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Program #3 GDB Write-up

In program #3, gdb was used a lot. I experienced a lot of "segmentation fault" while programming and one thing I noticed is that when compiling a program, I can use "g++ -g *.cpp" instead of "g++ *.cpp" and get more information about segmentation fault when using gdb. When compiled with "g++ *.cpp", when using gdb's backtrace, it was only possible to find out what function segmentation fault occurred. However, when compiled with "g++ -g *.cpp", when using gdb's backtrace, it shows which function the segmentation fault occurred, and the address value of the function arguments, and much more information. So it was much easier to debug. And I also found out that the cause of most segmentation fault is dereferencing a null pointer. Based on my experience, the reason why the segmentation fault occurred was dereferencing a null pointer in most cases. So when I experienced a segmentation fault, I tried to think, "where did I dereference a null pointer?" and it turned out that It was much easier to find the cause. And the vim command practice was also very helpful. In the past, I manually edited the code one by one, now I know how to use the search and replace function of vim, so I experienced less syntax error.