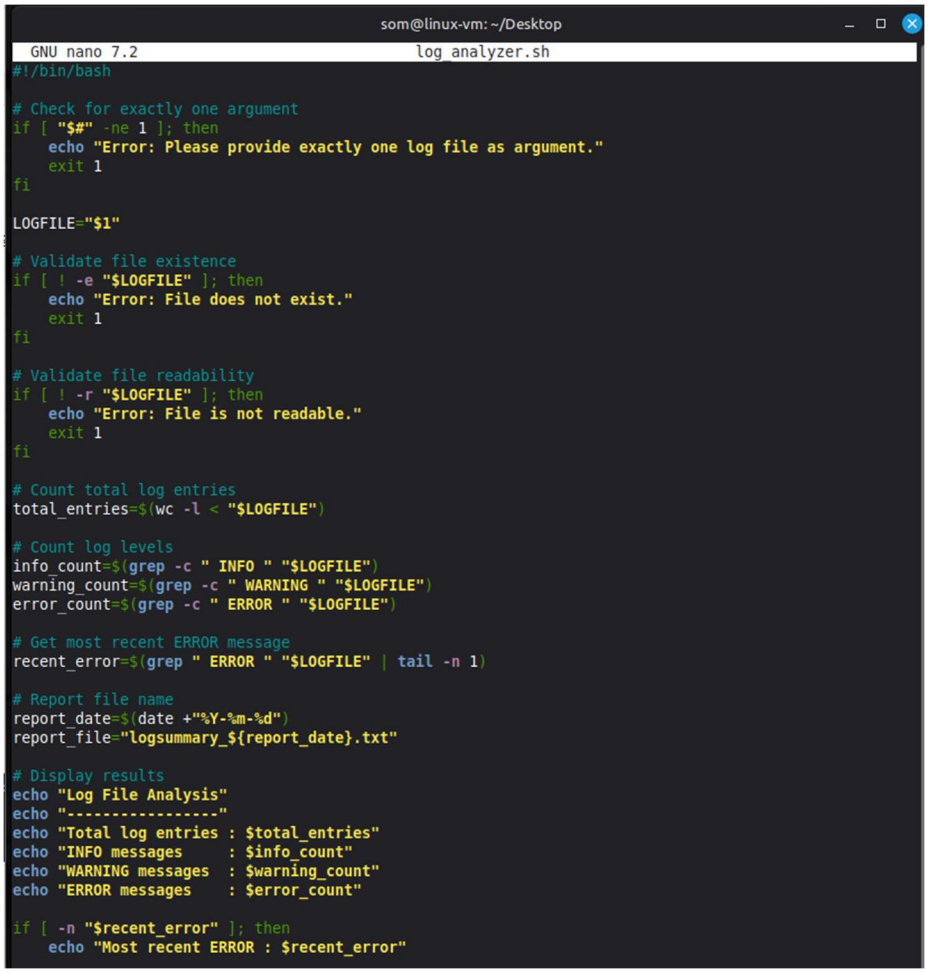
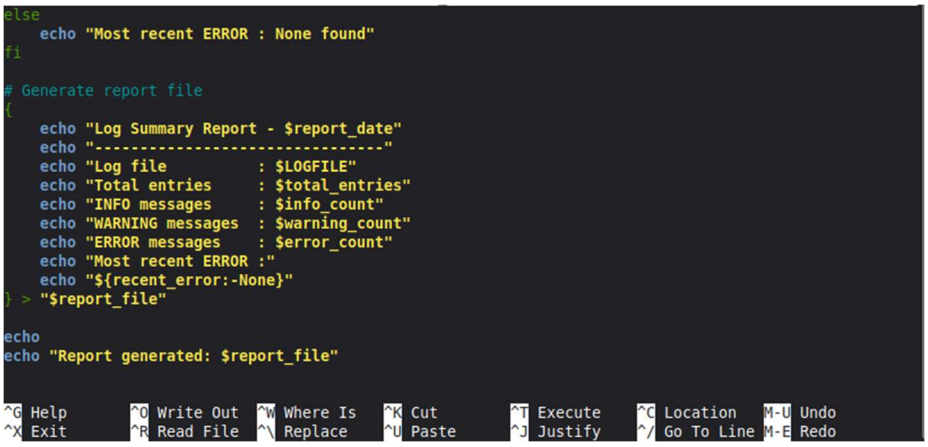
Question 2 (2024eb03003):

Please find screenshot of shell script below and attaching **log_analyzer.sh** script to GitHub repository:

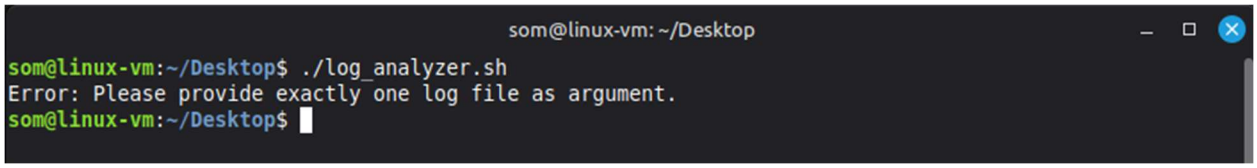




Testing the log_analyzer.sh Script

Test Case 1: No command-line argument

./log_analyzer.sh

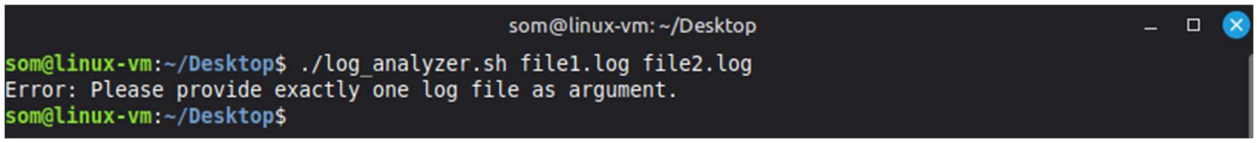


Requirement validated:

- Handles invalid argument count
- Displays meaningful error message

Test Case 2: More than one argument

./log_analyze.sh file1.log file2.log

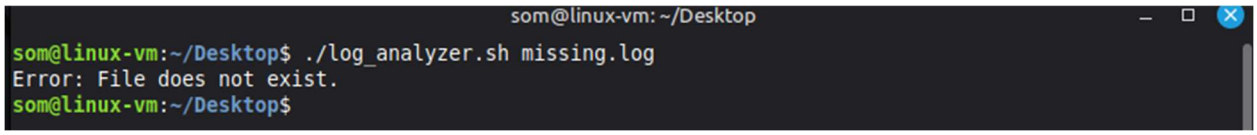


Requirement validated:

- Accepts exactly ONE argument only

Test Case 3: File does not exist

./log_analyze.sh missing.log

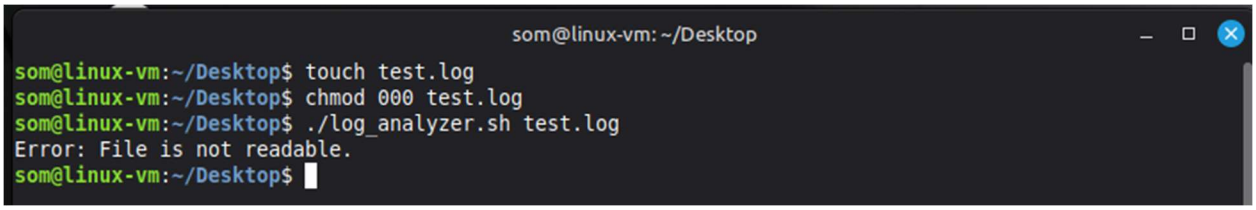


Requirement validated:

- Validates file existence
- Graceful error handling

Test Case 4: File exists but not readable

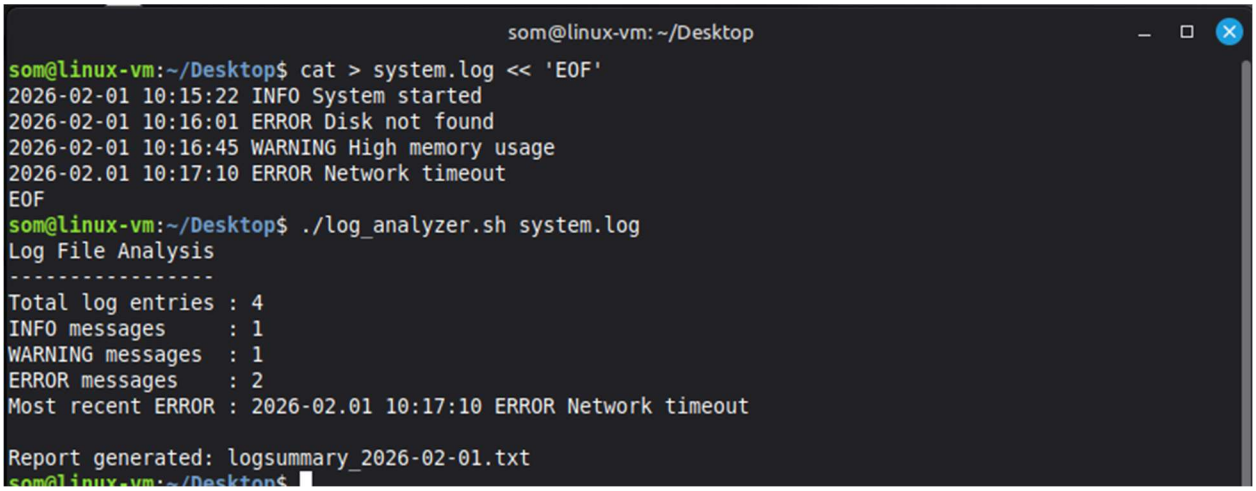
touch test.log
chmod 000 test.log



Requirement validated:

