Dr. Wang

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COSC 220

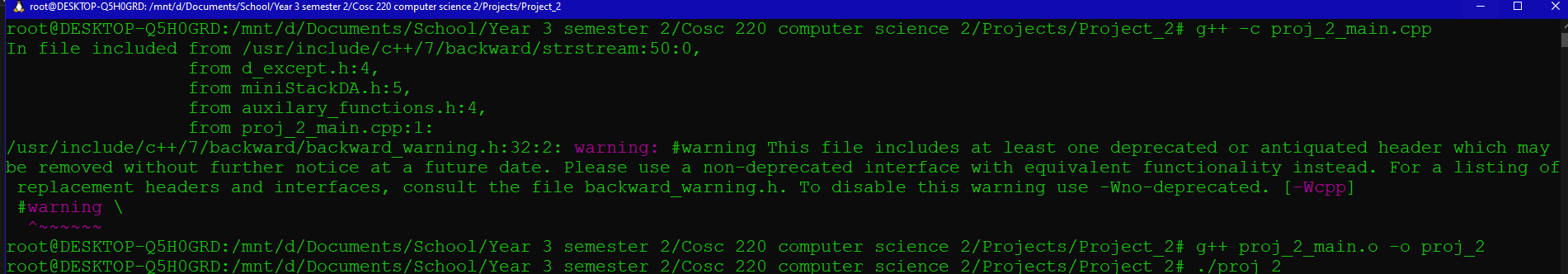
10 April 2021

Project 2 writeup

Testing Plan (all recored in this pdf)

The plan is to make sure that I can add remove print and print top for all 4 implementations of stack and all 4 implementations of queue, I shall try to test it all in one go to make sure I do not get segfaults like I did with the last project. I shall post the output in this pdf.

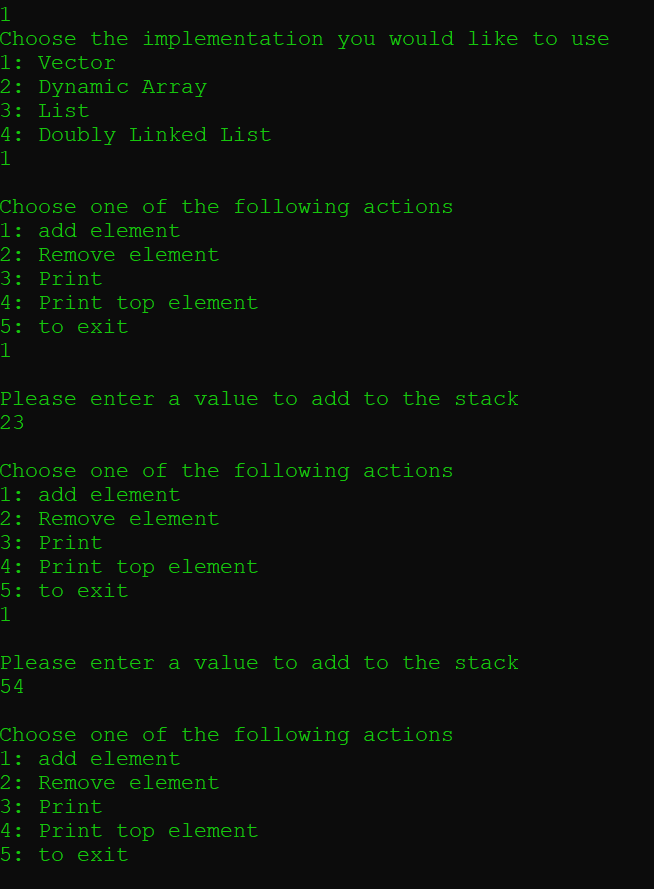
Building in linux environment



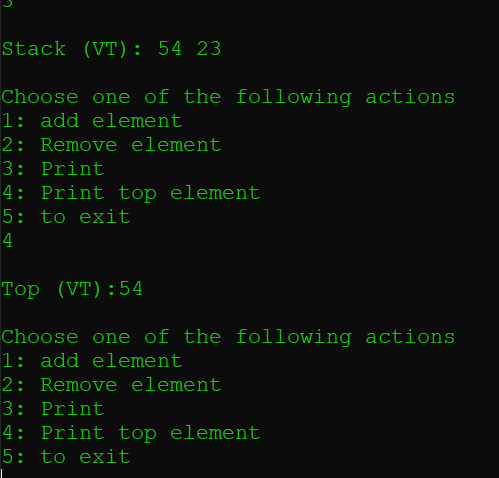
(warning about header files dosen’t affect running of program

