```
Script started on 2020-10-11 00:55:48-04:00 [TERM="xterm-256color" TTY="/dev/pts/3" COLUMNS="1
15" LINES="48"]
\033]0;gurusaran@guru: ~/Desktop/OS/P0\007\033[1;34mgurusaran@guru\033[00m:\033[1;32m~/Desktop
/OS/P0\033[00m$ gbd \033[K033[K033[K033[Kdb ./P0
\label{localization} $$ \033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\033[35;1m\03]]]])
\033[m\033[mCopyright (C) 2020 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <a href="http://gnu.org/licenses/gpl.html">http://gnu.org/licenses/gpl.html</a>
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.
Type "show copying" and "show warranty" for details.
This GDB was configured as "x86_64-linux-gnu".
Type "show configuration" for configuration details.
For bug reporting instructions, please see:
<a href="http://www.gnu.org/software/gdb/bugs/">http://www.gnu.org/software/gdb/bugs/>.</a>
Find the GDB manual and other documentation resources online at:
     <http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from \033[32m./P0\033[m...
(gdb) break shell.C:108
Breakpoint 1 at 033[34m0x3257\\033[m: file \\033[32mshell.C\\033[m, line 108.
(gdb) t033[Krun
Starting program: /home/gurusaran/Desktop/OS/P0/P0
The shell has only the following cmds:
           quit
           mkdisk
           fddisk
           rddisk
           wrdisk us
           echo
                       SSSS
           mkfs
                       1111
           findfs
           inode
Start with ! to invoke a Unix shell cmd
sh350% mkdisk
cmd [mkdisk]
simDisk 55555556e8d0 = new SimDisk (D1, 124, 512)
mkSimDisk() == 1431759056
sh350% wrdisk name 1234
cmd [wrdisk name 1234]
arg #0 (name) must be a number.
sh350% wfdAsk 223 name
cmd [wrdisk 123 name]
toNum 123toNum 123arg 123 123 123
Breakpoint 1, 033[33mdoWriteDisk 033[m (033[36ma 033[m=0x55555556e8f0)]]] at 033[32mshell.C]
\033[m:108
108
              033[01mprintf(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(033[m(0)]))])]))])])])])])))])))))))))))
033[31m, 033[m st 033[31m, 033[m r 033[31m); 033[m]]]
(gdb) p a[\] \] 033[C.u]
$1 = 123
(gdb) d 1
(gdb) break shell.C:116
Breakpoint 2 at 033[34m0x55555555555572bc\\033[m: file <math>033[32mshell.C\\033[m, line 116.]]
(gdb) mkdisk
Undefined command: "mkdisk". Try "help".
The program being debugged has been started already.
Start it from the beginning? (y or n) y
Starting program: /home/gurusaran/Desktop/OS/P0/P0
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The shell has only the following cmds:
                                quit
                               mkdisk
                                fddisk
                                rddisk
                                wrdisk us
                                echo
                                                                SSSS
                                mkfs
                                                                1111
                                findfs
                                inode
Start with ! to invoke a Unix shell cmd
sh350% mkdisk
cmd [mkdisk]
simDisk 55555556e8d0 = new SimDisk (D1, 124, 512)
mkSimDisk() == 1431759056
sh350% rddskk^12B^[[D
cmd [rddisk 123]
toNum 123toNum 123arg 123 123 123
Breakpoint 2, 033[33mdoReadDisk033[m](033[36ma)033[m=0x55555556e6d0)] at 033[32mshell.C033]
[m:116
116
                                         35m \ln 033 [m \log 31m \log 3
 [31m, \033[m buf\033[31m, \033[m r\033[31m); \033[m
 (gdb) p a[\] \] 033[C.u]
$2 = 123
 (gdb) d 2
 (gdb) brak\033[K033[K033[Keak shell.&033[KC\033[K:12&033[K8
Breakpoint 3 at 033[34m0x55555555555731a\\033[m: file <math>033[32mshell.C\\033[m, line 128.
 (gdb) \(\hat{n}_033[K\007run
The program being debugged has been started already.
Start it from the beginning? (y or n) y
Starting program: /home/gurusaran/Desktop/OS/P0/P0
The shell has only the following cmds:
                                quit
                               mkdisk
                                fddisk
                                rddisk u
                                wrdisk us
                                echo
                                                                 SSSS
                                mkfs
                                                                 1111
                                findfs
                                inode
                                                                 11
Start with ! to invoke a Unix shell cmd
sh350% echo my name is Guru
cmd [echo my name is Guru]
Breakpoint 3, 033[33mdoEcho 033[m (033[36ma 033[m=0x55555556e6d0)]]] at 033[32mshell.C 033[m:1]]
28
128
                                         \033[01mprintf\033[m\033[31m(\033[m\033[31m"%s#%d, %s#%d, %s#%d, %s#%d\033[m\033[35m
\n\sqrt{33} [m\sqrt{33} [31m"\sqrt{33} [m\sqrt{33} [31m], \sqrt{33} [m a\sqrt{33} [31m], \sqrt{33} [m\sqrt{33} [35m0\sqrt{33} [m\sqrt{33} [31m], \sqrt{33} [ms\sqrt{33} [ms/3] [ms/3] [ms/3] ]]]]])]]])]]
m, \033[m a\033[31m[\033[m\033[35m0\033[m\033[31m].\033[mu\033[31m,\033[m]]]])
 (gdb) print a[\emptyset],033[C.s]
$3 = \033[34m0x7fffffffdc45\033[m "my"]
 (gdb) print a[\mathbb{Q}]38[1P]]ss
$4 = \033[34m0x7fffffffdc48\033[m "name"]
 (gdb) print a[1],033[1R033[1P2$ss
$5 = \033[34m0x7fffffffdc4d\033[m "is"]
 (gdb) print a[\] \] 3\] [1P\] ss
$6 = \033[34m0x7fffffffdc50\033[m "Guru"]
 (gdb) print a[$\P3\B33[C\033[C\033[\C033[Ku
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gdbSession.txt
                       Sun Oct 11 01:07:57 2020
                                                         3
$7 = 0
(gdb) d 3
(gdb) break doma033[K033[KMakedis1033[K033[K033[K033[KDisk
Breakpoint 4 at 033[34m0x5555555557186\033[m: file <math>033[32mshell.C\033[m, line 93.]]
(qdb) run
The program being debugged has been started already.
Start it from the beginning? (y or n) y
Starting program: /home/gurusaran/Desktop/OS/P0/P0
The shell has only the following cmds:
        quit
        mkdisk
        fddisk
        rddisk u
        wrdisk us
        echo
                 SSSS
        mkfs
                 uu
        findfs
        inode
Start with ! to invoke a Unix shell cmd
sh350% ndkdlisk
cmd [mkdisk]
Breakpoint 4, \033[33mdoMakeDisk\033[m (\033[36ma\033[m=0x55555556e6d0) at \033[32mshell.C\033
[m:93
93
          uint r \sqrt{033[31m]} \sqrt{033[01mmkSimDisk]} \sqrt{033[31m]}; \sqrt{033[m]}
(gdb) n
simDisk 55555556e8d0 = new SimDisk (D1, 124, 512)
          \label{eq:condition} $$ \033[01;34mif\033[m\033[31m(\033[mr\033[31m!=\033[m\033[35m0\033[m\033[31m)\033[m]\])]) $$
(gdb) n
95
             \033[01mreleaseCfv\033[m\033[31m();\033[m]
(gdb) n
          \label{eq:continuous_simple_condition} $$ \033[01mprintf\\033[m\\033[31m"mkSimDisk() == $d\\033[m\\033[35m\\n\\033[m]) $$
96
\033[31m"\033[m\033[31m,\033[m r\033[31m);\033[m]]
(gdb) print r
$8 = 1431759056
(gdb) n
mkSimDisk() == 1431759056
97
        \033[31m}\033[m
(gdb) d 4
(gdb) break sin033[Kmdisk033[K033[K033[K033[KDisk.C:55
Breakpoint 5 at 033[34m0x55555555555544033[m: file <math>033[32msimDisk.C033[m, line 58.
The program being debugged has been started already.
Start it from the beginning? (y or n) y
Starting program: /home/gurusaran/Desktop/OS/P0/P0
The shell has only the following cmds:
        quit
        mkdisk
        fddisk
        rddisk u
        wrdisk us
        echo
                 SSSS
        mkfs
        findfs
        inode
                 11
```

