01-4 Development Tools

Chapters 13 and 15

gdb and friends

gdb

- gdb allows you to see what is going on `inside' a program while it executes
- gdb can do four main kinds of things:
  - Start your program
  - Make your program stop on specified conditions.
  - Examine what has happened
  - Change things in your program
- The program being debugged can be written in Ada, C, C++, Objective-C, Pascal (and many other languages)
- Those programs might be executing on the same machine as GDB (native) or on another machine (remote)

Exercise 06- gdb

- In Exercise 06 we'll try the following commands in gdb
  - help, break, run, continue, list, step, next, backtrace
- We'll also try remote debugging later.
- Remote debugging is used when your target can't run gdb

- Go do http://elinux.org/EBC_Exercise_06_gdb_Debugging

binutils

- Section 13.5 on page 355 gives a nice summary of many handy binary utilities
  - **readelf**
  - **objdump**
  - **strip**
  - **strings**
  - **ldd**
  - **nm**
- Check them out