

## Git

### 1. Merge Conflict in Local

### 2. Merge Conflict in GitHub

## Jenkins

### 1. Job with Hello World or Java Version(Batch Command).

New Item > Name >FreeStyle > Add Description

Build Steps : Add build Steps > **Execute Windows batch command** > echo "Hello World" or javac --version

Apply and Save

Enter Build Now

### 2. Same Job build periodically.(Two types : Build periodically, Poll SCM )

New Item > Name >FreeStyle > Add Description

In Build Triggers : Select **Build periodically and Poll SCM**

**Inside give 5 stars ( \* \* \* \* \* )**

1. \* \* \* \* \* = Per Minute

2. H/15 \* \* \* \* \* = Per 15 Minutes

3. H H \* \* \* = Every Per Day

Build Steps : Add build Steps > **Execute Windows batch command** > echo "Hello World" or javac --version

Apply and Save

Enter Build Now

### 3. Pipeline:

- **with 3 Jobs (Build, Test, Deploy) using View(+)**

Install Pulgins:

Manage Jenkins > Manage Plugins > Available Pulgins > Search **Build Pipeline Plugin**

Create 3 jobs Build, Test and Deploy.(refer Q.1)

Go to Job **Build > configure**

**In Post-build action > Select build other project or build other project(manually) > In projects to build > Enter Next Job name (Test). Apply and save**

**Repeat the same for Test.**

**Create Pipeline View.**

**In dashboard select new view (+)**

**In New view : add name > select build Pipeline View>Add name>select initial job>Apply and save**

- **With pipeline script with helloworld(Declarative)**

In dashboard :-new item >enter name>select

pipeline>pipeline>script>select hello world from right corner>apply and save and build project

- **Pipeline script with svm(Declarative)**

In dashboard :-new item >enter name>add poll svm or build

periodically >select pipeline>pipeline>script>pipeline script from

svm >in svm select git > paste repository from git with a jenkinsfile

>credential add email and password of app or gitpassword try

>branches select main or master >script :jenkinsfile refer from github

>apply and save .

- **Pipeline script with svm webhook**

In dashboard :-new item >enter name >select

pipeline>pipeline>script>pipeline script from svm >in svm select git

> paste repository from git with a jenkinsfile >credential add email and

password of app or git password try >branches select main or

master >script :jenkinsfile refer from github >apply and save .

Go to git hub :go to repo with jenkinsfile>settings >webhook>add  
webhook>payload url from ngrok:commands 1)ngrok.exe http 8080  
Paste the link after /github-webhook/ >select send me everything  
>select activate>add webhook .

Relode the git hub after making changes to a file >go to jenkins and  
reload it will build automatically .

#### 4. Email:

- **E-mail Notification**

Go to dashboard >manage jenkins >configure system>go  
bottom >email Notification>smtpserver:-smtp.gmail.com>select  
use smtp authentication:user name: email password:app  
generated >use ssl tick >smtp port:465>reply to address: email  
>charset :utf-8>test configuration by sending test e-mail add  
email and test configuration the message will be sent to your  
email.

- **Extended E-mail Notification**

Go to dashboard >manage jenkins >configure system>go  
bottom>Extended-EmailNotification>smtpserver:-smtp.gmail.com  
>smtp port:465>default content type:html(text/html)>default  
triggers:select :-always

Create a job >freestyle>got to bottom post-build action :-select  
Editable Email Notification >project from :any name>project  
recipient :-(email id ) project-reply-to-list :-(email id)> content  
type (html/text) apply and save build a job it will get notification  
to your mail

- **Extended E-mail Notification with Pipeline.(Two types :  
with Pipeline script , Pipeline script with svm)**

Go to dashboard>new item >pipeline >select build  
periodically>pipeline select :-pipeline script trysamplepipline  
select hello world paste the program:-

```
pipeline {  
    agent any  
  
    stages {
```

```

stage('apna') {
    steps {
        echo 'Hello World'
    }
}
stage('pipeline') {
    steps {
        echo 'Hello World'
    }
}
stage('ajay') {
    steps {
        echo 'Hello World'
    }
}
}
post
{
    always
    {
        email body: 'ajaypipeline', subject: 'apnapipeline', to:
'hritikhotagiofficial@gmail.com'
    }
}
}

```

Apply and save and build the project

**Go to dashboard>new item >pipeline >select build periodically>pipeline select>pipeline script from SCM>Add scm :-git >repository >repository url:-git email >credential add git hub user name :- email password :-git or app generated>discription :-add anything >scriptpath :jenkinfile or see the git hub file name apply save and build .**

## 5. Role Based Authorization

## 6. Maven