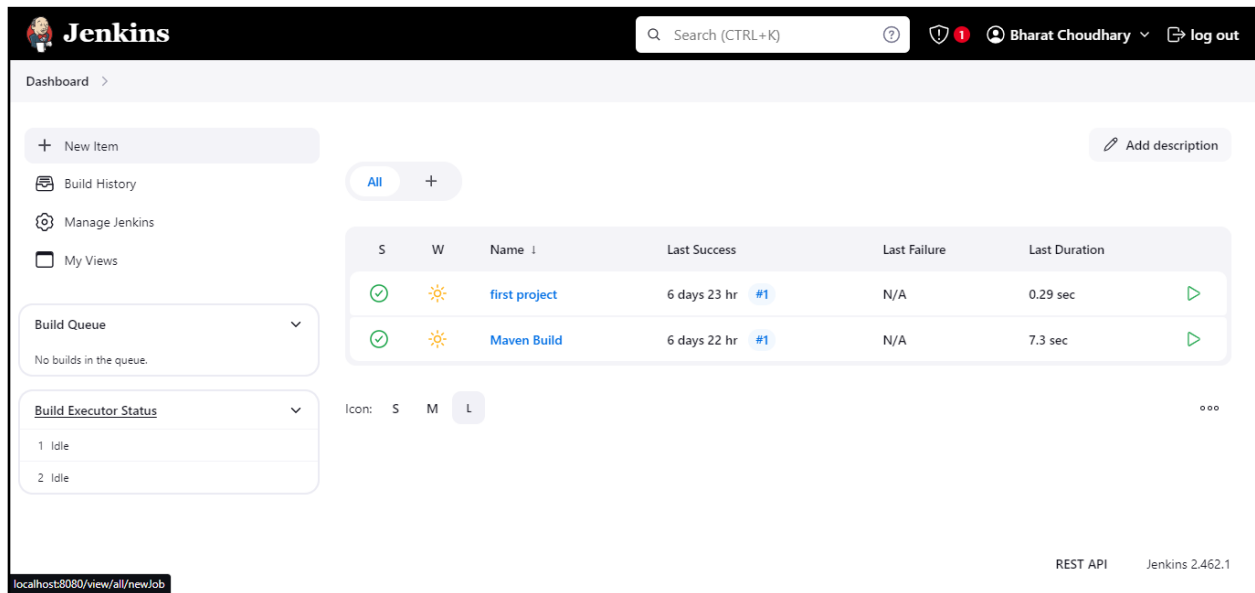


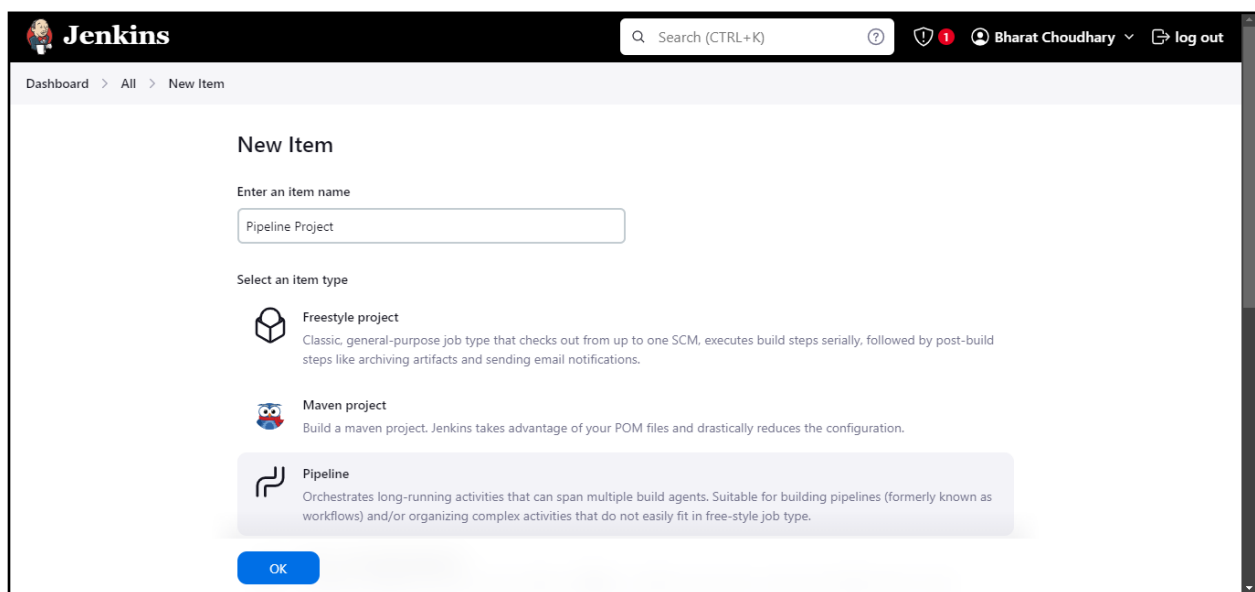
Experiment No. 5

Procedure :

Step 1 : Visit Jenkins dashboard.



