**INTRODUCTION TO DEVOPS TOOLS-ASSESSMENT 1**

1. **Jenkins installation steps.**

* First check whether the JDK is installed in the system. If not installed, then install Java Development Kit (JDK).
* Set the path for the Environmental Variable for JDK.
* Download and install Jenkins for Windows.
* Run Jenkins on localhost 8080.
* After this we will have login page.
* Login by giving username and password.
* Build and run a job on Jenkins.

1. **Role management in Jenkins.**

* First navigate to Jenkins and then click Manage Jenkins.
* Next click Manage and Assign Roles.
* Manage roles from Jenkins dashboard.
* Create an admin role with the Overall permission.
* Or else click Administer permission and then click apply and save.

1. **Free style project creation in Jenkins.**

* In the Jenkin dashboard click new item from the sidebar menu.
* Enter a name for the new job in the Enter an item name field at the top of the page.
* Click Freestyle project.
* Click ok to start configuring our new Freestyle project.
* Description is optional. Enter the description for the job in the Description field.
* Now configure the freestyle job starting with source code management.
* After that in the Add build step click Execute Windows batch command.
* At last, apply and then save.

**4.Git Integration**

* Use Git: Clone command to load source from a Git repository.
* Create a new branch for development with Git: Create Branch.
* After making some changes, you will see the list of your changes in the Source Control: Git view.
* Now to stage the changes with Git: Stage.
* Use Git: Commit to commit your changes.
* Login to the git and copy the URL of any project that you had committed.

**Running Git-hub:**

* In the Jenkin dashboard click new item from the sidebar menu.
* Enter description and click Freestyle project.
* Click ok to start configuring.
* In the source code management click Git.
* After clicking Git there appears a text box to paste the URL of the Git.
* After that in the Add build step click Execute Windows batch command.
* At last, apply and then save.