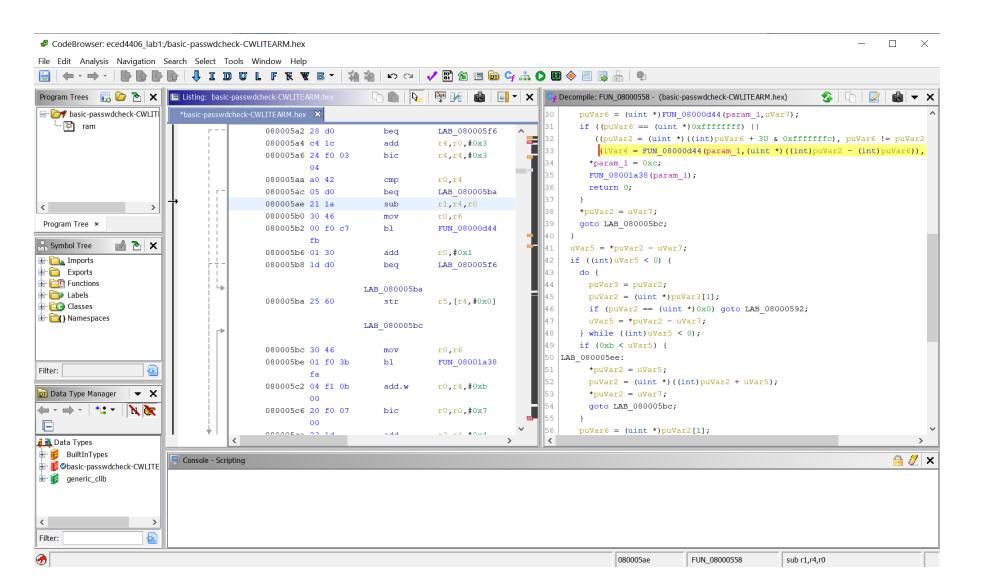




Done – file is now opened!



Explore disassembly on left \rightarrow Decompiled on right



What is this source code??

Main file is:

https://github.com/newaetech/chipwhisperer/blob/develop/hardware/victims/firmware/basic-passwdcheck/basic-passwdcheck.c

..but also includes all the supporting code you "don't see", such as:

- Low-layer hardware drivers (source elsewhere in link above).
- Libraries linked in from compiler (source not in links above).

Next Steps

- This was designed to confirm you can install & run Ghidra.
- We opened a basic Arm Cortex-M binary.

Next – explore some features of Ghidra!

More Ghidra?

- Several nice resources out there, such as:
 - Ghidra Ninja (Twitter / YouTube)
 - Hackaday Ghidra Course
 - Ghidra Book (https://nostarch.com/GhidraBook)

