#8th Pgm

mkdir neeraj8

cd neeraj8

mvn archetype:generate -DgroupId=com.example -DartifactId=myapp -DarchetypeArtifactId=maven-archetype-quickstart -DinteractiveMode=false

cd myapp

gedit pom.xml

add properties, edit versions and add <build> like in 2nd pgm. save,close

mvn clean install

mvn exec:java -Dexec.mainClass="com.example.App"

nano hosts.ini

[local]

localhost ansible\_connection=local

ctrl+o enter, ctrl+x

nano setup.yml

- name: Deploy Maven Artifact

hosts: local

become: true

tasks:

* name: Create deployment directory

debug:

msg: "Helloowww 8th pgm"

ctrl+o enter, ctrl+x

ansible-playbook -i hosts.ini setup.yml

(or)

ansible-playbook -i hosts.ini setup.yml --ask-become-pass

login to GitHub

back to terminal and run:

git config --global user.name "Neerajk5522"

git config --global user.email "neerajkodur@gmail.com"

now in GitHub, create repo - "myapp"

run in terminal:

echo "# myapp" >> README.md

git init

git add README.md

git commit -m "first commit"

git branch -M main

git remote add origin https://github.com/Neerajk5522/myapp.git

git add .

git commit -m "first commit:myapp"

git push -u origin main

Username for 'https://github.com': Neerajk5522

Password for 'https://Neerajk5522@github.com': paste\_generated\_classic\_tockens\_in\_settings

edit setup.yml file in GitHub after pushing -> change "become: true" to "become: no"

run in terminal:

sudo systemctl start jenkins

sudo systemctl enable jenkins

jenkins login (http://localhost:8080)

username: admin

for password run:

sudo cat /var/lib/jenkins/secrets/initialAdminPassword

after login

settings/tools - select "install automatically" in git and maven(also add maven as name), apply & save

click on New Item - "myapp"

note: repo and item name shd be same as Dartifact\_Id=myapp

Select “Freestyle project” and OK

go to Source Code Management (SCM)

select “Git” enter repo link: https://github.com/Neerajk5522/myapp

change Branch: master to main

“Add build step” - “Invoke top-level Maven targets” select maven

In the Goals - type: "clean package"

“Add build step” - “Execute shell” - type: mvn exec:java -Dexec.mainClass="com.example.App"

“Add build step" - “Execute shell” - type: ansible-playbook -i hosts.ini setup.yml

apply & save

build now -> open console output!!

Prerequisites for any Pgm

sudo apt install maven gradle ansible git -y

sudo apt install jenkins

sudo apt update

sudo apt upgrade -y

rm -r p2 (to delete any directory "p2")

cd .. (to revert )

use nano if gedit doesn't works

repo & item name shd match DartifactId in 6th and 8th

mkdir pg4

cd pg4

mvn archetype:generate -DgroupId=com.example -DartifactId=maven-example -DarchetypeArtifactId=maven-archetype-quickstart -DinteractiveMode=false

cd maven-example

<?xml version="1.0" encoding="UTF-8"?>

<project xmlns="http://maven.apache.org/POM/4.0.0"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>com.example</groupId>

<artifactId>maven-example</artifactId>

<version>1.0-SNAPSHOT</version>

<dependencies>

<dependency>

<groupId>junit</groupId>

<artifactId>junit</artifactId>

<version>4.12</version>

<scope>test</scope>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-compiler-plugin</artifactId>

<version>3.8.1</version>

<configuration>

<source>1.8</source>

<target>1.8</target>

</configuration>

</plugin>

</plugins>

</build>

</project>

package com.example;

public class App {

public static void main(String[] args) {

System.out.println("Hello, Maven");

System.out.println("This is the simple realworld example....");

int a = 5;

int b = 10;

System.out.println("Sum of " + a + " and " + b + " is " + sum(a, b));

}

public static int sum(int x, int y) {

return x + y;

}

}

mvn clean install

mvn exec:java -Dexec.mainClass="com.example.App"

gradle init

plugins {

id 'java'

}

group = 'com.example'

version = '1.0-SNAPSHOT'

repositories {

mavenCentral()

}

dependencies {

testImplementation 'junit:junit:4.12'

}

task run(type: JavaExec) {

main = 'com.example.App'

classpath = sourceSets.main.runtimeClasspath

}

gradle build

gradle run