

Guide to BOOK Appendix B Examples: *Jonathan Bailey*

Debugging Software with the GNU Debugger

The examples provided for this chapter assume that you have a working installation of **gcc** and **gdb** on your computer. OS X with Xcode installed on their systems should already have these utilities, as will most Linux or Unix users. For Windows users, the path of least resistance is probably to install **Cygwin** (www.cygwin.com).

You will need **gcc** and **make** installed to compile and build the examples below.

ftom

The only source code file for the first example is *ftom.c*. To build this example, simply run:

```
$ gcc -ggdb -o ftom ftom.c
```

from your command Terminal. This will compile the program with necessary symbols for debugging with **gdb**.

simple_oscil

The included source code files for *simple_oscil* are *simple_oscil.c*, *simple_waveforms.c* and *simple_waveforms.h*.

To build the second example, you must first obtain and compile a working version of **portaudio** (www.portaudio.com). Once downloaded, simply compile and install according to the developer's instructions. At this point you can simply run the following commands to build the *simple_oscil* example program:

```
$ configure  
$ make all
```

All other files in the examples directory are required to support the automatic configuration and compilation of the examples for the various platforms supported by the book, and should not be modified or deleted. To learn more about this, investigate the **autoconf** utility, that is another compilation resource in the GNU development toolkit.