

## Task: Generate Logs into a File

### Task 1 - Simple FileWriter Log

Create a program that:

- Takes a message from user input
- Writes it into `log.txt`
- Every run should **append** the message

### Task 2 - BufferedWriter Log with Timestamp

Write logs like:

```
2025-01-22 10:35:25 START Application Started  
2025-01-22 10:36:11 ERROR Invalid age input
```

Use:

```
bw.write(LocalDateTime.now() + " INFO " + message);  
bw.newLine();
```

### Task 3 Generate 50 Logs in Loop

Automatically generate 50 log lines:

- 25 INFO

- 15 WARN
- 10 ERROR

Format:

2025-01-22 10:39:55 WARN Low memory

## Task 4 - Create a Log Analyzer

Read the log file using BufferedReader and print:

- Total log lines
- INFO count
- ERROR count
- WARN count
- Longest log line
- First and last timestamp