GDB Übersicht

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http://hhoegl.informatik.hs-augsburg.de\
/sysprog/gdb_anleitung/quickref{.txt,.pdf}

Optionen

```
--tui            Text user interface
-x <gdbscript>   Read cmds from file
-iex "set auto-load safe-path /"
```

Startup file: ./.gdbinit, ~/.gdbinit

```
C-L    Bildschirm neu zeichnen
C-x 2  Switch layouts
C-x 1
^V     Assembler Fenster auf/ab

RET    Wiederhole vorheriges Kommando
s, si  Zeile ausführen (step into fct)
n, ni  Zeile ausführen (next line)
q      Quit

run [args]  Von Anfang an ausführen
c    Ab brkpt ausführen (continue)
C-c  Programm stoppen (= Strg-C)

b    _start
b    26
b    main.s:26
b    *<addr>
b    funktion1
b    L1 if $eax == 1000
info b        Breakpoint list
del  <nr>     Delete breakpoint
dis  <nr>     disable
en   <nr>     enable
until <nr>    run until br <nr>
cond <nr> <cond>  Set condition
b L1 if <cond> | Brkpt with condition
commands       | and command list
...            |
end            |

commands <nr>  | Commands for brkpt <nr>
...            |
end            |
```

```
clear         delete brkpts at pos
watch expr    Watchpoint
p    $eax
p/x  $eax
p var1
p/x var1
p/a var    # address
p/t var    # binary ("two")
p   fct::locvar
set $eax = 42
set variable var1 = 43
set var1 = 43
p &var1   # address of
set {int}0x80490a7 = 0xAFFE
whatis var1
ptype var1

str1: .asciz  "ABC"   # data
p str1
p/x str1
p/x str1
p/x &str1
x/s &str1
x/4c &str1
set (0x80490a7 + 1) = 'm'

array:   .long   3, 67, 34, 12, 0
p array@5
p {int[6]} &array
set *(unsigned int *)0x804909e = 18
x/4xw &array

.lcomm buffer, 256   # bss
p buffer
p buffer@256
p (char[256]) buffer
set {int} (&buffer+3) = 2017
x/8xw &buffer
x/32cb &buffer

disp expr   Set display
info disp
undisp      Undisplay

__argc, argv__
p $esp
p/x *(int*)$esp
```

```
x/s *(char**)($esp+4)  # prog name
x/s {char*}($esp+4)
x/s *(char**)($esp+8)  # arg1


# ./.gdbinit
set confirm off
set pagination off
set history save on  # .gdb_history
set logging file gdb_log.txt
set logging on
tui enable
layout regs
winheight src +3
winheight regs 7
set prompt (gdb)
file main
br _start
run

source <file>


help info
info program|functions|stack|frame|
     scope|variables|registers|breakpoints|
     address

call address
finish

diassemble

load    # flash microcontroller

show args

Mehr Info
- http://www.unknownroad.com/rtfm/gdbtut/
- https://www.gnu.org/software/gdb/documenta
```

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