Stack Vector

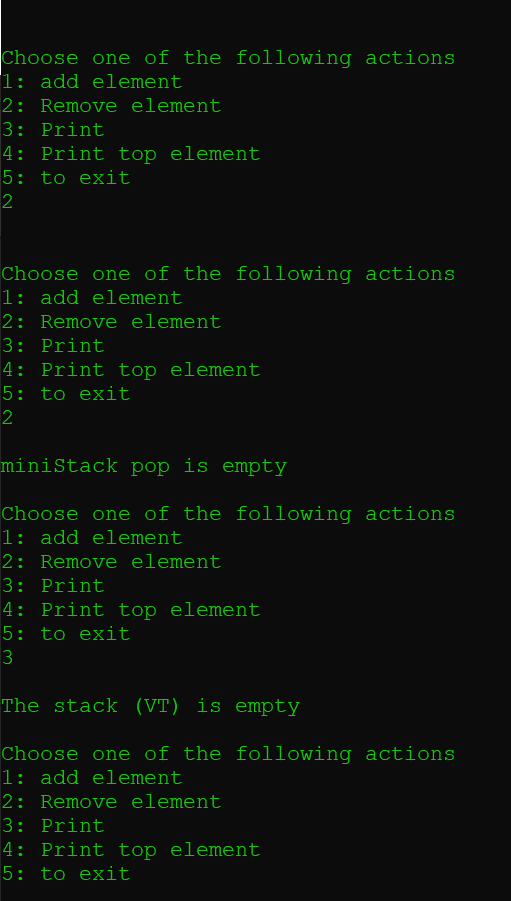
Add elements

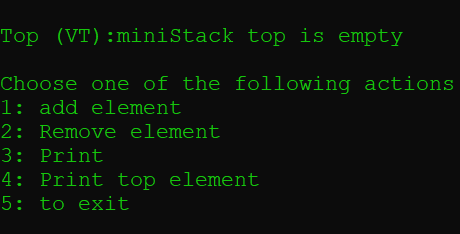


Print and Print top



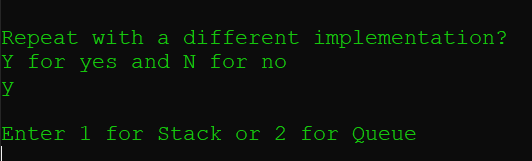
Remove elements ( and do it until exception handling kicks in



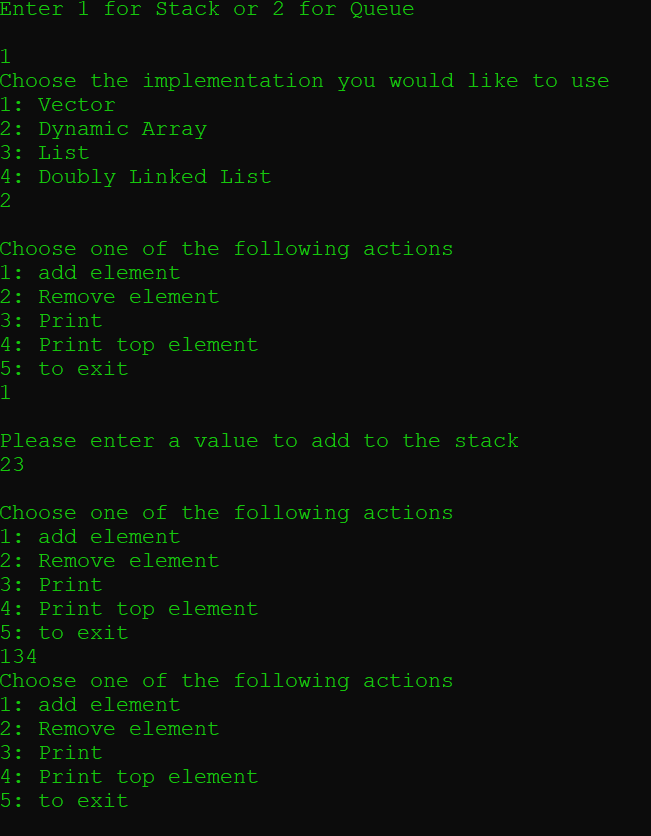


As we can see exceptions were raised and a message similar showed up when trying to print empty stack (same with printing the top)

