Intro to gdb | Coursera

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Intro to gdb

Once you have implemented your algorithm in code, you must test it. Testing often reveals that your code has mistakes ("bugs"), which you must then fix. Debugging is the process of identifying precisely what is wrong with your code and fixing it. This process should be done scientifically (rather than by changing things in an *ad hoc* fashion and hoping something works), and a key component of that scientific process is gathering more information.

A key tool in the debugging process is a piece of software called a *debugger*, although this name is a bit misleading, as the program does not actually debug your code for you, it just helps you gather information about what is going on in your code. Here, we will introduce you to a particular debugger, gdb, The GNU DeBugger. Becoming proficient with the debugger is highly recommended, as it will drastically reduce the amount of time you spend trying to fix bugs—often one of the largest sources of effort and frustration for novices, as they tend to both make a lot of mistakes and struggle to fix them.