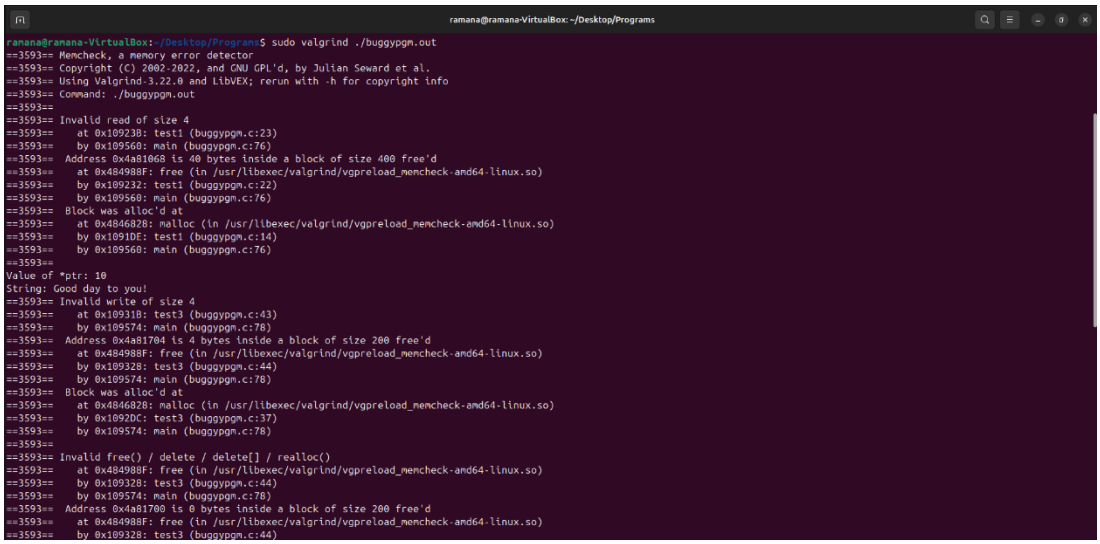
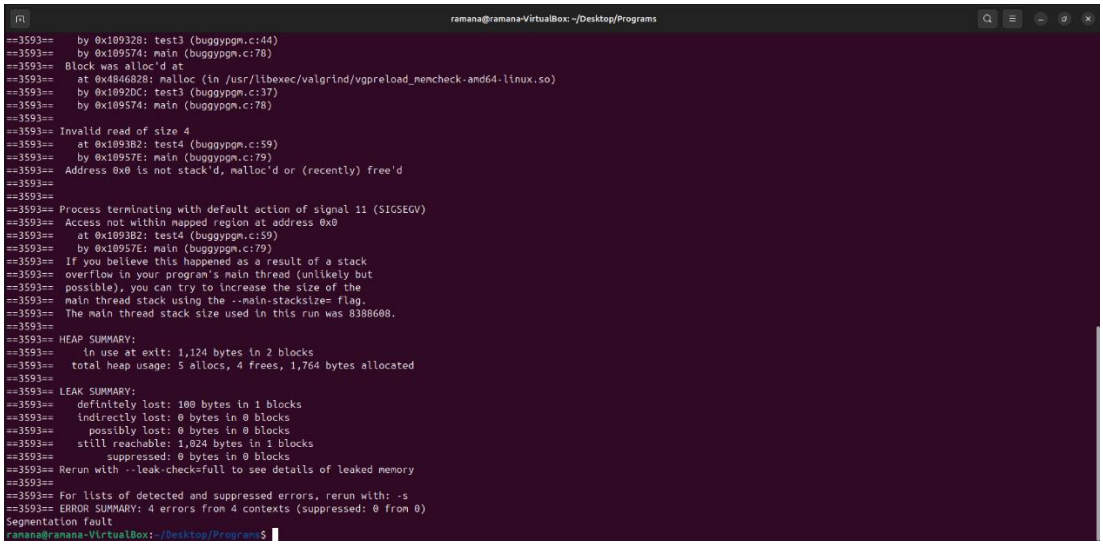
Module 4 – Assessment

Code Debugging Tools (GBD and Valgrind)

