

## **Practice for Lesson 2: Build and Run Jobs on Jenkins**

## Practices for Lesson 2

---

### Overview

In these practices, you will build and run a job on Jenkins. Further, schedule a job to execute periodically and also integrate GitHub repository source code with Jenkins job.

## Practice 2-1: Build and Run a Job on Jenkins Instance

---

### Overview

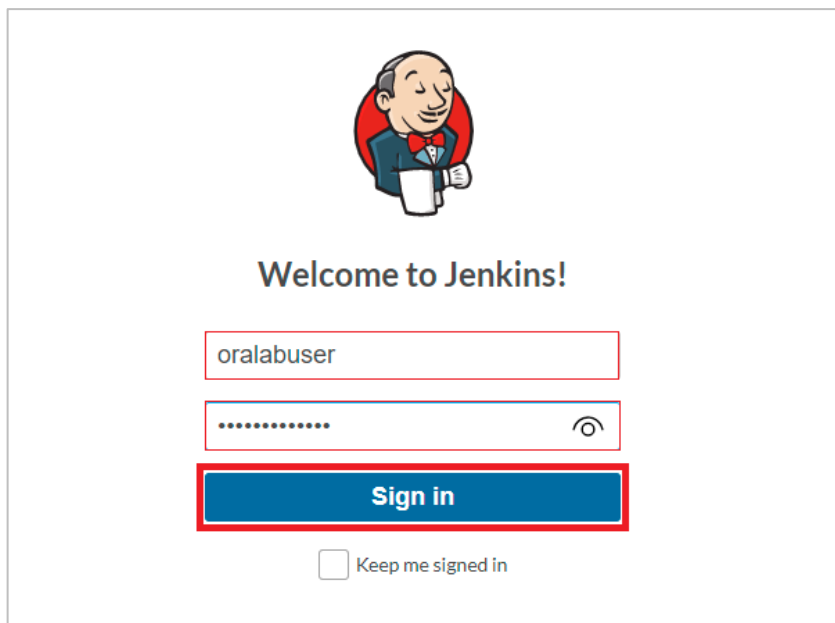
In this practice, you will learn how to build and run a Job on Jenkins Instance installed in AWS EC2 Linux instance.

### Assumptions

You should have completed the Practice of Lesson 1.

### Tasks

1. Sign in to **Jenkins Instance Dashboard**.
  - a. In a browser on your local machine, enter the **Public IP** address of the EC2 instance followed by the IP address to sign in to the Jenkins Dashboard (for example, **34.208.77.168:8080**).

A screenshot of the Jenkins login page. At the top center is the Jenkins logo, a cartoon character with a red bow tie. Below the logo, the text "Welcome to Jenkins!" is displayed. Underneath, there is a username input field containing "oralabuser". Below that is a password input field with a masked password "....." and a toggle icon for visibility. A blue "Sign in" button is highlighted with a red border. At the bottom, there is a checkbox labeled "Keep me signed in".

