

```

Starting:
gdb
gdb <file>
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
kill

Breakpoints
break FUNCTION
break *ADDRESS
disable <NUM>
enable <NUM>
clear FUNCTION
delete <NUM>
delete

Working at breakpoints
stepi
stepi <NUM>
nexti
nexti <NUM>
until LOCATION
continue
continue <NUM>
finish
backtrace
where

Examining code
print/a $pc
Print $sp
disas
disas ADDR
disas ADDR1 ADDR2

Examining data
print $eax
print/x $eax
print/a $eax
print/d $eax
print/t $eax
print/c $eax

```

```

print 0x100
print/x 555
      (print decimal repr. of hex value)
      (print hex repr. of decimal value)

x ADDR
x/NFU ADDR
      (print the contents of ADDR in memory)
      (print the contents at ADDR in memory:
      N = number of units to display
      F = display format
      U = b (bytes), h (2 bytes), w (4 bytes))

```

Autodisplaying information

```

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

```

Running gdb in emacs

```

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

```

```

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

Examining code
print/a $pc
Print $sp
disas
disas ADDR
disas ADDR1 ADDR2
      (print the program counter)
      (print the stack pointer)
      (display the function around the current line)
      (display the function around the address)
      (display the function between the addresses)

Examining data
print $eax
print/x $eax
print/a $eax
print/d $eax
print/t $eax
print/c $eax
      (print the contents of $eax)
      (print the contents of $eax as hex)
      (print the contents of $eax as an address)
      (print the contents of $eax as decimal)
      (print the contents of $eax as binary)
      (print the contents of $eax as a character)

```