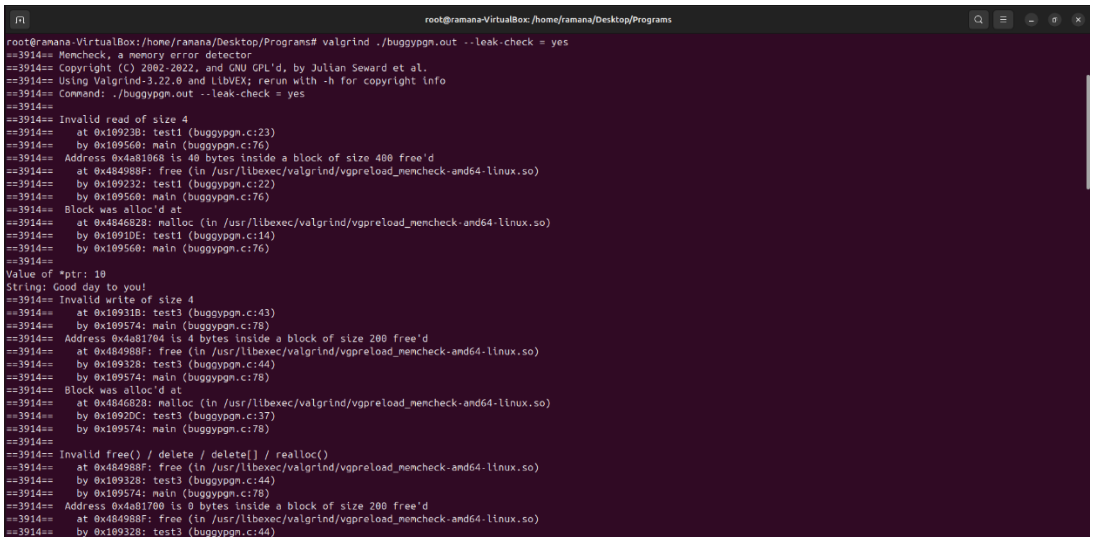
1) Using Valgind identify memleaks in the given program. Explore optional flags in Valgrind.
   i. Install valgrind by typing “sudo apt install valgrind” in the terminal
   ii. Then compile the program using the following command “gcc -g -o program.out program.c”
   iii. Then type “valgrind program.out” to find mem leaks