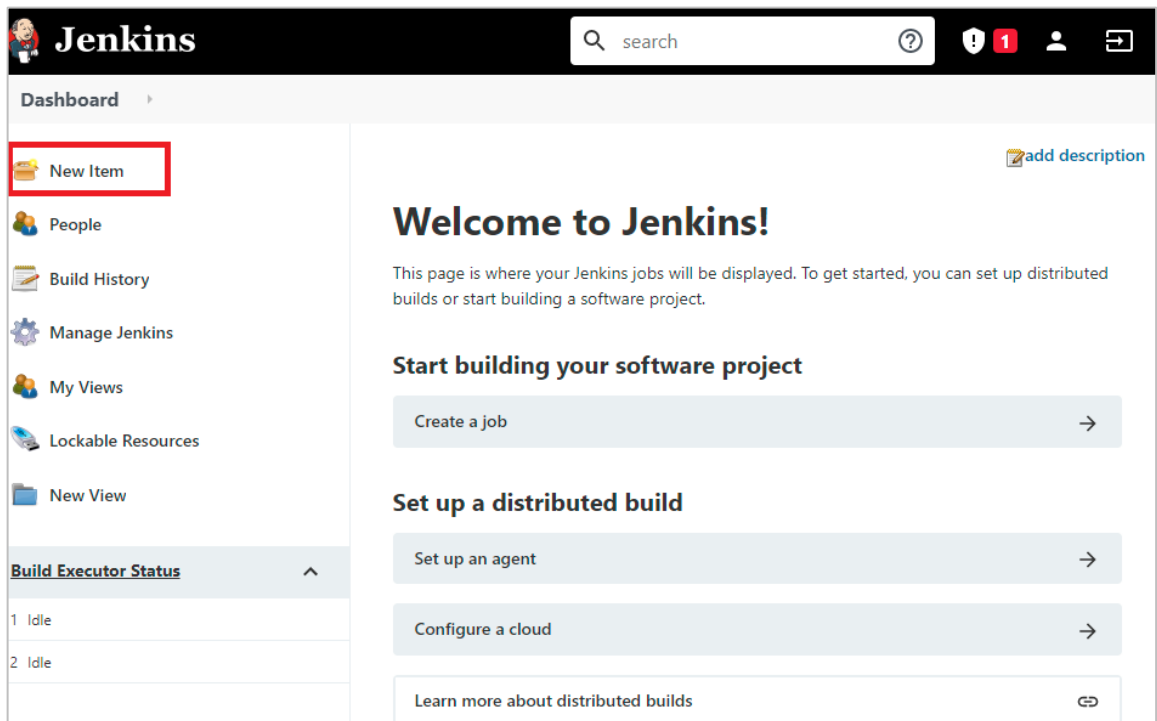
oralabuser

.....

