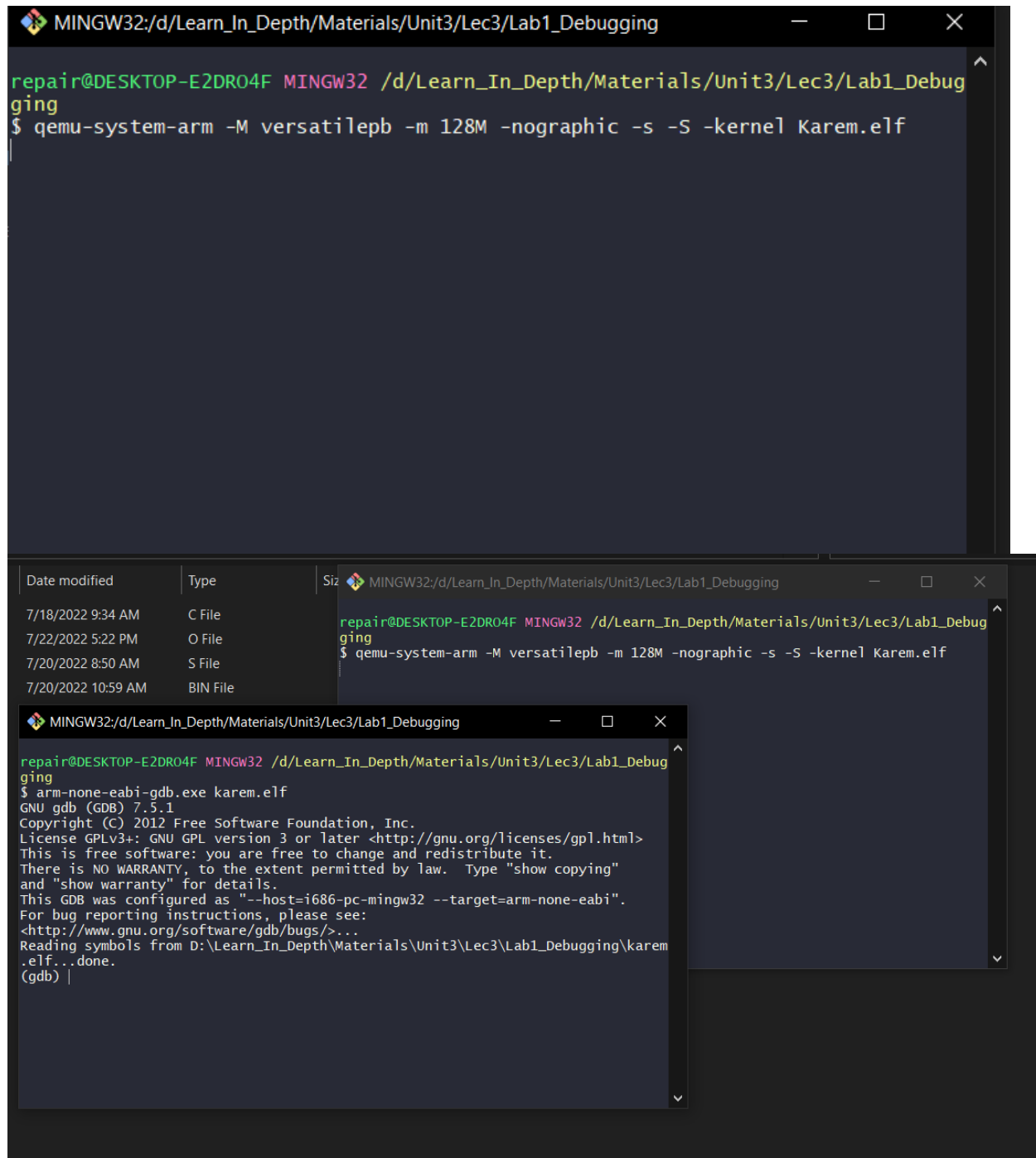


# Debugging Lab1



```
MINGW32:/d/Learn_In_Depth/Materials/Unit3/Lec3/Lab1_Debugging
repair@DESKTOP-E2DR04F MINGW32 /d/Learn_In_Depth/Materials/Unit3/Lec3/Lab1_Debugging
$ qemu-system-arm -M versatilepb -m 128M -nographic -s -S -kernel Karem.elf

Date modified | Type | Size | MINGW32:/d/Learn_In_Depth/Materials/Unit3/Lec3/Lab1_Debugging
7/18/2022 9:34 AM | C File |
7/22/2022 5:22 PM | O File |
7/20/2022 8:50 AM | S File |
7/20/2022 10:59 AM | BIN File |

MINGW32:/d/Learn_In_Depth/Materials/Unit3/Lec3/Lab1_Debugging
repair@DESKTOP-E2DR04F MINGW32 /d/Learn_In_Depth/Materials/Unit3/Lec3/Lab1_Debugging
$ arm-none-eabi-gdb.exe karem.elf
GNU gdb (GDB) 7.5.1
Copyright (C) 2012 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
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 "--host=i686-pc-mingw32 --target=arm-none-eabi".
For bug reporting instructions, please see:
<http://www.gnu.org/software/gdb/bugs/>...
Reading symbols from D:\Learn_In_Depth\Materials\Unit3\Lec3\Lab1_Debugging\karem.elf...done.
(gdb) |
```

```
n_In_Depth > Materials > Unit3 > Lec3 > Lab1_Debugging
```

Date modified	Type	Size
7/18/2022 9:34 AM	C File	
7/22/2022 5:22 PM	O File	
7/20/2022 8:50 AM	S File	

```
MINGW32/d/Learn_In_Depth/Materials/Unit3/Lec3/Lab1_Debugging
repair@DESKTOP-E2DR04F MINGW32 /d/Learn_In_Depth/Materials/Unit3/Lec3/Lab1_Debugging
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MINGW32/d/Learn_In_Depth/Materials/Unit3/Lec3/Lab1_Debugging
repair@DESKTOP-E2DR04F MINGW32 /d/Learn_In_Depth/Materials/Unit3/Lec3/Lab1_Debugging
$ arm-none-eabi-gdb.exe karem.elf
GNU gdb (GDB) 7.5.1
Copyright (C) 2012 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