Step 2 : Create new item, enter item name and select pipeline project.



Step 3 : In project configuration write the pipeline script, apply and save.

Dashboard > Pipeline Project > Configuration

Configure

- General
- Advanced Project Options
- Pipeline**

Definition: Pipeline script

Script ?

```
1 pipeline {  
2   agent any  
3  
4   stages {  
5     stage('Hello') {  
6       steps {  
7         echo 'Hello World'  
8       }  
9     }  
10  }  
11 }  
12
```

☒ Use Groovy Sandbox ?

[Pipeline Syntax](#)

Save Apply

Step 4 : Click build now.

Jenkins

Search (CTRL+K) Bharat Choudhary log out

Dashboard >

- New Item
- Build History
- Manage Jenkins
- My Views

Build Queue: No builds in the queue.

Build Executor Status: 1 Idle

S	W	Name	Last Failure	Last Duration
✓	☀	first project	N/A	0.29 sec
✓	☀	Maven Build	N/A	7.3 sec
☹	☀	Pipeline Project	N/A	N/A

- </> Changes
- ▶ Build Now**
- ⚙ Configure
- 🗑 Delete Pipeline
- 📁 Stages
- ✏ Rename
- 🔍 Pipeline Syntax

Step 5 : Build is successful.

Jenkins

Search (CTRL+K) Bharat Choudhary log out

Dashboard >

- New Item
- Build History
- Manage Jenkins
- My Views

Build Queue: No builds in the queue.

Build Executor Status: 1 Idle

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀	first project	6 days 23 hr #1	N/A	0.29 sec
✓	☀	Maven Build	6 days 22 hr #1	N/A	7.3 sec
✓	☀	Pipeline Project	2.4 sec #1	N/A	2.1 sec

Icon: S M L

Step 6 : Click console output.

The screenshot shows the Jenkins Dashboard. On the left, there are sections for 'My Views', 'Build Queue' (empty), and 'Build Executor Status' (2 idle). The main table lists builds for 'first project', 'Maven Build', and 'Pipeline Project'. A dropdown menu is open for 'Pipeline Project' build #1, showing options like 'Changes', 'Console Output', 'Edit Build Information', etc. The 'Console Output' option is highlighted. The bottom status bar shows 'localhost:8080/job/Pipeline Project/lastSuccessfulBuild/console'.

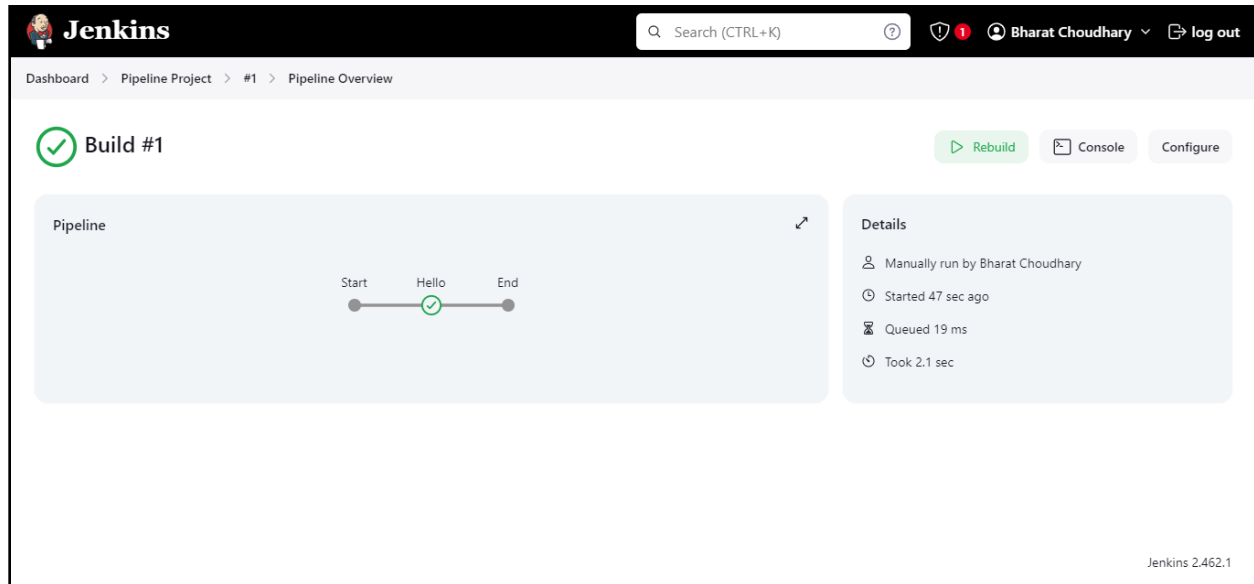
S	W	Name	Last Success	Last Failure	Last Duration
✓	☀	first project	6 days 23 hr #1	N/A	0.29 sec
✓	☀	Maven Build	6 days 22 hr #1	N/A	7.3 sec
✓	☀	Pipeline Project	22 sec #1	N/A	2.1 sec

Step 7 : Console output is visible.

