

Debugger Writeup 1#

CS 202: Programming Systems

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1. Effectiveness of the debugger

The debugger used to create the program #1 was the gdb running in a Linux machine. It was capable to show me my mistakes, which were segmentation faults in general, in the specific point of my code. Moreover, the debugger was able to show the content of the variables or functions that were having this segmentation faults. Therefore, with that I could see where the problem was occurring and how I could fix that.

2. Problems it helped you solve

In the beginner of the program construction, I needed to know how I could use a node class instead of a node structure. So, I created a node class using the lab one example and simplify that for a node of a linear linked list for start using in a example, but I was having problem to “walk” through linear linked list having always a segmentation fault. With the help of the debugger, I could see that I was trying to deference a NULL pointer and I could never pass through this problem trying to do that.

Another problem, that the debugger helped me was with my binary search tree and the away that the player had to come back in the maze. In the beginner, I was using a node pointer that handles just the parent before the player goes to the next node. Therefore, if the player have gone two times for the left, he couldn't come back for the first point.

3. Discover how it could be used to enhance the programming experience

As I said in the last answer, the debugger helped me find an away to solve the “walk through the maze” with the player. It helped me find a solution to give the freedom of the player goes to the right, left and come back to any path in the maze.

4. Features that you would like to learn about so that you could use them the next time you program

A graphic user interface would be good for the programmer to see exactly what is happening as well as how implement breakpoints in the program.