

4. To build a Java Project (With and without parameters) using Jenkins

New Item -> Free style project -> Add build Steps -> Windows batch command -> Enter the following commands

```
J Java.java > ...
You, 18 minutes ago | 1 author (You)
1 public class Java {
  Run | Debug | Codeium: Refactor | Explain | Generate Javadoc
2   public static void main(String[] args) {
3       System.out.println("Your name is: " + args[0] + " " + args[1]);
4   }
5 }
6
```

cd /d path

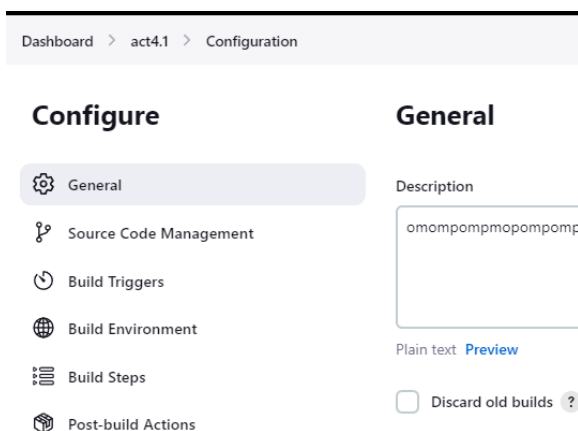
Javac Filename.java

Java Filename %parameter1% %parameter2%

Apply -> Save -> Build now -> Console output

5. To implement windows batch command on a project in Jenkins (with and without parameters)

New item -> Freestyle project -> Add Build Steps -> Windows Batch Command -> In the box enter (echo "Hello World") -> Build Now -> Console Output



Check This project is parameterized

☒ This project is parameterized ?

≡ Boolean Parameter ?

Name ?

☐ Set by Default ?

Description ?

Exp 6: To build any Python project in Jenkins

New Item -> Free style project -> Add build Steps -> Python Script -> Enter some Code -> Build

Exp 7: To build a Maven and Ant project in Jenkins

Maven

New Item -> Maven Project -> Create -> (Source code management) Select Git ->

***Note* Maven Ant & Gradle works explicitly** -> Fork a Repo on github (darkleon/HelloWorld)

-> Enter the cloning url ->

Scroll down to Build -> Goals & Options -> clean compile test -> Apply -> Save -> Build Now

Ant

New Item -> Maven Project -> Create -> (Source code management) Select Git -> Build steps

-> select Invoke Ant -> Ant Version -> Ant -> (Targets = clean compile package) -> Build now ->

Open console output -> Scroll dwn and copy the path ->

-> Open cmd -> execute: dir

C:\ProgramData\Jenkins\jenkins\workspace\act7.2\target\roshambo.war

8. To create a pipeline script and build a pipeline of jobs in Jenkins

New Item -> Pipeline -> Create -> Enter some definition -> Scroll down to Pipeline -> Select pipeline script -> Enter script -> Build Now

```
pipeline{
    agent any
    stages{
        stage ('Plan phase'){
            steps{
                echo 'Hi. This is Shree Jaswal'
            }
        }
        stage ('code phase'){
            steps{
                input('Do you want to continue?')
            }
        }
        stage ('integrate phase'){
            when{
                not{
                    branch "master"
                }
            }
            steps {
                echo 'Integration test passed'
            }
        }
        stage ('testing phase'){
```

```
parallel{
  stage ('unit test'){
    steps{
      echo 'running unit test'
    }
  }
}
}
```

9. To create a Jenkinsfile in a repository on GitHub and build a pipeline of jobs in Jenkins

New Item -> Pipeline project -> Check Github hook trigger for GITScm polling -> Pipeline -> Pipeline script from SCM -> (SCM) GIT -> <https://github.com/chrisdias2311/jenkins-pipeline-tutorial.git> -> Script path -> hello-world/Jenkins -> Apply -> Save -> Build

10. To create a Jenkinsfile in a repository on GitHub and build a pipeline of jobs in Jenkins

First fork a repo -> <https://github.com/chrisml/jenkins-pipeline-tutorial> -> New Item -> Pipeline -> Create -> Enter some description -> Scroll down to pipeline -> Select pipeline from SCM -> In SCM select Git -> Enter Git URL -> Apply and Save -> Build Now

Once build is successful -> Go to github -> Setting -> Left panel search for webhooks -> Add webhook

Go to ngrok website -> Download Windows 64bit zip -> Extract .exe file ->

Go to cmd -> ngrok -> execute 'ngrok.exe http 8080' copy the forwarding link add it to the payload_url -> Add Webhook '/github-webhook' -> Content-type (Application/JSON)

Go to Jenkins -> Click on build now

Go to GitHub -> Add a file .txt -> commit it -> Go to Jenkins -> Refresh -> Wait for 10-15 sec and it will automatically Build

Exp 11: To Implement Docker Commands

Docker commands:

Docker --version

Docker login

Next open docker -> Go to images -> Search 'Images' -> eg: Image named registry

Cmd -> docker pull <imagename> -> docker images -q ->

Docker pull ubuntu

Docker pull ubuntu:rolling

Exp 12: To build an Image for a Web Application using DockerFile

Create a index.html file -> write some code -> Keep the Docker file in the same folder ->

Docker login

Docker build -t aec .

Docker scout images

Docker images

Docker inspect images

Docker history aec

Docker ps

Exp 13: In Jenkins, create a slave node, connect it with master and build a project in slave node

Manage Jenkins => Node -> Create new Node -> Permanent Agent -> Create ->

Enter Name of node -> No of executors (2) -> Working dir (Enter any folder path)

-> Remote root directory (Same Path) -> Save -> Click On node -> Copy and past on cmd

Create a freestyle project -> Restricted where this project can be run -> Enter the name of LAabel -> Build Steps -> Windows Batch Command -> Apply Save

Exp 14: To create and run a test case on Chrome/Firefox browser with selenium IDE addon

Open Selenium -> Record a new test in a new project -> enter project name -> enter base URL -> start recording -> record some actions -> stop Recording

Open selenium -> Run current test
(Should pass all the testcases)