# **GDB** - Report

## Resource

https://www.tutorialspoint.com/gnu\_debugger/gdb\_debugging\_examples.htm

# **Description**



Use to:

Use GDB to debug 2 example



#### Result:

### Example 1

```
MINGW64:/c/Users/nkhoi/Documents/Project/CodeSample_GDB/CodeSample_GDB
                                                                                                                                                                                                                                                                                ×
<http://www.gnu.org/software/gdb/bugs/>...
Reading symbols from C:\Users\nkhoi\Documents\Project\CodeSample_GDB\CodeSample_
GDB\Source.exe...done.
(gdb) C:\Users\nkhoi\Documents\Project\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample_GDB\CodeSample
 (gdb) C:\Users\nkhoi/.gdbinit:2318: Error in sourced command file:
Python scripting is not supported in this copy of GDB. break /Full/path/to/Source.cpp:7
 Make breakpoint pending on future shared library load? (y or [n]) [answered N; i
nput not from terminal]
(gdb) No source file named /Full/path/to/service.cpp.
 b Source.cpp:7
Breakpoint 1 at 0x401476: file Source.cpp, line 7.
 (gdb) info break
                                                                     Disp Enb Address
                                                                                                                                What
 Num
                       Type
                                                                     keep y 0x00401476 in main() at Source.cpp:7
                       breakpoint
(gdb) run
 Starting program: C:\Users\nkhoi\Documents\Project\CodeSample_GDB\CodeSample_GDB
 /Source.exe
New Thread 24140.0x51d0]
[New Thread 24140.0x5778]
[New Thread 24140.0x3d88]
[New Thread 24140.0x5598]
 Breakpoint 1, main () at Source.cpp:7
                                 int x = 5, y = 2;
 (gdb) s
                                 cout << divint(x, y);
 (gdb) s
divint (a=5, b=2) at Source.cpp:18
                                return a / b;
18
 (gdb) s
19
(gdb) s
 _fu0__ZSt4cout () at Source.cpp:10
10
                                 x = 3; y = 0;
(gdb) s
                                 cout << divint(x, y);</pre>
(gdb) s
 divint (a=3, b=0) at Source.cpp:18
                                 return a / b;
 (gdb) s
Program received signal SIGFPE, Arithmetic exception.
0x004014ea in divint (a=3, b=0) at Source.cpp:18
18 return a / b;
(gdb)
```

Error: File Source.cpp at line 18

→ Can't device to 0

## Example 2

```
MINGW64:/c/Users/nkhoi/Documents/Project/CodeSample_GDB/CodeSample_GDB
                                                                                                                       ×
       show warranty"
This GDB was configured as "mingw32".
For bug reporting instructions, please see:
<a href="http://www.gnu.org/software/gdb/bugs/>...">http://www.gnu.org/software/gdb/bugs/>...</a>
Reading symbols from C:\Users\nkhoi\Documents\Project\CodeSample_GDB\CodeSample_GDB\a.exe...done.

(gdb) C:\Users\nkhoi/.gdbinit:2318: Error in sourced command file:
Python scripting is not supported in this copy of GDB.
info b
No breakpoints or watchpoints.
(gdb) b Source.cpp:7
Breakpoint 1 at 0x401476: file Source.cpp, line 7.
(gdb) info b
Num
          Type
                              Disp Enb Address
                                                        What
                              keep y 0x00401476 in main() at Source.cpp:7
          breakpoint
(gdb) run
Starting program: C:\Users\nkhoi\Documents\Project\CodeSample_GDB\CodeSample_GDB/a.exe
[New Thread 25048.0x5490]
[New Thread 25048.0x5864]
[New Thread 25048.0x5060]
[New Thread 25048.0x4ba4]
Breakpoint 1, main () at Source.cpp:8
8 setint(&a, 10);
(gdb) s
setint (ip=0x61ff08, i=10) at Source.cpp:20
(gdb) s
          }(gdb) s
main () at Source.cpp:9
              cout << a << endl;</pre>
(gdb) p a
$1 = 10
(gdb) s
10
              setint(b, 10);
(gdb) s
setint (ip=0x401a9b <__do_global_ctors+43>, i=10) at Source.cpp:20
               *ip = i;
(gdb) s
Program received signal SIGSEGV, Segmentation fault.
0x004014fc in setint (ip=0x401a9b <__do_global_ctors+43>, i=10)
    at Source.cpp:20
20
              *ip = i;
(gdb)
```

Error: File Source.cpp at line 20

→ Passing argument is wrong format



Important things:

N/A