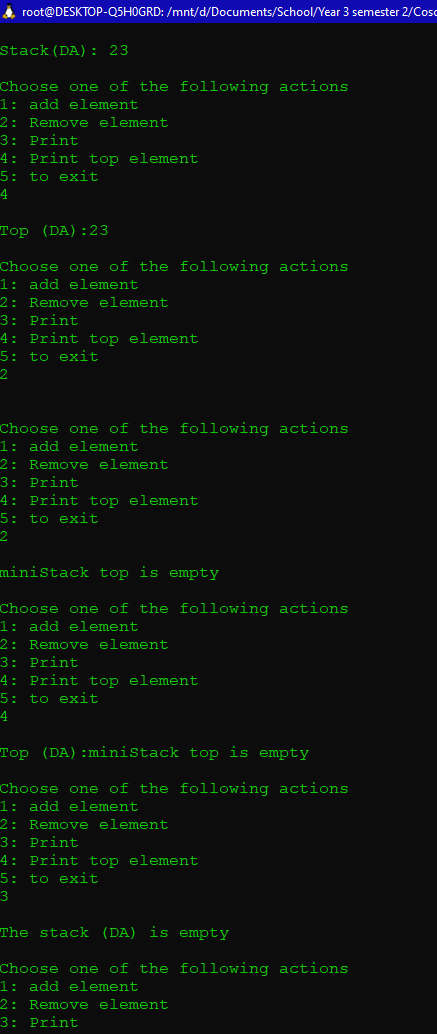
Exit and tried again with a different implementation



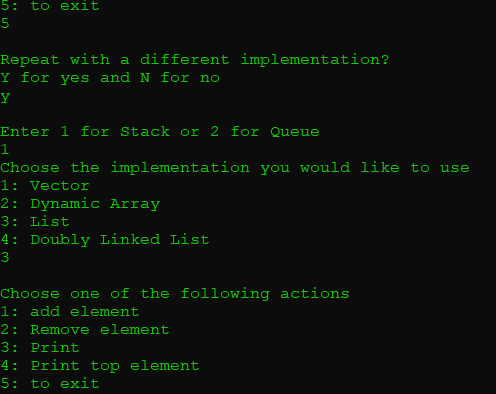
Try it again for stack dynamic array also see input validation in the menu



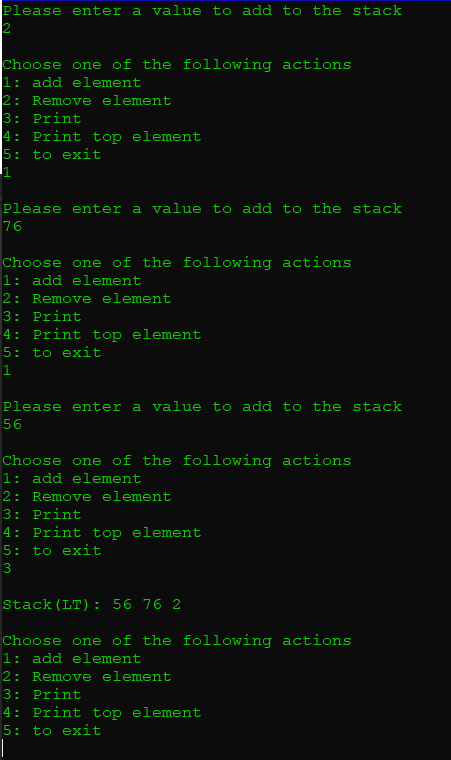
Removed Element and saw exception handling messages occur



