gdb cheat sheet

gdb is the Linux debugger. Pretty much anything you can do in the Visual Studio debugger, you can do in gdb. To use gdb, you must compile with the “-g” option, and I’d suggest you turn off the optimizer (-O0 or –O1).

To start the debugger:

gdb program

where “program” is the name of the program you want to debug.

Useful commands:

run Start running the program at the beginning

run a1 a2 … Start running the program at the beginning passing a1, a2, etc. as command line arguments

br <loc> Set a breakpoint at a location. You can specify function names or line numbers. gdb can do name completion: type part of a name and then hit <tab>.

c Continue executing after hitting a breakpoint

n step (over)

s step (into)

p <var> print the value of a variable

bt backtrace: print the call stack

up move the current scope up one level in the call stack

down move the current scope down one level in the call stack

l list the code around the current line number

l <n> list the code around line <n>

q quit gdb