

Report 2

The following report summarizes the *man* command's manual of GDB. To specify, this paper will state the synopsis, description, options, and the copyright information of GDB as much as the writer of this paper understood the manual.

GDB, which stands for GNU Debugger, is a widely used debugger. Its purpose is to understand the ongoing processes of a program as it executes or crashes. There are four main features within GDB to allow developers to catch bugs. The four features are: 1) Starting a program and specifying anything that affects its behavior, 2) making a program stop on specified condition, 3) examining the program when it stops, and 4) changing things in the program to allow experiments with fixing bugs and learn about another bug. The synopsis shows that GDB is executed using the "*gdb [an executable program]*" command. Some frequent commands used in GDB include *break*, which sets a breakpoint at a function, and *print*, which displays the value of an expression. Various options to enhance the GDB experience exist, but the most eye-catching include executing commands from a file, adding directories, and enabling edits and writings into executable and core files. The previously stated options will allow developers to debug programs easily within the terminal alone, rather than having to continually switch from terminal to directories, and so on. A more detailed documentation of GDB can be accessed using the Texinfo documentation.

In conclusion, GDB is a great debugging program, which provides flexibility, several features, and variety. Although the learning curve for GDB is quite high, it will be a reliable ally for developers in the field of debugging several programs and files.