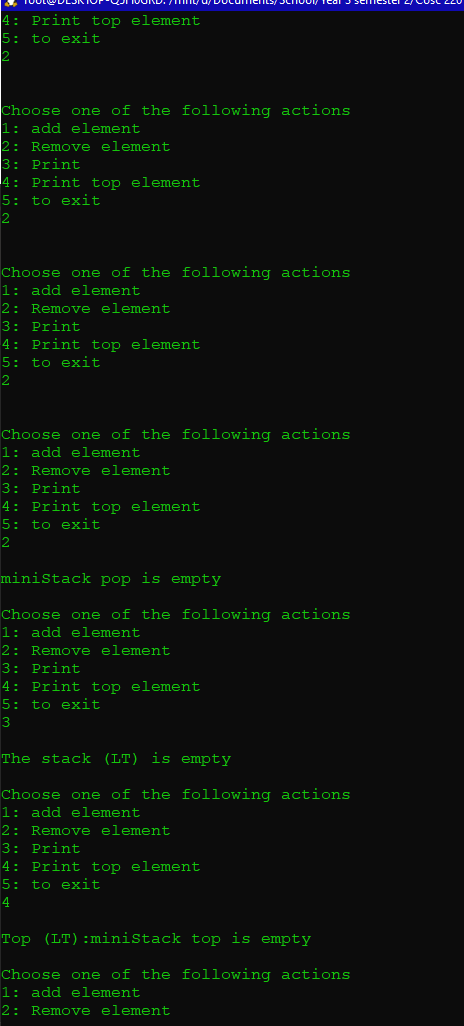
Keep going and do it again with STL list



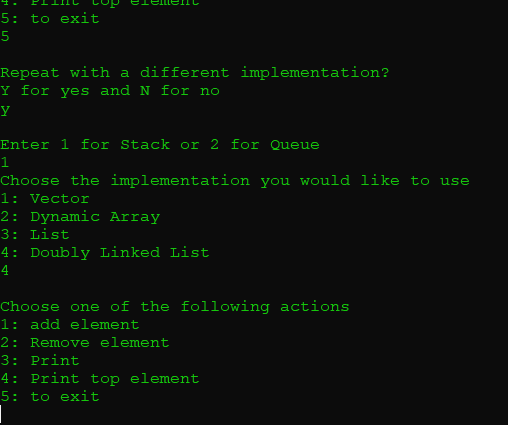
Added 3 elements to the stack and printed it out



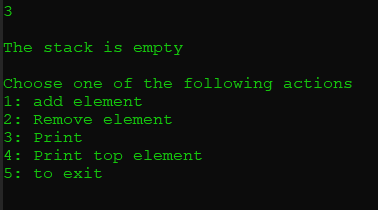
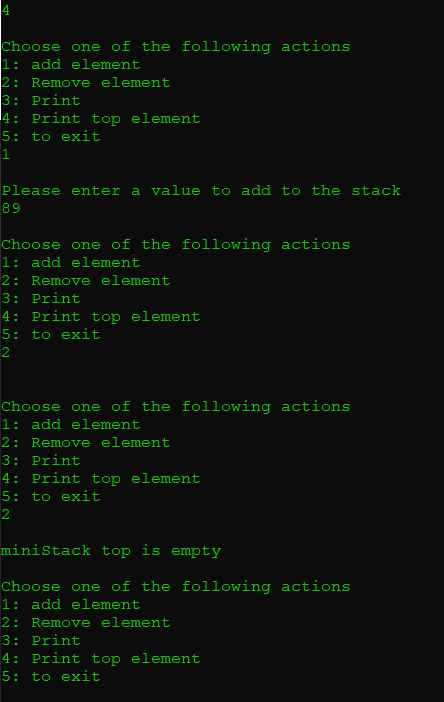
Remove them all and show exception messages happen for deleting and printing



