**Jenkins CI/CD Automation Assignment**

**Objective**

Create two Jenkins jobs (Freestyle and Pipeline) that integrate with Git and automate builds on code changes.

**Part 1: Freestyle Project with Git SCM**

**Tasks:**

1. Create a Freestyle project named freestyle-git-demo
2. Configure Git SCM:
   * Repository URL: Your GitHub repo URL
   * Branch: b1
3. Set up Build Triggers:
   * Enable **Poll SCM**
   * Schedule: H/2 \* \* \* \* (polls every 2 minutes)
4. Add Build Step:

**Validation:**

* Push a change to branch b1
* Verify Jenkins automatically starts a build within 2 minutes
* Check console output for "Started by an SCM change"

**Part 2: Pipeline Project with Jenkinsfile**

**Tasks:**

1. Create a Jenkinsfile in your repo with:
   * Poll SCM trigger (H/2 \* \* \* \*)
   * Stages: Checkout, Build, Test, Deploy
   * Simple echo commands in each stage
2. Create a Pipeline project named pipeline-demo
3. Configure:
   * Definition: "Pipeline script from SCM"
   * Point to your Git repo and b1 branch
   * Script path: Jenkinsfile

**Validation:**

* Modify and push the Jenkinsfile to branch b1
* Verify pipeline runs automatically and shows stage view

1. Screenshots of:
   * Configured jobs (SCM & Build Triggers)
   * Console output showing SCM-triggered builds
   * Pipeline stage view
2. GitHub repo URL and Jenkinsfile content