

WHAT IS GNU DEBUGGER?

http://www.tutorialspoint.com/gnu_debugger/what_is_gdb.htm

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A debugger is a program that runs other programs, allowing the user to exercise control over these programs, and to examine variables when problems arise.

GNU Debugger, which is also called **gdb**, is the most popular debugger for UNIX systems to debug C and C++ programs.

GNU Debugger helps you in getting information about the following:

- If a core dump happened, then what statement or expression did the program crash on?
- If an error occurs while executing a function, what line of the program contains the call to that function, and what are the parameters?
- What are the values of program variables at a particular point during execution of the program?
- What is the result of a particular expression in a program?

How GDB Debugs?

GDB allows you to run the program up to a certain point, then stop and print out the values of certain variables at that point, or step through the program one line at a time and print out the values of each variable after executing each line.

GDB uses a simple command line interface.

Points to Note

- Even though GDB can help you in finding out memory leakage related bugs, but it is not a tool to detect memory leakages.
- GDB cannot be used for programs that compile with errors and it does not help in fixing those errors.