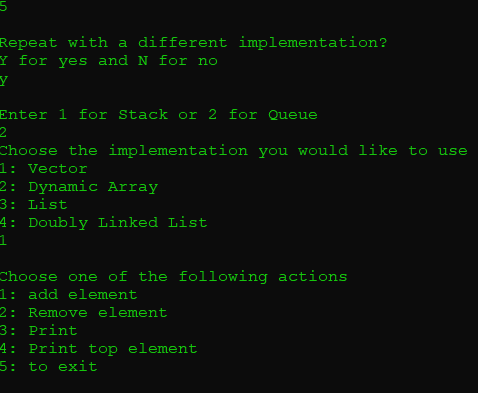
Repeat process with doubly linked list



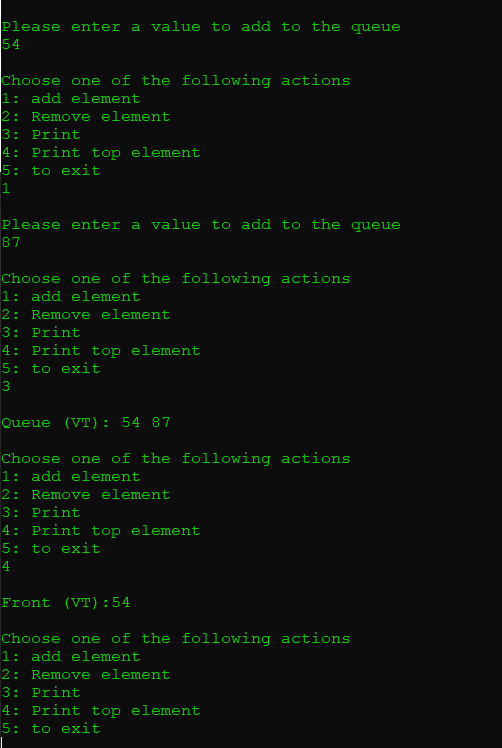
Add element remove and show error messages



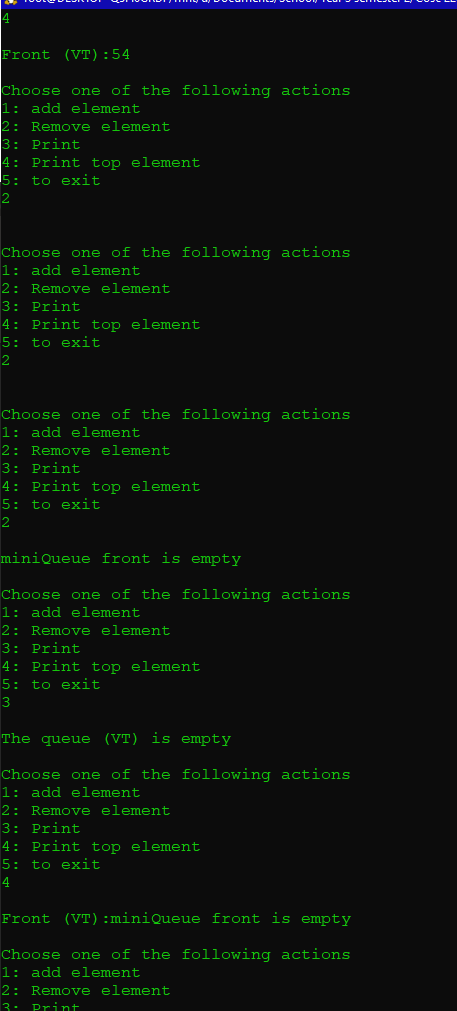
Exit now test process with Queues starting with queue vector



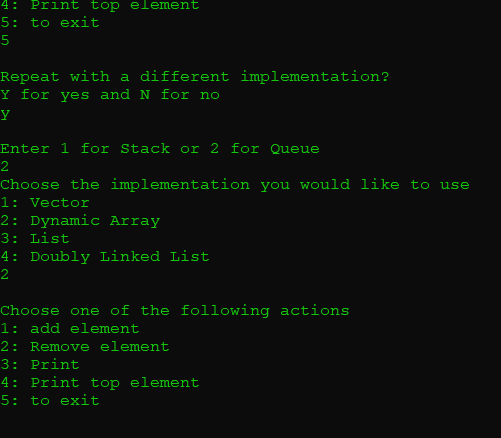
Add some elements and print the queue and the queue front