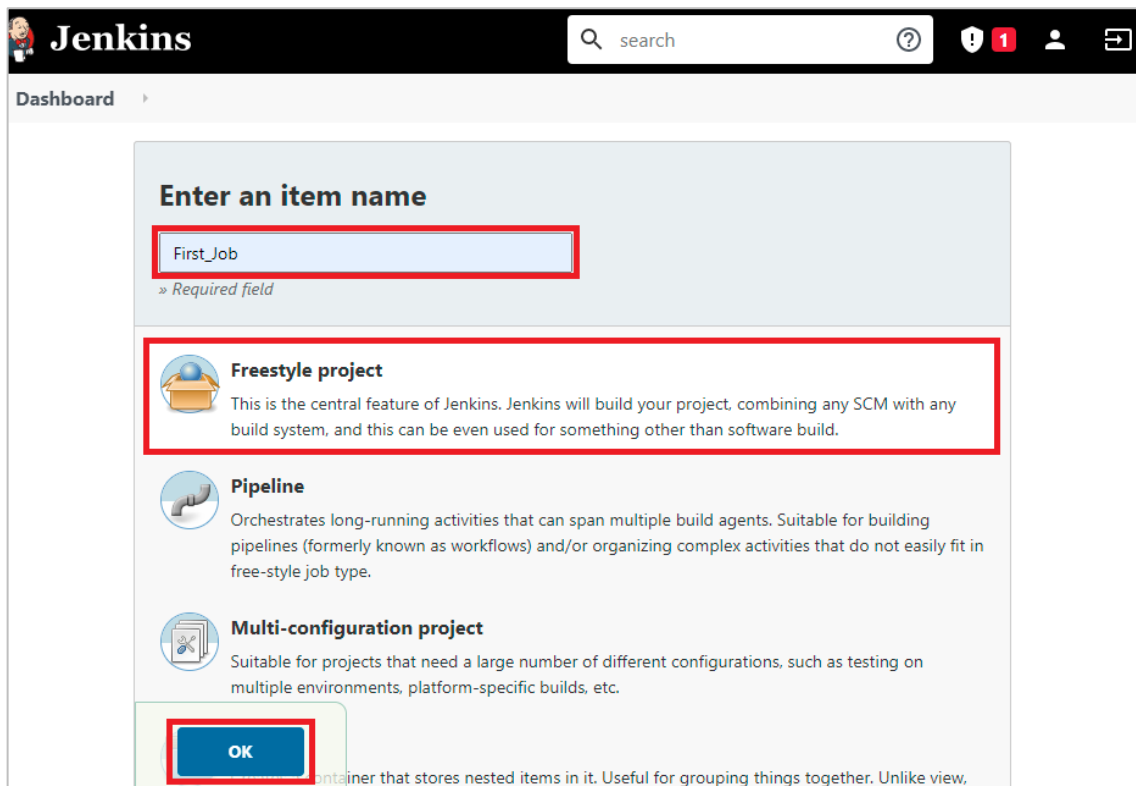
Sign in

☐ Keep me signed in

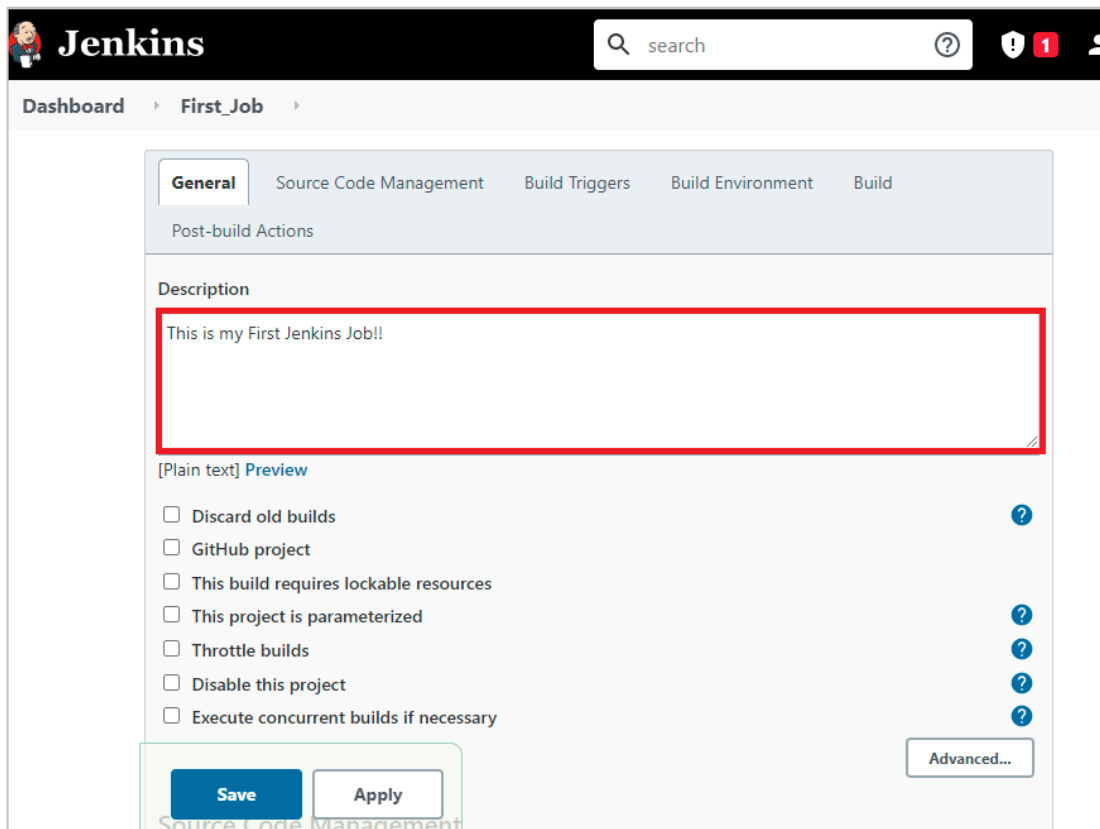
- b. Enter the user name and password provided.
  - c. You will have access to the Jenkins Dashboard.
2. To build and run a job on Jenkins Instance.
  - a. In the Jenkins Instance Dashboard, navigate to **Main menu** and select **New Item** to create a new job as shown below.



