ExperimentNo.1.6

Student Name: Vignesh   **UID:** 22MCC20027

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.

```
pipeline {
    agent any
    tools{
        maven 'M1'
    }
    stages
    {
        stage('Fetching')
        {
            steps
            {
                git branch:'main', url:'https://github.com/vignesh-vp/SpringPetClinic'
            }
        }

        stage('Compile')
        {
            steps
            {
                sh 'mvn compile'
            }
        }

        stage('test') {
            steps {
                sh 'mvn test'
            }
        }

        stage ('package') {
            steps {
                echo 'Packaging the Maven Project'
                sh 'mvn package'
            }
        }

        stage('verify') {
            steps {
                echo 'Verifying the Maven Project'
```

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```
            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'
        }
    }

}


    stage('clean') {
        steps {
            echo 'Cleaning the Maven Project'
            sh 'mvn clean'
        }
    }

}
}
```
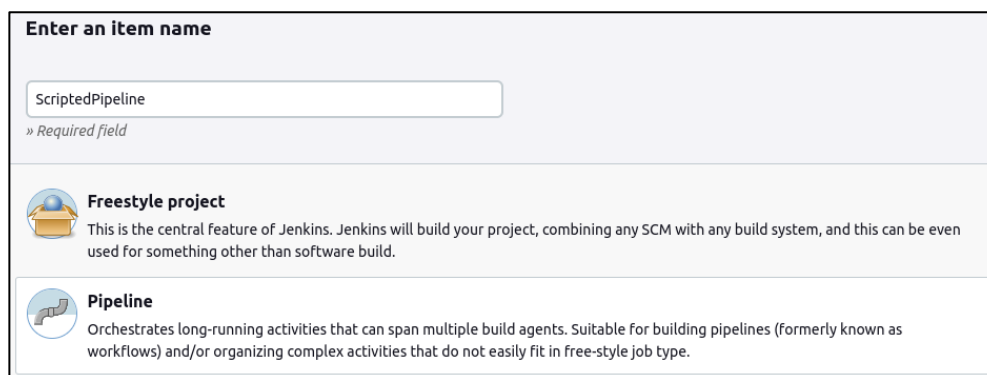
Steps for practical: (b)

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.

Enter an item name

ScriptedPipeline

» Required field

Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

Pipeline
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

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.**

Pipeline

Definition

Pipeline script from SCM

SCM ?

Git

Repositories ?

Repository URL ?

https://github.com/vignesh-vp/SpringPetClinic

Credentials ?

- none -

Add ▼

Advanced ∨

Branch Specifier (blank for 'any') ?

*/main

Add Branch

Repository browser ?

(Auto)

Additional Behaviours

Add ▼

Script Path ?

jenkinsfilename.txt

☑ Lightweight checkout ?

Pipeline Syntax

Save   Apply

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.

Stage View

	Declarative: Checkout SCM	Declarative: Tool Install	fetch	validate	clean	compile	test	package	verify	install	execting generate jar
Average stage times: (Average full run time: ~31s)	1s	816ms	2s	2s	2s	2s	3s	3s	3s	3s	1s
#7 Oct 08 22:38 1 commit	1s	767ms	2s	2s	2s	3s	3s	3s	3s	3s	1s
#6 Oct 08 1 commit	1s	606ms	2s	2s	2s	2s	3s	3s	3s	3s	1s