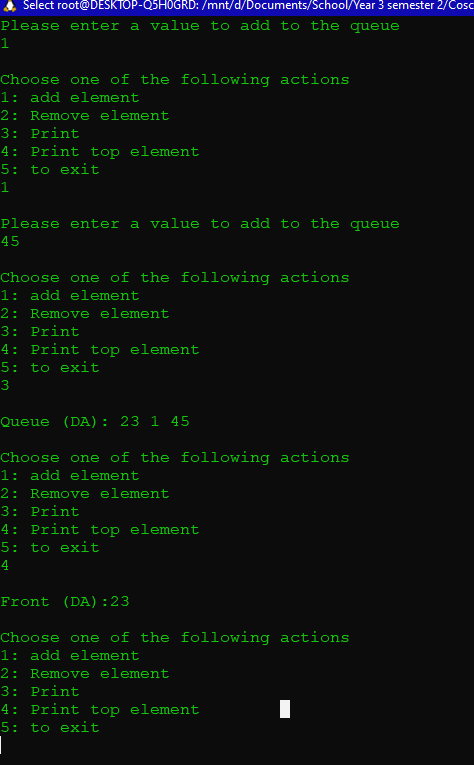
Remove elements and trigger exception for empty stack and print exception messages



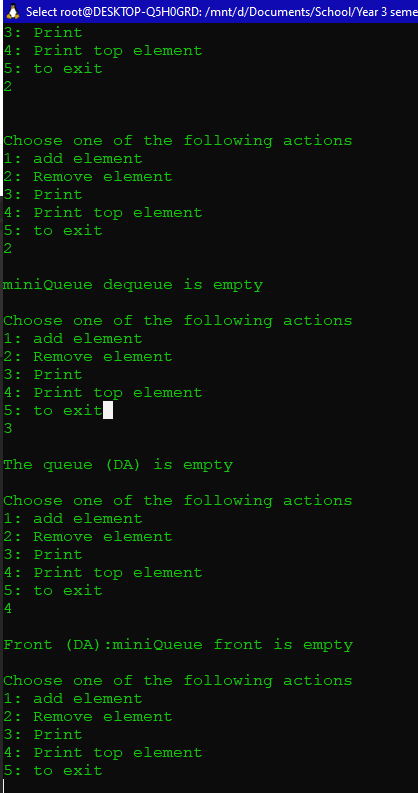
Retry with queue dynamic array



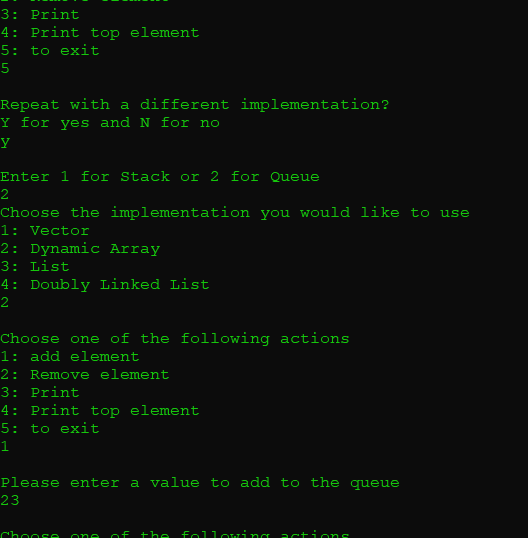
Added some elements and printed them out

