Starting:
  gdb
  gdb <file>  (lists command line options)
  gdb -h (lists command line options)

Exiting:
  quit
  Ctrl-d
  Note: Ctrl-C does not exit from gdb, but halts the current gdb command

General commands
  run  (start your program)
  kill (stop the program)

Breakpoints
  break FUNCTION (set a breakpoint at the entry to the function)
  break *ADDRESS (set a breakpoint at the specified address)
  disable <NUM> (disable the breakpoint with that number)
  enable <NUM>  (enable the breakpoint with that number)
  clear FUNCTION  (clear any breakpoints at the entry to the function)
  delete <NUM> (deletes the breakpoint with that number)
  delete (deletes all breakpoints)

Working at breakpoints
  stepi (execute one machine code instruction)
  stepi <NUM> (execute NUM instructions)
  step (execute one C statement)
  nexti (like stepi, but proceed through subroutine calls)
  nexti <NUM>
  next
  until LOCATION (continue running until LOCATION is reached)
  continue (resume execution)
  continue <NUM> (continue, ignoring this breakpoint NUM times)
  finish (run until the current function returns)
  backtrace (print the current address and stack backtrace)
  where (print the current address and stack backtrace)

Examining code
  print/a $pc (print the program counter)
  print $sp (print the stack pointer)
  disas (display the function around the current line)
  disas ADDRESS (display the function around the address)
  disas ADDRESS1 ADDRESS2 (display the function between the addresses)

Examining data
  print/0 $eax (print the contents of %eax)
  print/x 0x100 $eax (print hex repr. of decimal value)
  print/x 555 (print hex repr. of decimal value)
  x ADDRESS (print the contents at ADDRESS in memory)
  x/NUF ADDRESS  (print the contents at ADDRESS in memory:
  N = number of units to display
  U = b (bytes), h (2 bytes), w (4 bytes))

Autodisplaying information
  display $eax (print the contents of %eax every time the
  program stops)
  display (print the auto-displayed items)
  delete display <NUM> (stop displaying item NUM)

Useful information commands
  help info
  info program (current status of the program)
  info functions (functions in program)
  info stack (backtrace of the stack)
  info frame (information about the current stack frame)
  info scope (variables local to the scope)
  info variables (global and static variables)
  info registers (registers and their contents)
  info breakpoints (status of user-settable breakpoints)
  info address SYMBOL (use for looking up addresses of functions)

Running gdb in emacs
  M-x gdb
  C-h m to see the features of GDB mode