- Validates read permission

Test Case 5: Valid log file with mixed entries

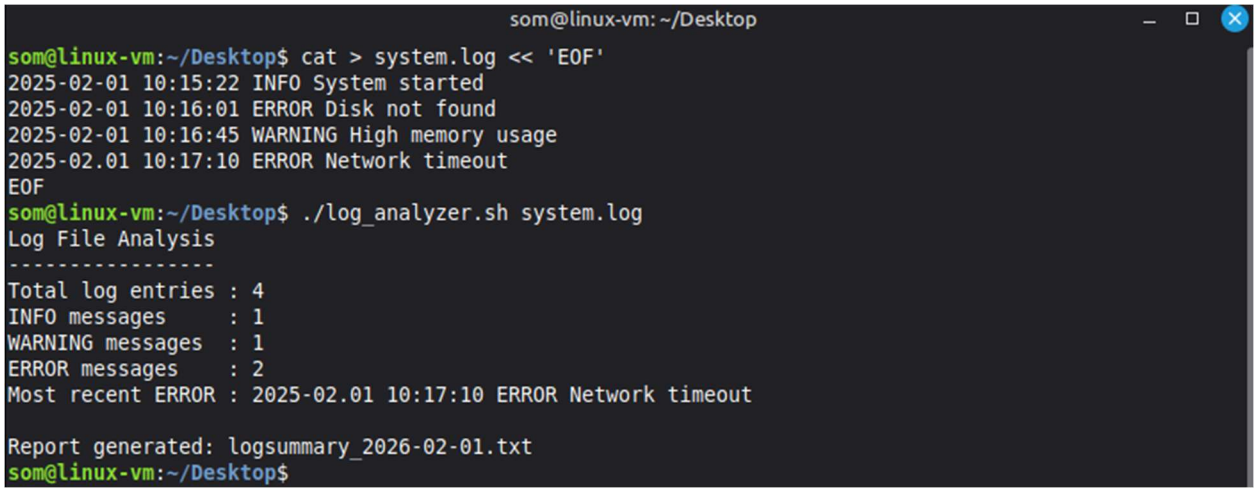


Requirement validated:

- Counts total entries
- Counts INFO, WARNING, ERROR correctly

Test Case 6: Most recent ERROR message

Most recent ERROR : 2026-02.01 10:17:10 ERROR Network timeout



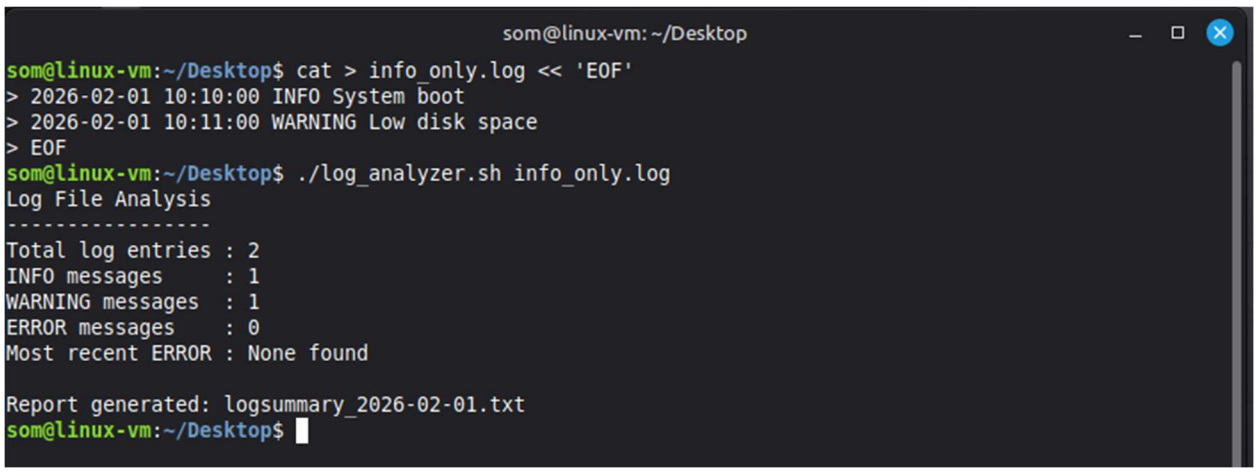
Requirement validated:

- Displays most recent ERROR entry

Test Case 7: Log file with NO ERROR messages

cat > info_only.log << 'EOF'
>2026-02-01 10:10:00 INFO System boot
>2026-02-01 10:11:00 WARNING Low disk space
>EOF

./log_analyze.sh info_only.log

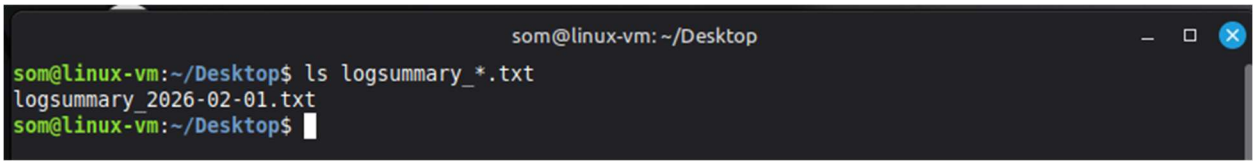


Requirement validated:

- Handles absence of ERROR logs gracefully

Test Case 8: Report file generation

ls logsummary_*.txt



Requirement validated:

- Creates report file with correct naming format