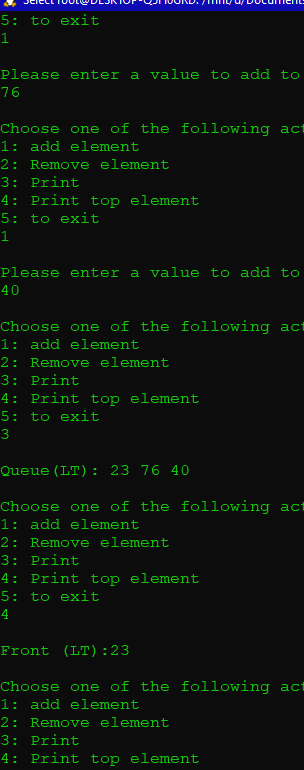


Remove elements until nothing is left and exception messages appear

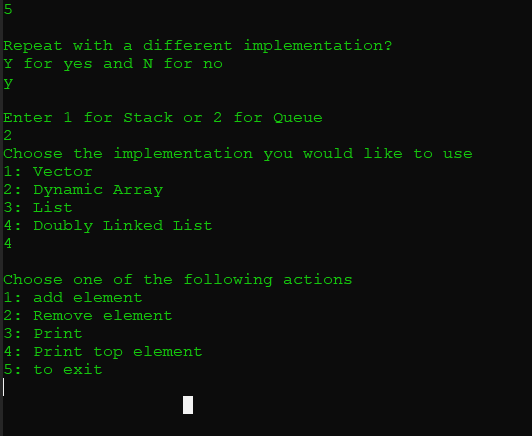


Restart with stl list

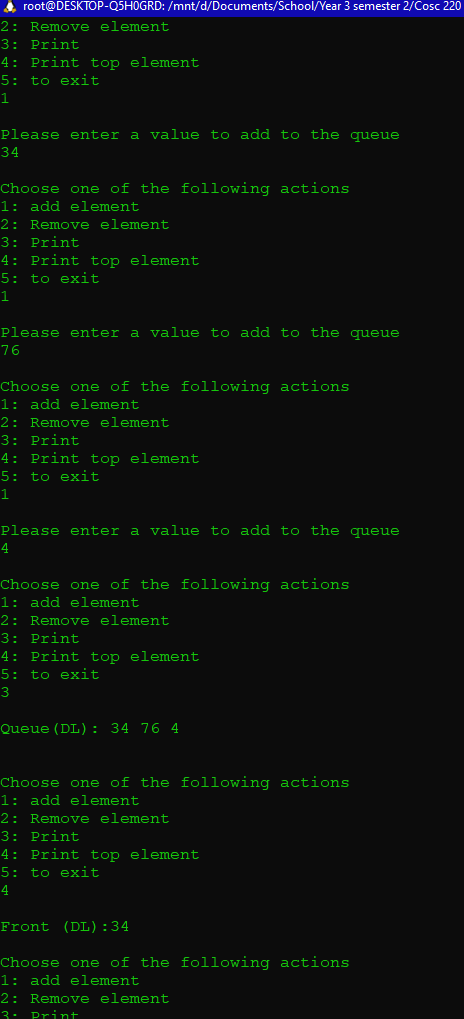




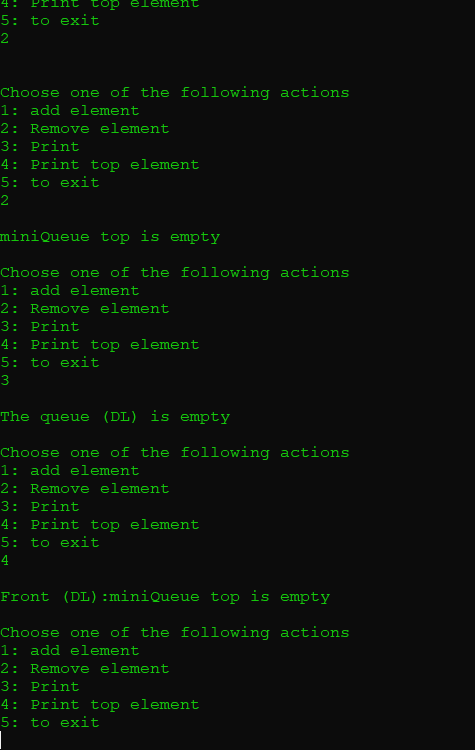
Finally test with queue doubly linked list



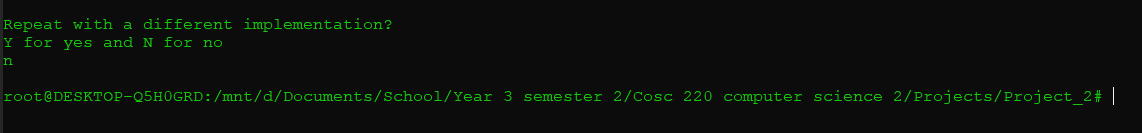
Add some elements to it



Now remove them all and make sure remove print and print front exceptions work



Exit and don’t repeat



All possible cases tested no errors occurred!

😊