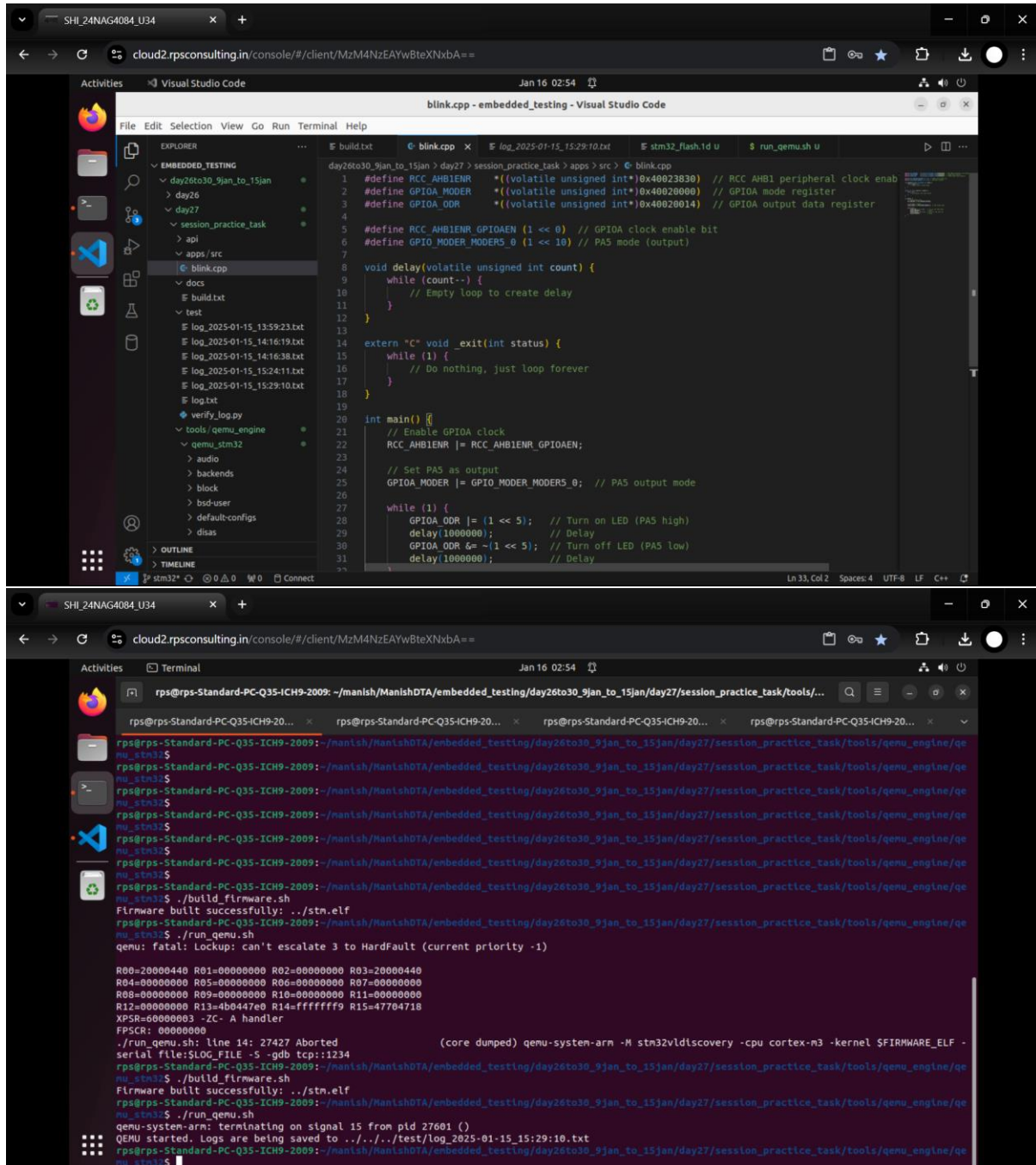Given Presentation on basic debugging with GDB with qemu-arm-system and with localhost server and cover all test scenario to generate log file and generate the test case report .

```
(gdb) quit
rps@rps-Standard-PC-Q35-ICH9-2009:~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task/tools/qemu_engine/qe
mu_stm32$ gdb-multiarch ../stm.elf
GNU gdb (Ubuntu 12.1-0ubuntu1-22.04.2) 12.1
Copyright (C) 2022 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 "x86_64-linux-gnu".
Type "show configuration" for configuration details.
For bug reporting instructions, please see:
<https://www.gnu.org/software/gdb/bugs/>.
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 ../stm.elf...
(gdb) target remote localhost:1234
Remote debugging using localhost:1234
0xd0024282 in ?? ()
(gdb) load
Loading section .text, size 0x438 lma 0x8000000
Loading section .init, size 0xc lma 0x8000438
Loading section .fini, size 0xc lma 0x8000444
Loading section .eh_frame, size 0x4 lma 0x8000450
Loading section .ARM.exidx, size 0x8 lma 0x8000454
Loading section .data, size 0x438 lma 0x800045c
Loading section .init_array, size 0x4 lma 0x8000894
Loading section .fini_array, size 0x4 lma 0x8000898
Loading section .init_array.00000, size 0x4 lma 0x800089c
Start address 0x08000000, load size 2208
Transfer rate: 718 KB/sec, 245 bytes/write.
(gdb) break main
Breakpoint 1 at 0x800012e: file ../../../apps/src/blink.cpp, line 22.
```

```
Remote debugging using localhost:1234
0xd0024282 in ?? ()
(gdb) load
Loading section .text, size 0x438 lma 0x8000000
Loading section .init, size 0xc lma 0x8000438
Loading section .fini, size 0xc lma 0x8000444
Loading section .eh_frame, size 0x4 lma 0x8000450
Loading section .ARM.exidx, size 0x8 lma 0x8000454
Loading section .data, size 0x438 lma 0x800045c
Loading section .init_array, size 0x4 lma 0x8000894
Loading section .fini_array, size 0x4 lma 0x8000898
Loading section .init_array.00000, size 0x4 lma 0x800089c
Start address 0x08000000, load size 2208
Transfer rate: 718 KB/sec, 245 bytes/write.
(gdb) break main
Breakpoint 1 at 0x800012e: file ../../../apps/src/blink.cpp, line 22.
(gdb) step
Single stepping until exit from function deregister_tm_clones,
which has no line number information.
0xfffffffe in ?? ()
(gdb) next
Cannot find bounds of current function
(gdb) print RCC_AHB1ENR
No symbol "RCC_AHB1ENR" in current context.
(gdb) continue
Continuing.
stepRemote connection closed
(gdb) step
The program is not being run.
(gdb) Quit
(gdb)
The program is not being run.
(gdb) quit
rps@rps-Standard-PC-Q35-ICH9-2009:~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task/tools/qemu_engine/qe
mu_stm32$ gdb-multiarch ../stm.elf
GNU gdb (Ubuntu 12.1-0ubuntu1-22.04.2) 12.1
```

