Task 1:

Linux System

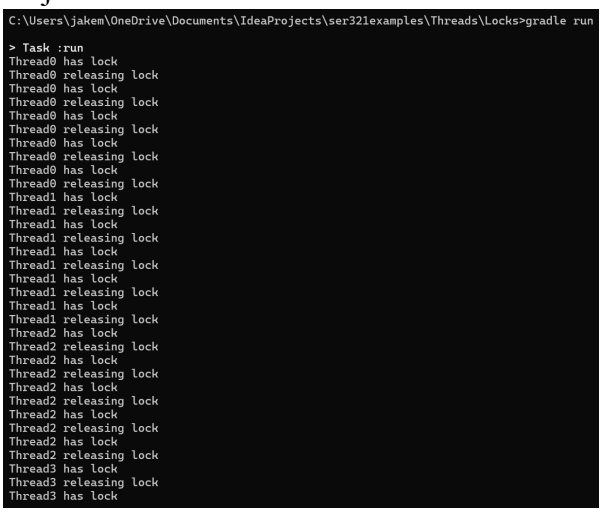
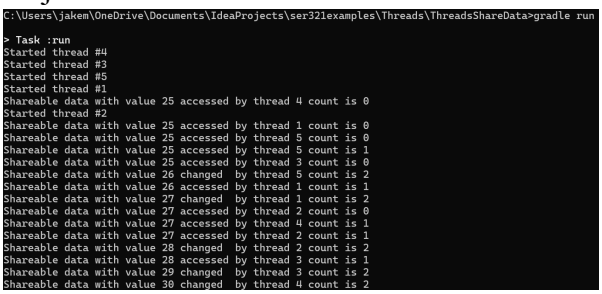
1. mkdir cli_assignment
2. cd cli_assignment
3. touch stuff.txt
4. cat > stuff.txt
5. wc -w stuff.txt
6. wc -l stuff.txt
7. echo “Another line” >> stuff.txt
8. mkdir draft
9. mv stuff.txt draft
10. touch .secret.txt
11. mv draft draft.remove
12. mv draft.remove final
13. ls -l
14. zcat NASA_access_log_Aug95.gz
15. gzip -d NASA_access_log_Aug95.gz
16. mv NASA_access_log_Aug95.gz logs.txt
17. mv logs.txt cli_assignment/
18. head -100 logs.txt
19. head -n 100 logs.txt > logs_top_100.txt
20. tail -100 logs.txt
21. tail -n 100 logs.txt > logs_bottom_100.txt
22. cat logs_top_100.txt logs_bottom_100.txt > logs_snapshot.txt
23. echo “jmbarri2: This is a great assignment 1-28-24” >> logs_snapshot.txt
24. less logs.txt
25. cut -d ‘%’ -f 1 marks.csv | tail -n +2
26. cut -d ‘%’ -f 4 marks.csv | sort
27. awk -F ‘%’ ‘{sum += $2} END {if (NR > 0) print sum / NR}’ marks.csv
28. awk -F '%' '{sum += $2} END {if (NR > 1) print sum / (NR-1)}' marks.csv > cli_assignment/done.txt
29. mv done.txt final
30. mv done.txt average.txt

Task 2.1:

GitHub Repository: https://github.com/JacobBarrios/ser321-spring25C-jmbarri2

Task 2.2:

Project: Thread/Account	This project runs multiple threads that

	represent transactions. Each thread deposits a certain amount of money based on the loop iteration number and the transaction number. The gradle project help pass arguments for number of transactions/threads, sleep delay, and the number of deposits.
Project: Thread/Lock 	This project creates multiple threads of locks that iterate through a loop unlocking and locking. The gradle build sets the amount of workers or lock threads that are created, the sleep delay, and the number of times the lock thread will lock and unlock.
Project: Threads/ThreadsShareData 	The project creates multiple threads that can access the same class, and can increment the shared data through different threads. The gradle build sets arguments for number of threads, and the sleep delay.

Task 2.4:

JavaSimpleSock2 Video: https://youtu.be/itq78TECKUg