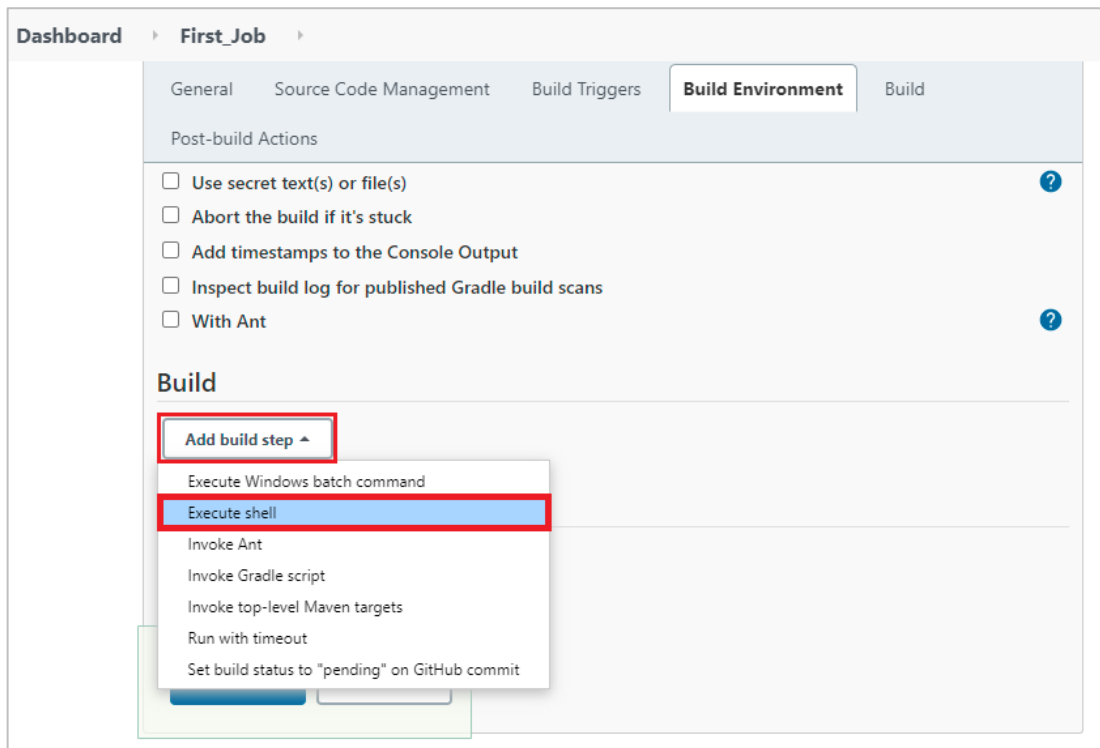
- b. Provide the name for the new Job and select **Freestyle project** as shown below. Further, click **OK**.