cloud2.rpsconsulting.in/console/#/client/MzM4NzEAYwBteXNxbA==

Activities   Terminal   Jan 16 02:55

rps@rps-Standard-PC-Q35-ICH9-2009: ~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task/test

rps@rps-Standard-PC-Q35-ICH9-20... ×   rps@rps-Standard-PC-Q35-ICH9-20... ×   rps@rps-Standard-PC-Q35-ICH9-20... ×   rps@rps-Standard-PC-Q35-ICH9-20... ×

```
rps@rps-Standard-PC-Q35-ICH9-2009:~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task/tools/qemu_engine/qe
mu_stm32$ cd ../../../
rps@rps-Standard-PC-Q35-ICH9-2009:~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task$ cd t
test/  tools/
rps@rps-Standard-PC-Q35-ICH9-2009:~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task$ cd test/
rps@rps-Standard-PC-Q35-ICH9-2009:~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task/test$ python3 verify
_log.py
Test Failed: Output mismatch!
rps@rps-Standard-PC-Q35-ICH9-2009:~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task/test$ python3 verify
_log.py
Test Failed: Output mismatch!
rps@rps-Standard-PC-Q35-ICH9-2009:~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task/test$
```

cloud2.rpsconsulting.in/console/#/client/MzM4NzEAYwBteXNxbA==

Activities   Terminal   Jan 16 02:56

rps@rps-Standard-PC-Q35-ICH9-2009: ~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task/tools/...

rps@rps-Standard-PC-Q35-ICH9-20... ×   rps@rps-Standard-PC-Q35-ICH9-20... ×   rps@rps-Standard-PC-Q35-ICH9-20... ×   rps@rps-Standard-PC-Q35-ICH9-20... ×

```
rps@rps-Standard-PC-Q35-ICH9-2009:~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task/tools/qemu_engine/qe
mu_stm32$ pkill qemu-system-arm
rps@rps-Standard-PC-Q35-ICH9-2009:~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task/tools/qemu_engine/qe
mu_stm32$ pkill qemu-system-arm
rps@rps-Standard-PC-Q35-ICH9-2009:~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task/tools/qemu_engine/qe
mu_stm32$ pkill qemu-system-arm
rps@rps-Standard-PC-Q35-ICH9-2009:~/manish/ManishDTA/embedded_testing/day26to30_9jan_to_15jan/day27/session_practice_task/tools/qemu_engine/qe
mu_stm32$
```