# CLI Lab 5 – Text Processing & Redirection

Duration: 1h20

Working Directory: ~/cli\_lab5

Files Used: fake\_syslog.txt

## Instructions

1. Create a working directory and navigate into it.
2. Copy or create the file fake\_syslog.txt in that folder.
3. Extract lines containing 'error' and redirect to errors.txt. Do the same for 'warn' into warnings.txt.
4. Generate basic statistics for errors.txt: line count, word count, character count, longest line. Save all to summary.txt.
5. Preview and save the first 5 lines of errors.txt and warnings.txt to first\_errors.txt and first\_warnings.txt.
6. Extract timestamps (first 2 fields from each line) from errors.txt and warnings.txt. Save their frequencies to error\_times.txt and warning\_times.txt.
7. Append the summary and timestamp statistics into a file named final\_report.txt.
8. Bonus: Try doing the timestamp count in a single pipeline (no intermediate files).
9. Bonus: Identify the longest line in errors.txt using advanced CLI tools.
10. Create a final report file combining all previous results (summary, error\_times, warning\_times).

## Questions

1. How many lines contain 'error' and 'warn'?
2. What are the five most frequent timestamps associated with errors?
3. What is the longest line (in characters) found in errors.txt?
4. What is the difference between using > and >> in your summary file?
5. Which options of grep and wc did you find most useful and why?
6. What did using a pipeline help you do more efficiently?