Ques 2 a. Setup a Jenkins ecosystem on cloud with3 one master and two slave nodes and setup a pipeline which in build step fetches a file from git repo and in the deploy step pushes it to a bucket [AWS/GCP]

1. Launched 3 linux instances on AWS, one for master and two for slaves
2. Installed jenkins on the Master machine, and java on the slaves machine.

Installation:

* sudo yum install java-1.8.0-openjdk
* sudo wget -O /etc/yum.repos.d/jenkins.repo

http://pkg.jenkins-ci.org/redhat/jenkins.repo

* sudo rpm --import https://jenkins-ci.org/redhat/jenkins-ci.org.key
* sudo dnf upgrade && sudo dnf install jenkins java
* sudo service jenkins start
* systemctl status jenkins

3. Open Jenkins on localhost port 8080, and follow the signup process.

4. Create two slave nodes from **Manage node** in **Manage Jenkins,** provide the corresponding private keys for authentication.

5. Install github on both the slaves.

6.Create a new jenkins pipeline job.

7. Create a webhook for github by providing the github access token.

8. Install S3 plugin for jenkins.

9. Add suitable IAM access to the instances and configure AWS S3 bucket from **Manage Jenkins** option

10. In the github repository a Jenkins file needs to be present for deploy process on S3 bucket

Jenkinsfile:

pipeline {

agent any

stages {

Stage('Deploy') {

steps {

s3Upload(consoleLogLevel: 'INFO', dontWaitForConcurrentBuildCompletion: false, entries: [[bucket: 'kavish-sample-bucket', excludedFile: '', flatten: false, gzipFiles: false, keepForever: false, managedArtifacts: false, noUploadOnFailure: false, selectedRegion: 'us-east-1', showDirectlyInBrowser: false, sourceFile: 'sample.txt', storageClass: 'STANDARD', uploadFromSlave: false, useServerSideEncryption: false]], pluginFailureResultConstraint: 'FAILURE', profileName: 'my-profile', userMetadata: [])

}

}

}

}

11.The jenkins pipeline is ready, push anything to github and the jenkins webhook will fetch the

Repo an upload a file to S3 bucket.