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EECS 665
Lab 1 Report
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1. Quickly describe the exact changes you made and why you made them. Discuss how you approached the problem and exactly how you determined the source of the problem. Discuss which debugger commands you found most helpful.

Originally the code has a for loop which iterates through a list of dp's by moving to dp->next before each iteration. However, it doesn't check whether the next dp is null before trying to dereference it. So, I moved dp = dp->next to be the last statement of the loop and then changed the for loop to a while loop that checks whether dp is null before continuing. I found the problem by running the program in gdb. The most helpful commands were print, backtrace, break, and list. When the program seg faulted, I used the backtrace command to find exactly what line it seg-faulted at. Then I set a breakpoint at the beginning of that function and examined its execution. The first execution succeeds, looking for the word "Kurt", but the second, looking for "Vonnegut's" is where the seg fault occurred. I stepped through the execution using the next command and recognized that dp was being assigned to dp->next before entering the second execution of the loop, but dp->next was null.

2. List (in order) the modifications of my_watch, including both the old value and new value it was set with.
    1. old value: 0, new value: 2
    2. old value: 2, new value: 248
    3. old value: 248, new value: 228
    4. old value: 228, new value: 208
    5. old value: 208, new value: 188
    6. old value: 188, new value: 168
    7. old value: 168, new value: 169
    8. old value: 169, new value: 149
    9. old value: 149, new value: 129
    10. old value: 129, new value: 180
    11. old value: 180, new value: 160
    12. old value: 160, new value: 140