**GROOVY PROJECTS**

**1. Groovy Script for Log File Analysis**

**Description:**  
Parse and analyze server log files to extract useful insights like error counts, request trends, and response times.

**Solution:**

* Read a log file line by line.
* Use regex to extract timestamp, status codes, and messages.
* Aggregate and summarize the data.
* Generate a report.

**Tech Stack:** Groovy, Regex, File I/O  
**Use Case:** DevOps, System Monitoring

**2. Automating API Testing with Groovy & Restssured**

**Description:**  
Create a Groovy script to test REST APIs by sending HTTP requests and validating responses.

**Solution:**

* Use RestAssured library for API calls.
* Validate status codes, response body, and headers.
* Automate test execution with Gradle.

**Tech Stack:** Groovy, RestAssured, Gradle  
**Use Case:** API Testing, QA Automation

**3. Gradle Plugin for Custom Build Tasks**

**Description:**  
Develop a Gradle plugin in Groovy that automates project setup, versioning, or dependency checks.

**Solution:**

* Create a buildSrc directory.
* Implement a custom task in Groovy.
* Register and use the plugin in build.gradle.

**Tech Stack:** Groovy, Gradle  
**Use Case:** Build Automation, DevOps

**5. Web Scraping with Groovy & Jsoup**

**Description:**  
Build a Groovy script that scrapes data from a website and saves it in a CSV file.

**Solution:**

* Use Jsoup to fetch and parse HTML content.
* Extract required elements using CSS selectors.
* Write the extracted data to a CSV file.

**Tech Stack:** Groovy, Jsoup, CSV Parsing  
**Use Case:** Data Scraping, Automation