02-3 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 16- gdb

- In Exercise 16 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 16 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