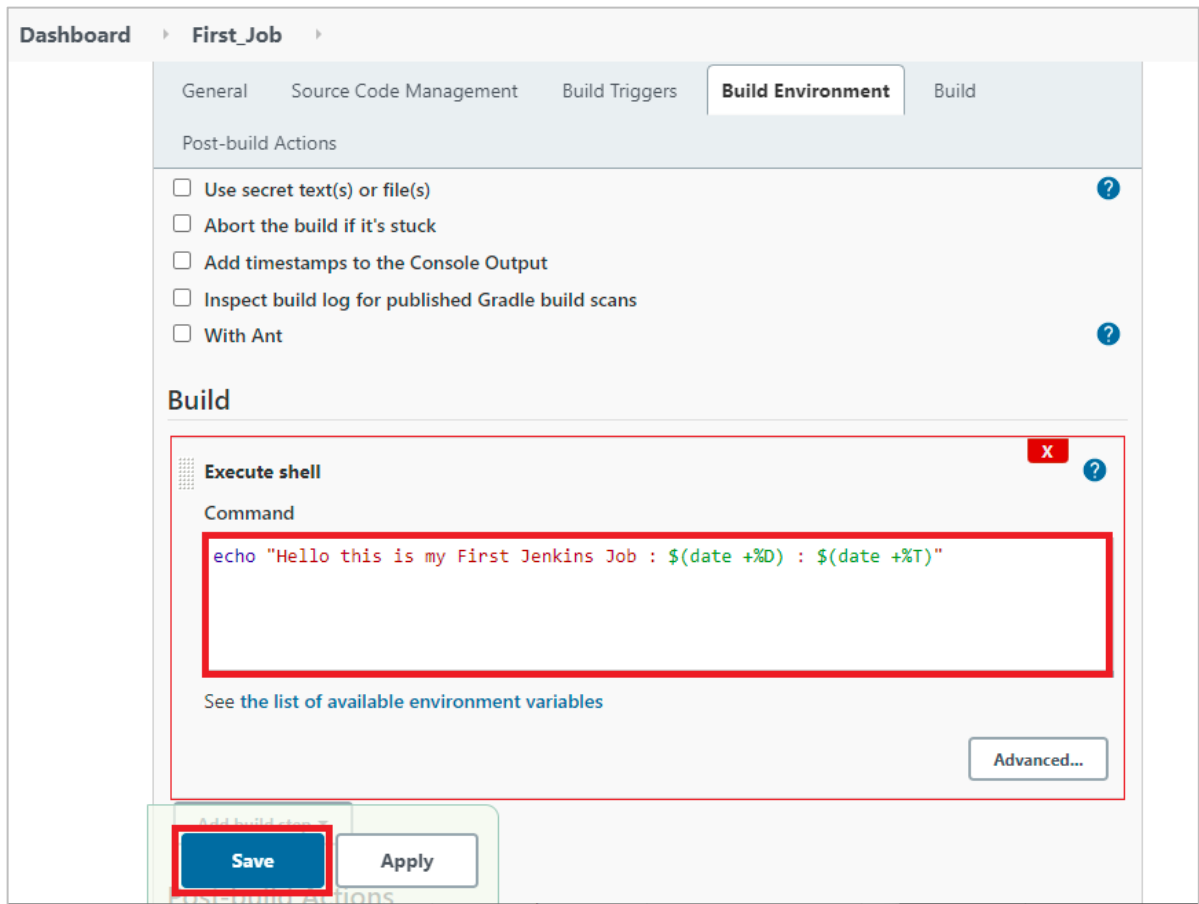
- c. As shown below, provide the **Description** for the New Job, which is an optional.



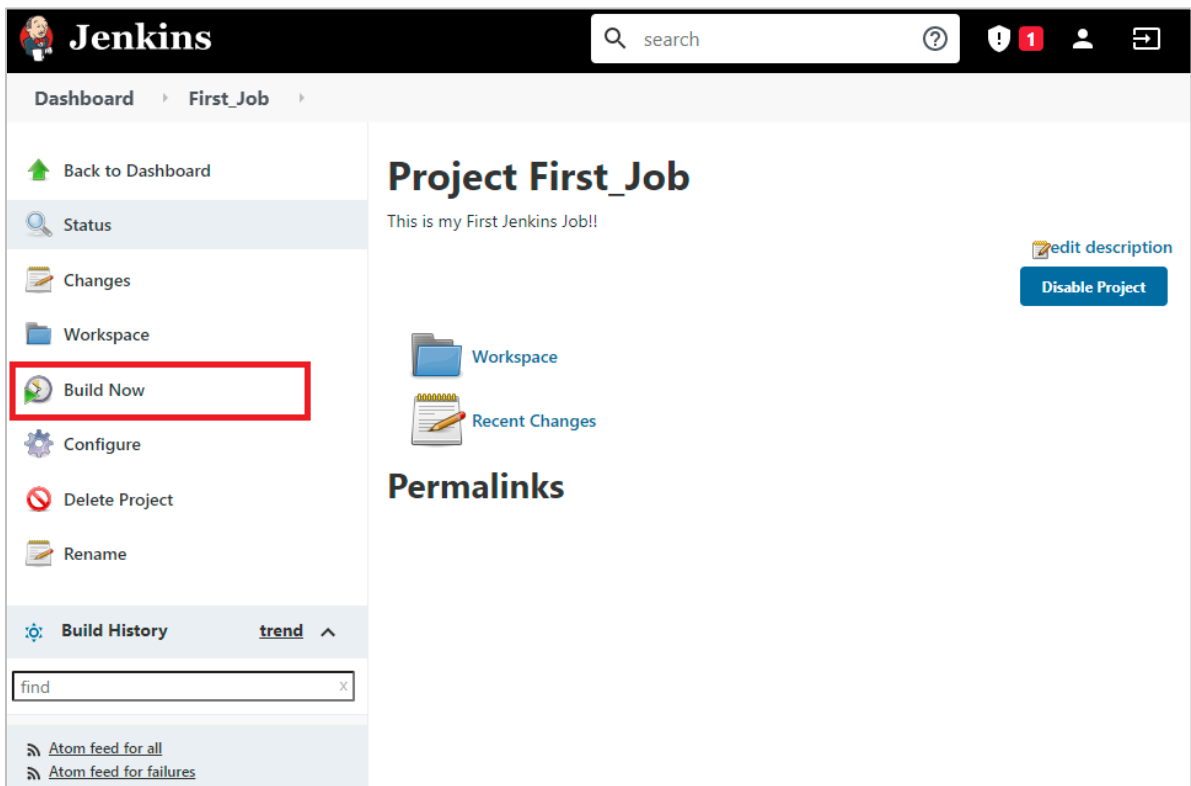
- d. Scroll down to **Build** section, click **Add build step** and select **Execute shell** as shown below.



