

Day 4

10/15/2023

CI and CD

Creating Jenkin job to run node js program

Creating Jenkin job to run python program

Installing python in unix or linux os

```
sudo apt-get install python3
```

Jenkin pipeline : Jenkin pipeline is a collection of events or jobs which are interconnected to each others to perform a specific task.

```
pipeline {
  agent any
  stages {
    stage('Verification') {
      steps {
        echo 'All software version verify'
      }
    }
    stage('Compile the programs') {
      steps {
        echo 'Compile the programs using few commands'
      }
    }
  }
}
```

```

stage('Run the application') {
    steps {
        echo 'Run all application and create execute file like jar file, exe file or object file'
    }
}

stage('Test the application and generate the report') {
    steps {
        echo 'Test the application and generate the report'
    }
}

}
}

```

We execute one simple Jenkin pipeline job to display echo message.

Creating pipeline job to build **java project using maven build tools**.

```

pipeline {
    agent any
    tools {
        // Install the Maven version configured as "M3" and add it to the path.
        maven "M3"
    }

    stages {
        stage('Build') {
            steps {
                // Get some code from a GitHub repository
                git 'https://github.com/jglick/simple-maven-project-with-tests.git'
            }
        }
    }
}

```


Using cd command please move inside a project.

mvn command must be execute inside project folder ie pom.xml file must be present.

pom : project object model.

Maven goal.

mvn compile :	it compile the project
mvn clean :	it will remove target folder.
mvn test :	it will test all test file present inside a project.
mvn package	it will create jar or war file.

Please login to git hub account.

And create remote repository.

And clone your repository in your local VM with token

Then copy and paste your maven project in repository

Then move inside repository folder using cd command

git add .

git commit -m "message"

git push -u origin HEAD

please check your project in remote repository.