Breakpoint 5, \033[33mSimDisk::openDiskImage\033[m (\033[36mthis\033[m=0x55555556e8d0, \033[36

Start with ! to invoke a Unix shell cmd

 $mmode\033[m=0)$ at $\033[32msimDisk.C\033[m:58]$

sh350% mkdisk cmd [mkdisk]

Script done on 2020-10-11 01:07:57-04:00 [COMMAND_EXIT_CODE="0"]

gdbSession.txt

```
\label{localization} $$ \033[01msprintf] 033[m] 033[31m(033[mtfnm)033[31m, 033[m] %s.dsk")033[m] 33[m] $$ $$ \033[01msprintf] 033[m] $$ \033[01msprintf] 033[m] $$ \033[01msprintf] 033[m] $$ \033[01msprintf] 033[m] $$ \033[m] $$ \
1m,\033[m labelOfTheDisk\033[31m);\033[m
(gdb) orint033[K033[K033[K033[K033[Kprint labelOfTheDisk
$9 = "D1", '\000' <repeats 13 times>
(gdb) d 2033[K5
(gdb) run
The program being debugged has been started already.
Start it from the beginning? (y or n) \u033[Ky
Starting program: /home/gurusaran/Desktop/OS/P0/P0
The shell has only the following cmds:
                       quit
                      mkdisk
                       fddisk
                       rddisk u
                       wrdisk us
                       echo
                                              SSSS
                      mkfs
                                              uu
                       findfs
                       inode
                                              11
Start with ! to invoke a Unix shell cmd
sh350% mkdssk
cmd [mkdisk]
simDisk 55555556e8d0 = new SimDisk (D1, 124, 512)
mkSimDisk() == 1431759056
sh350% wrdisk 10 name
cmd [wrdisk 10 name]
toNum 10toNum 10arg 10 10 10
write4350disk(10, name...) == 512
sh350% rddisk 19
cmd [rddisk 10]
toNum 10toNum 10arg 10 10 10
read4350disk(10, namenamena...) == 512
sh350% q
cmd [q]
[Inferior 1 (process 2253) exited normally]
(qdb) q
\033]0;gurusaran@guru: ~/Desktop/OS/P0\007\033[1;34mgurusaran@guru\033[00m:\033[1;32m~/Desktop
/OS/P0\033[00m\$ exit
```