

QUESTION 2 ANSWERS

```
Terminal - coder@dce7ae72477b: ~
File Edit View Terminal Tabs Help
coder@dce7ae72477b:~$ vi log_analyze.sh
coder@dce7ae72477b:~$ chmod +x log_analyze.sh
coder@dce7ae72477b:~$ vi system.log
coder@dce7ae72477b:~$ ./log_analyze.sh system.log
./log_analyze.sh: line 2: [: missing `]'
Total entries: 4
INFO : 1
WARNING: 1
ERROR: 2
Most recent ERROR:
2025-01-12 10:17:10 ERROR Network timeout
coder@dce7ae72477b:~$ ls
analyze.sh      install          Public
coursera        log_analyze.sh  system.log
coursera-ro     logsummary_26-02-04.txt  Templates
data            Music           test.txt
Desktop         node_modules    Videos
Desktop-ro      noVNC           wm.log
Desktop.save    package.json    wm_startup.sh
Documents       package-lock.json workspace
Downloads       Pictures        wrapper_process.sh
coder@dce7ae72477b:~$ cat logsummary_26-02-04.txt
Total entries: 4
INFO : 1
WARNING: 1
ERROR: 2
Most recent ERROR:
2025-01-12 10:17:10 ERROR Network timeout
coder@dce7ae72477b:~$
```

```
#!/bin/bash
if [ $# -ne 1 ]; then
    echo "Usage: $0 logfile"
    exit 1
fi
logfile=$1
if [ ! -f "$logfile" ] || [ ! -r "$logfile" ]; then
    echo "Error: File does not exist or is not readable."
    exit 1
fi
total=$(wc -l < "$logfile")
info=$(grep -c " INFO " "$logfile")
warning=$(grep -c " WARNING " "$logfile")
error=$(grep -c " ERROR " "$logfile")
recent_error=$(grep " ERROR " "$logfile" | tail -1)
date=$(date +%y-%m-%d)
report="logsummary_$date.txt"
{
    echo "Total entries: $total"
    echo "INFO : $info"
    echo "WARNING: $warning"
    echo "ERROR: $error"
    echo "Most recent ERROR:"
    echo "$recent_error"
} > "$report"
cat "$report"
```

```
Terminal - coder@dce7ae72477b: ~
File Edit View Terminal Tabs Help
2025-01-12 10:15:22 INFO System started
2025-01-12 10:16:01 ERROR Disk not found
2025-01-12 10:16:45 WARNING High memory usage
2025-01-12 10:17:10 ERROR Network timeout
"system.log" 4L, 169C 4,41 All
```

I wrote a shell script that accepts a log file as input and first validates that the file exists and is readable. The script counts total log entries and the number of **INFO**, **WARNING**, and **ERROR** messages using **grep** and **wc**, and displays the most recent **ERROR** entry. A summary report is generated in a file named **logsummary_26-02-04.txt**.