

## JENKINS AUTOMATION SERVER – ASSIGNMENTS

Install the below tools on AWS EC2 Instance:

- Jenkins
- Maven
- Git

Points to remember:

- Install Jenkins on the EC2 instance
- Store the SSH Private key on Jenkins using “Manage Credentials” with “SSH Username with private key”
- Update “Host Key Verification Strategy” to “No Verification”.  
“Manage Jenkins” → “Configure Global Security” → “Git Host Key Verification Configuration”

Tips:

- Install “SSH agent” and “Git Credentials” plugins
- <https://techviewleo.com/install-jenkins-server-on-amazon-linux/>
- <https://github.com/VishnuvardhanKrishnan/devops-aug-sep-batch/blob/devops/jenkins-sample-pipelines/10-gitPushSSHJenkinsfile>

### Jenkins Pipeline Project 1 – Condition Pipeline:

- 1) Create a Pipeline named “project-1”
- 2) Create environment variables with the below name & value  
git\_push = true
- 3) Stage 1: Clone the Git repository “devops-aug-sep-batch”
- 4) Switch to the branch “maven”
- 5) Stage 2: Copy the contents of the branch and push it to your Git repository
- 6) Stage 2 should run only when the environment variable git\_push is set to true

### Jenkins Pipeline Project 2 – Parallel Stages in Pipeline:

- 1) Create a Pipeline named “project-2”
- 2) Stage 1: Clone the Git repository “devops-aug-sep-batch”
- 3) Switch to the branch “maven”
- 4) Stage 2: Run the maven build
- 5) Stage 3: Copy the contents of the branch “main” and push it to your Git repository
- 6) Stage 2 & 3 should run in parallel

## Jenkins Pipeline Assignments

### Jenkins Pipeline Project 3 – Pipeline with GitHub Webhook:

- 1) Create a Pipeline named “project-3” as a copy of the pipeline “project-2”
- 2) The “project-3” pipeline should run only when there is a git push event happens on GitHub
- 3) Achieve it through GitHub Webhook
- 4) Reference - <https://www.blazemeter.com/blog/how-to-integrate-your-github-repository-to-your-jenkins-project>

### Jenkins Pipeline Project 4 – Pipeline with AWS Integration:

- 1) Create a Pipeline named “project-1”
- 2) Stage 1: Clone the Git repository “devops-aug-sep-batch”
- 3) Switch to the branch “maven”
- 4) Stage 2: Copy the contents of the branch into an S3 bucket
- 5) Use AWS Credentials & IAM Role to connect with the S3 bucket