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 "--host=i686-pc-mingw32 --target=arm-none-eabi".
For bug reporting instructions, please see:
<http://www.gnu.org/software/gdb/bugs/>...
Reading symbols from D:\Learn_In_Depth\Materials\Unit3\Lec3\Lab1_Debugging\karem.elf...done.
(gdb) target remote localhost:1234
Remote debugging using localhost:1234
reset () at startup.s:3
3       ldr sp, =STACK_TOP
(gdb) |

(gdb) display/3i $sp
1: x/3i $sp
0x0: andeq    r0, r0, r0
0x4: andeq    r0, r0, r0
0x8: andeq    r0, r0, r0
(gdb) |

(gdb) si
reset () at startup.s:4
4       bl main
1: x/3i $sp
0x111140: andeq    r0, r0, r0
0x111144: andeq    r0, r0, r0
0x111148: andeq    r0, r0, r0
(gdb) |

5       stop: b stop(gdb) b main
Breakpoint 1 at 0x10068: file app.c, line 8.
(gdb) |
```

```

(gdb) s
Breakpoint 1, main () at app.c:8
8      UART_Send_String (string_buffer);
1: x/3i $sp
0x11138:    andeq    r0, r0, r0
0x1113c:    andeq    r0, r1, r8
0x11140:    andeq    r0, r0, r0
(gdb)

```

Lab1\_Debugging
Share View
This PC > MY WORK - ES (D:) > Learn\_In\_Depth
Name
app.c
app.o
MINGW32/d/Learn\_In\_Depth/Materials/U
repair@DESKTOP-E2DR04F MINGW32 /d/i
ging
\$ qemu-system-arm -M versatilepb -i
Learn-In-Depth : <Karem>

MINGW32/d/Learn\_In\_Depth/Materials/Unit3/Lec3/Lab1\_Debugging
1 .global reset
2 reset:
3 ldr sp, =STACK\_TOP
4 bl main
5 stop: b stop(gdb) b main
Breakpoint 1 at 0x10068: file app.c, line 8.
(gdb) si
reset () at startup.s:4
4 bl main
1: x/3i \$sp
0x11140: andeq r0, r0, r0
0x11144: andeq r0, r0, r0
0x11148: andeq r0, r0, r0
(gdb) s
Breakpoint 1, main () at app.c:8
8 UART\_Send\_String (string\_buffer);
1: x/3i \$sp
0x11138: andeq r0, r0, r0
0x1113c: andeq r0, r1, r8
0x11140: andeq r0, r0, r0
(gdb) c
Continuing.

2 KB