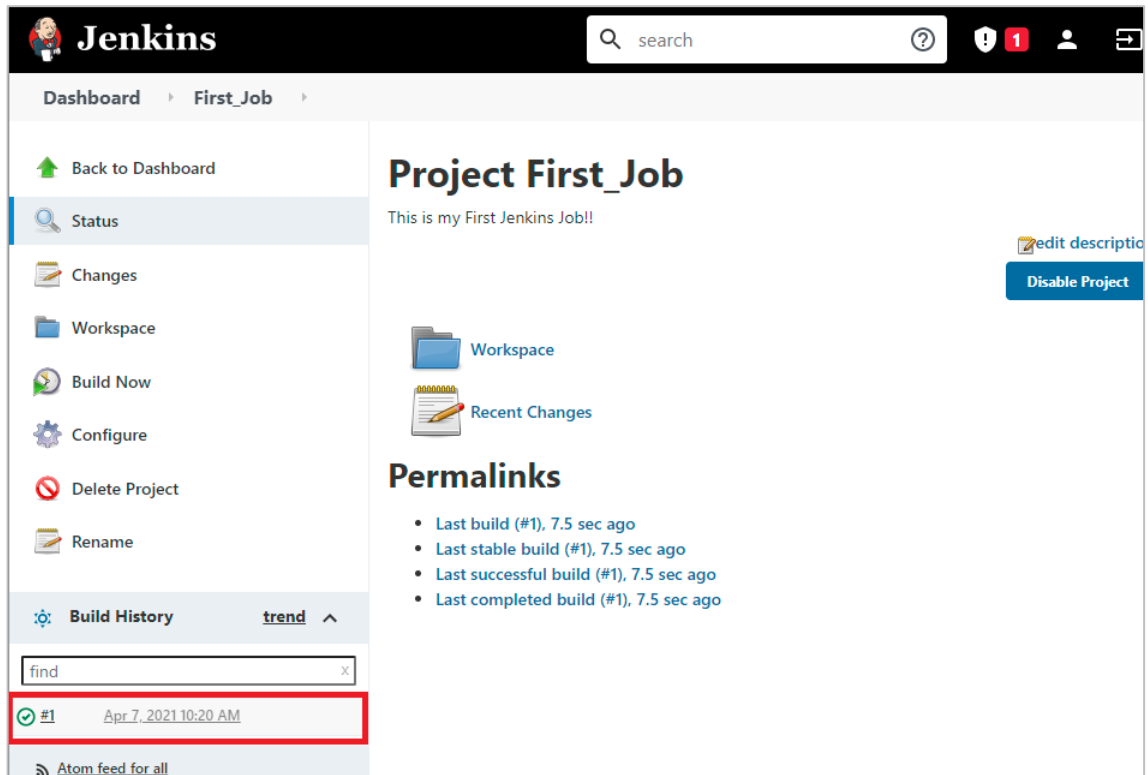
- e. In **Execute shell**, type the command as shown below and click **Save**.



