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ExperimentNo.1.6

Student Name: Gaurav Kumar
UID: 22MCC20177
Branch: MCA–CCD
Section/Group: MCD-1/A
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1. Aim/Overview of the practical:

a) Write a Scripted Pipeline to execute the build pipeline with all the 9 goals of Maven.
b) Execute the Scripted Pipeline via Scripted Pipeline with SCM. Name the file as Jenkinsfile and build a pipeline.

2. Steps for practical: (a)

Step 1 : Create a new file in the root directory of your project. Name the file as Jenkinsfile and add the pipeline script for 9 maven goals.

Jenkinsfile

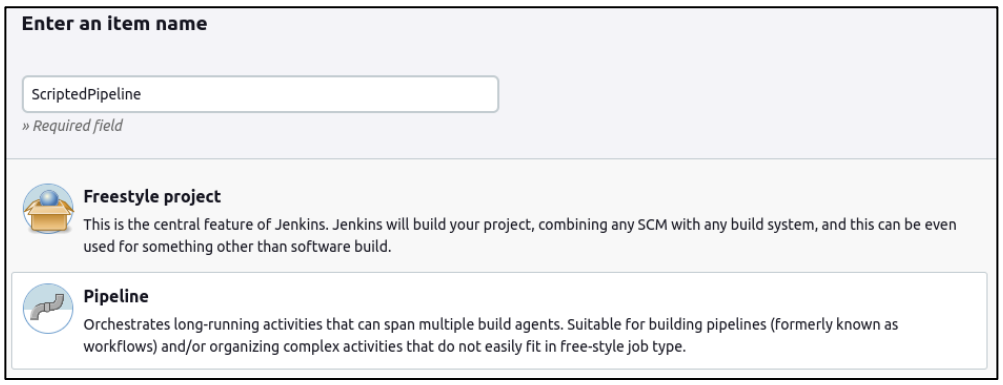
```
pipeline {
    agent any
    tools {
        maven 'maven1'
    }
    stages {
        stage('fetch') {
            steps {
                echo 'Fetching the Maven Project from github'
                git branch: 'main',
                url: 'https://github.com/Gauravkumar1502/DevOpsPractical'
            }
        }
        stage('validate') {
            steps {
                echo 'Validating the Maven Project'
                sh 'mvn validate'
            }
        }
        stage('clean') {
            steps {
                echo 'Cleaning the Maven Project'
                sh 'mvn clean'
            }
        }
```

```
        stage('compile') {
            steps {
                echo 'Compiling the Maven Project'
                sh 'mvn compile'
            }
        }
        stage('test') {
            steps {
                echo 'Testing the Maven Project'
                sh 'mvn test'
            }
        }
        stage('package') {
            steps {
                echo 'Packaging the Maven Project'
                sh 'mvn package'
            }
        }
        stage('verify') {
            steps {
                echo 'Verifying the Maven Project'
                sh 'mvn verify'
            }
        }
        stage('install') {
            steps {
                echo 'Installing the Maven Project'
                sh 'mvn install'
            }
        }
        stage('executing generate jar') {
            steps {
                echo 'Executing the generate jar file'
                sh 'java -jar ./target/Sum.jar 10 25 30 55 67 89'
            }
        }
    }
}
```

Steps for practical: (b)

Step 1 : To create a scripted pipeline via Jenkins SCM. First create a new pipeline by clicking on **"+"** icons on the Jenkins dashboard.

Step 2 : A new window will appear select **pipeline** option from menu and give a name to your pipeline and then click on OK.



Step 3 : A new window will appear from which you can configure the create pipeline by providing scripts and selecting options.

Step 4 : Go to the Pipeline Section and select Pipeline script from SCM from the drop-down menu for the **pipeline Definition.**

Step 5 : For SCM option select Git and provide repository URL and branch name.

Step 6 : After all that give the Jenkins file name that is present inside your project (case sensitive) under **Script Path** and click **Save.**

Step 7 : After that, from the right-hand side menu click on **Build Now** option.

Step 8 : If build success or fail, you will see a green or red indicator.