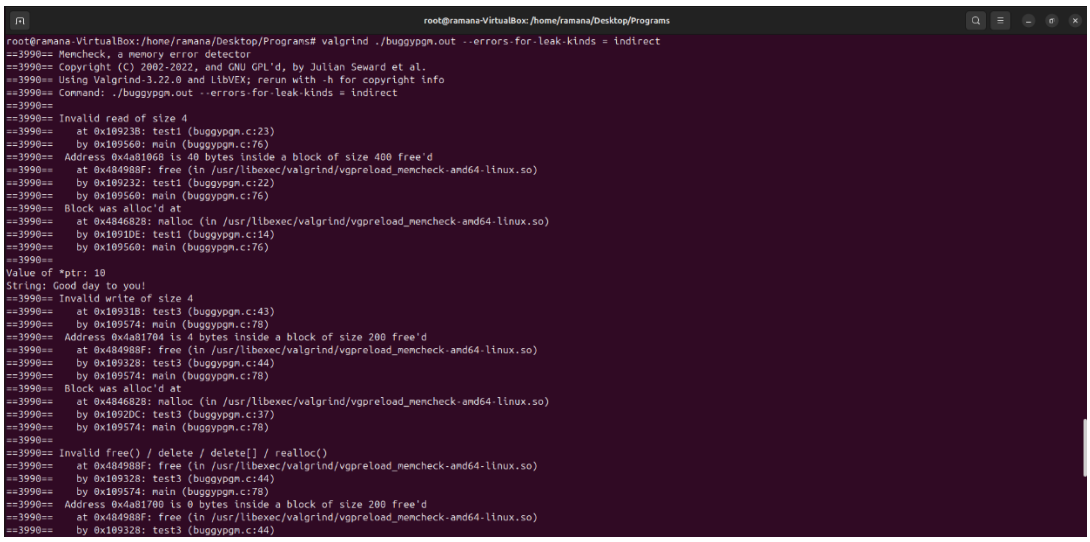


   iv. Trying out optional flags

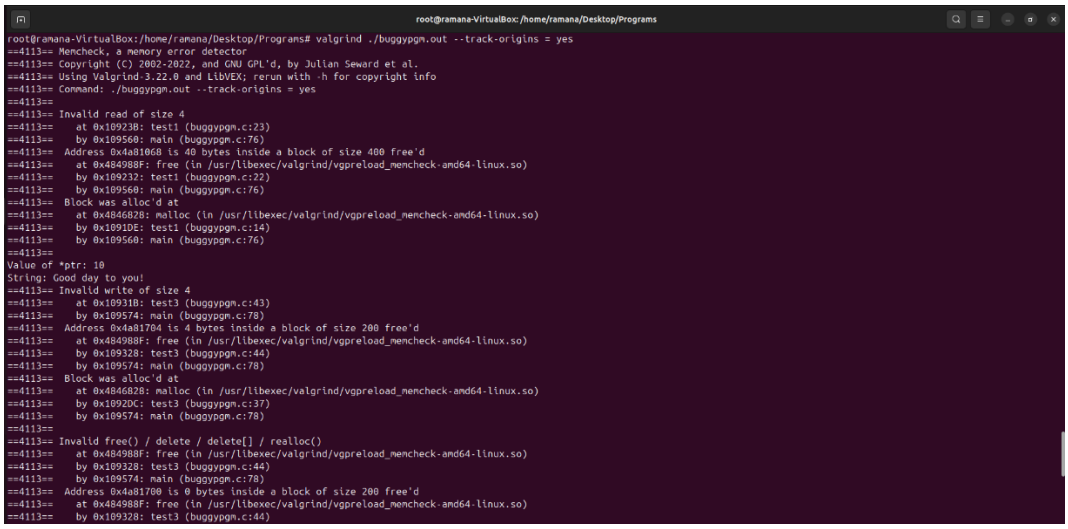
i. –leak-check



ii. –errors-for-leak-kinds

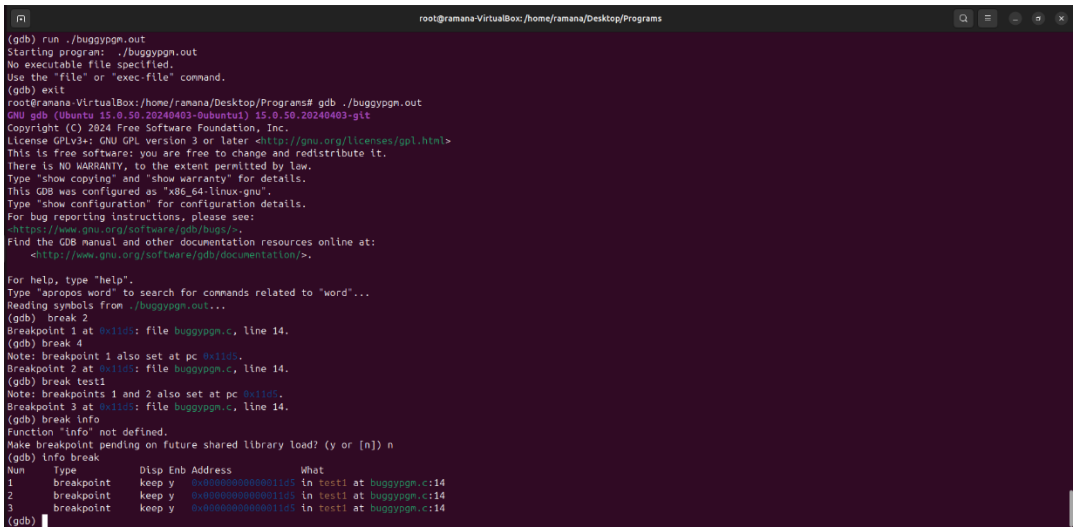


iii. –track-origins

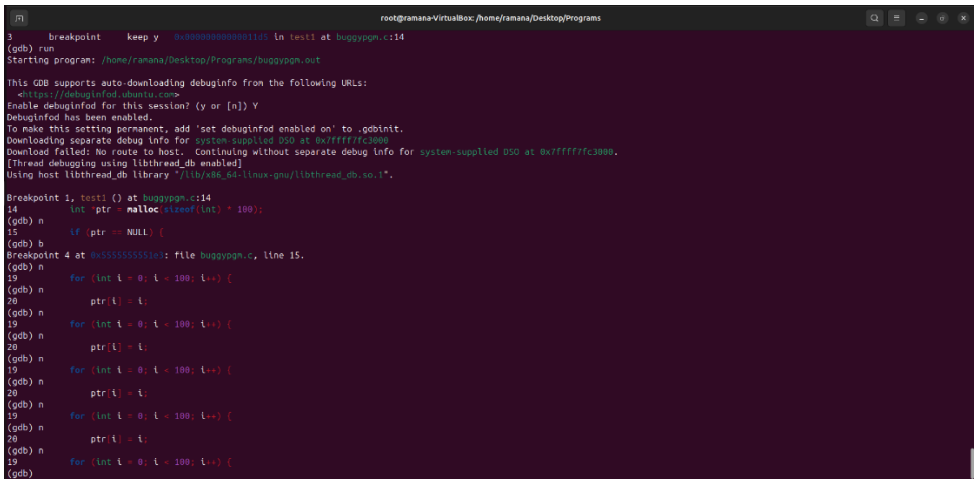


2) With the same program, using GDB, set breakpoints, run the program, list