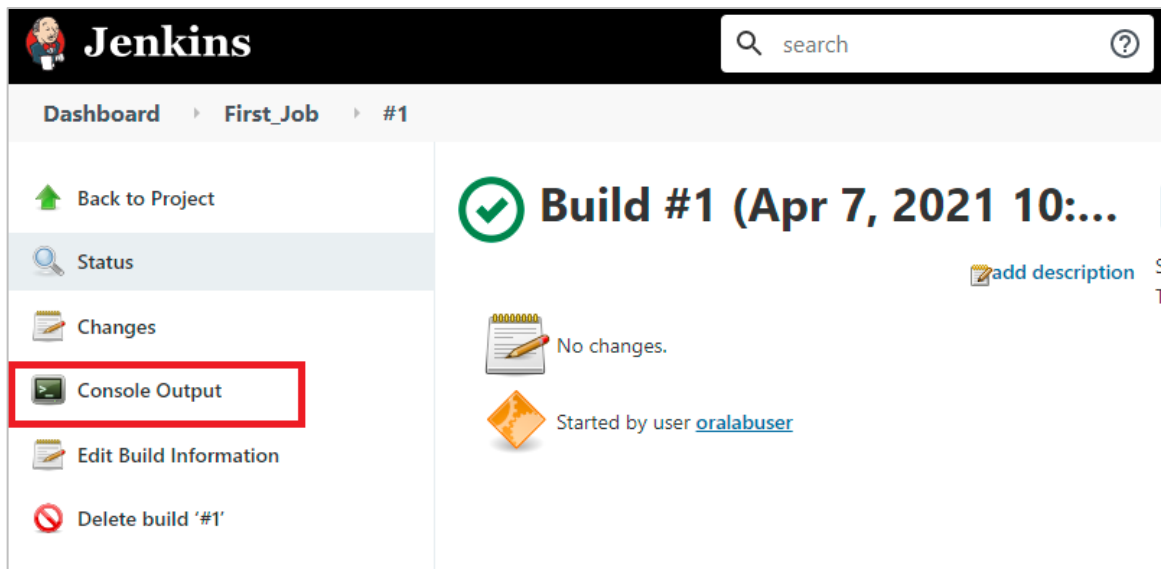
- f. The project is created as shown below, select **Build Now** to build the job in Jenkins.



- g. In the left bottom corner, click on the build created under **Build History** as shown below.



- h. In the **Build** page, click **Console Output** to view the output of the job.



- i. The Console output is displayed as shown below. The command provided in the job is executed successfully and the path of the workspace for this job in the instance is also provided.

The screenshot shows the Jenkins web interface. At the top is the Jenkins logo and a search bar. Below the navigation bar, the breadcrumb trail reads 'Dashboard > First\_Job > #1'. On the left sidebar, there are links for 'Back to Project', 'Status', 'Changes', 'Console Output' (which is selected), 'View as plain text', 'Edit Build Information', and 'Delete build '#1''. The main content area is titled 'Console Output' with a green checkmark icon. It displays the following text: 'Started by user orlabuser', 'Running as SYSTEM', 'Building in workspace /var/lib/jenkins/workspace/First\_Job', '[First\_Job] \$ /bin/sh -xe /tmp/jenkins712905534692475470.sh', '++ date +%D', '++ date +%T', '+ echo 'Hello this is my First Jenkins Job : 04/07/21 : 10:20:22'', 'Hello this is my First Jenkins Job : 04/07/21 : 10:20:22', and 'Finished: SUCCESS'. The lines 'Building in workspace /var/lib/jenkins/workspace/First\_Job' and 'Hello this is my First Jenkins Job : 04/07/21 : 10:20:22' are highlighted with red boxes.

3. Keep the Jenkins Dashboard and the AWS Management Console open for the next practice.