the code, run from one breakpoint to another, print the value of variables while execution, check assemble code, disable breakpoints, check registers info, explore optional flags.

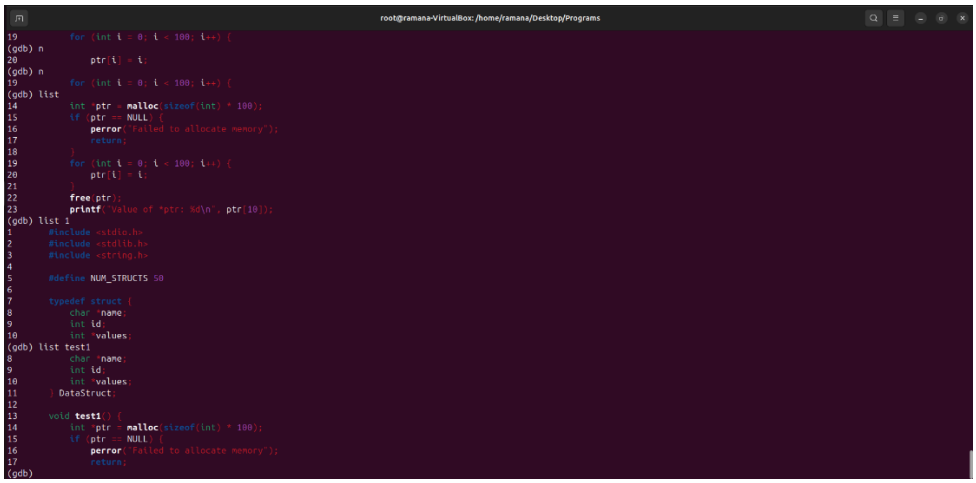
i. Set break points



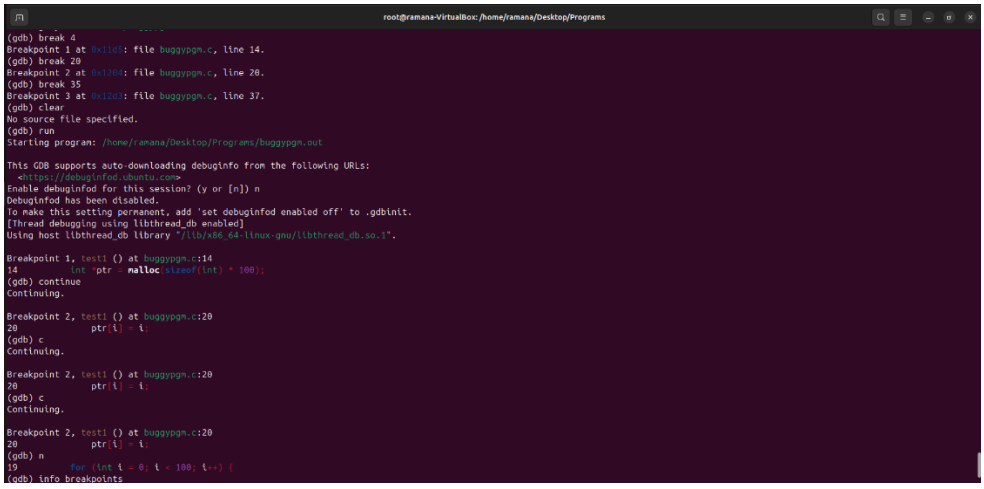
ii. Run the program and moving to next lines



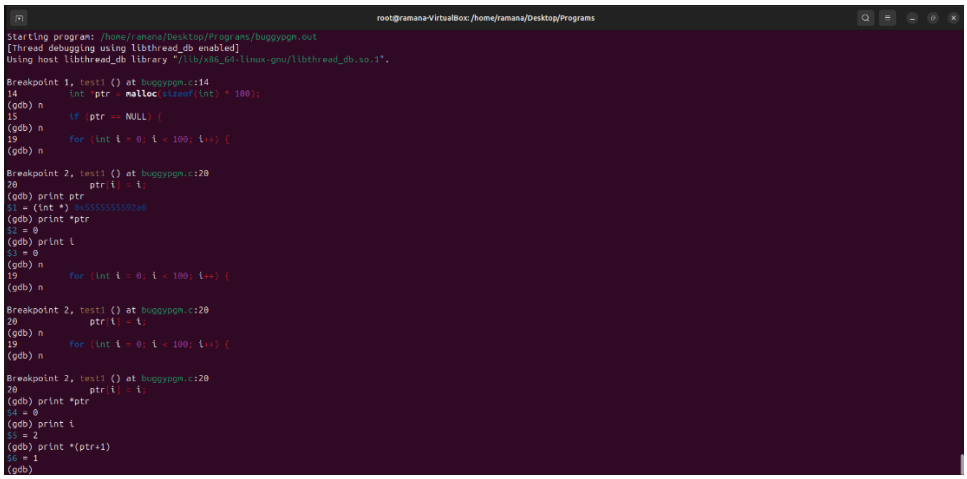
iii. Listing out the program



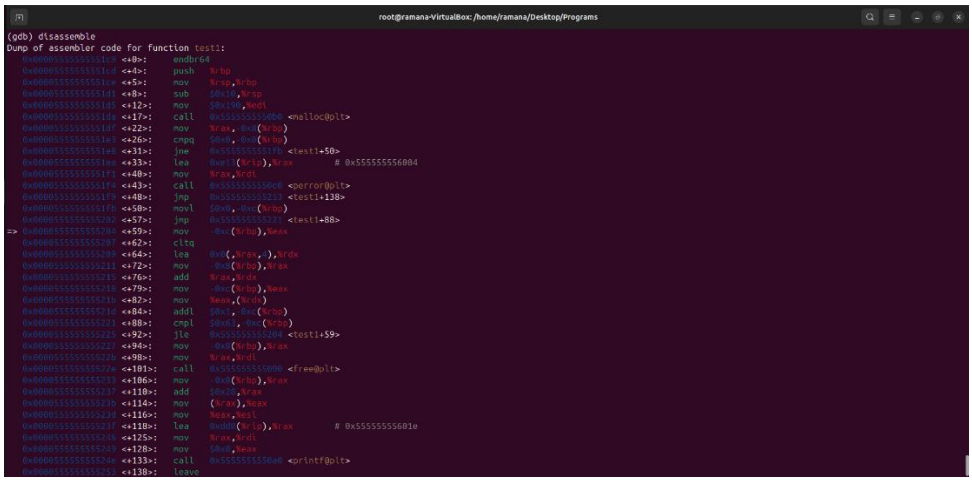
iv. From one breakpoint to another



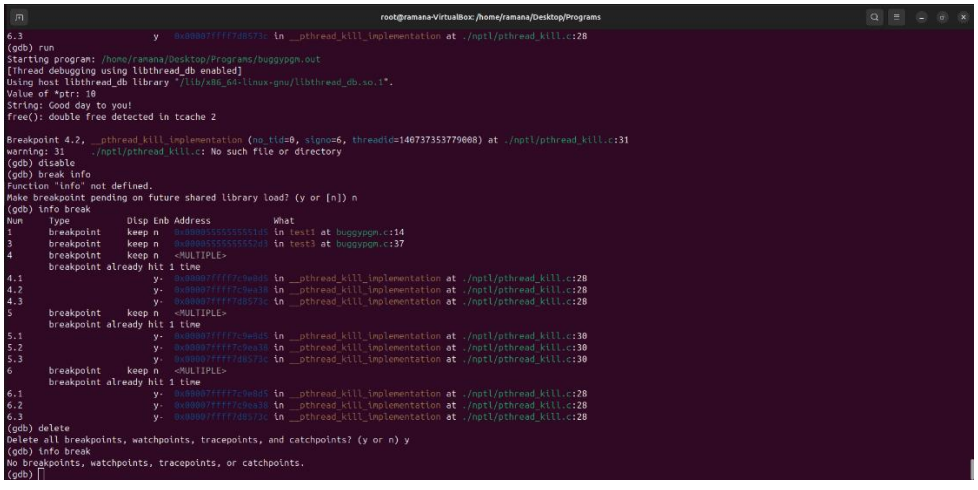
v. Printing out the variables



vi. Disassembling the program



vii. Deleting the breakpoints



viii. Viewing the register