The screenshot shows the Jenkins Console Output for 'Pipeline Project' build #1. The output text is as follows:

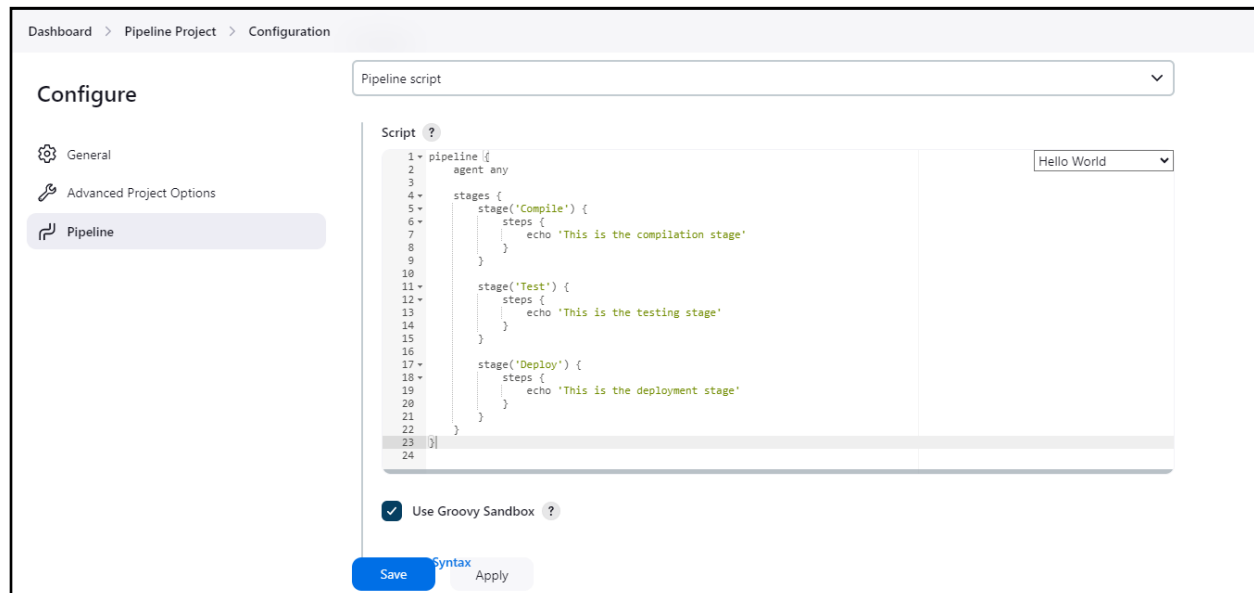
```
Started by user Bharat Choudhary
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in C:\ProgramData\Jenkins\.jenkins\workspace\Pipeline Project
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Hello)
[Pipeline] echo
Hello World
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

Step 8 : Pipeline overview.



The screenshot shows the Jenkins Pipeline Overview page for 'Build #1'. The page has a dark header with the Jenkins logo, a search bar, and user information. The breadcrumb trail is 'Dashboard > Pipeline Project > #1 > Pipeline Overview'. The main content area features a green checkmark icon and the text 'Build #1'. To the right are buttons for 'Rebuild', 'Console', and 'Configure'. Below this is a 'Pipeline' section with a visual representation of the pipeline stages: 'Start' (grey dot), 'Hello' (green dot with checkmark), and 'End' (grey dot). To the right of the pipeline is a 'Details' section with the following information: 'Manually run by Bharat Choudhary', 'Started 47 sec ago', 'Queued 19 ms', and 'Took 2.1 sec'. The bottom right corner of the page indicates 'Jenkins 2.462.1'.

Step 9 : Write a new script with compile, test, and deploy stages.



The screenshot shows the Jenkins Pipeline Configuration page. The breadcrumb trail is 'Dashboard > Pipeline Project > Configuration'. The left sidebar has a 'Configure' section with three tabs: 'General', 'Advanced Project Options', and 'Pipeline'. The 'Pipeline' tab is selected. The main content area has a 'Pipeline script' dropdown menu. Below it is a 'Script' section with a text area containing a Groovy script. The script defines a pipeline with three stages: 'Compile', 'Test', and 'Deploy'. Each stage has a single step that echoes a message. The script is as follows:

```
1 pipeline {  
2   agent any  
3  
4   stages {  
5     stage('Compile') {  
6       steps {  
7         echo 'This is the compilation stage'  
8       }  
9     }  
10  
11    stage('Test') {  
12      steps {  
13        echo 'This is the testing stage'  
14      }  
15    }  
16  
17    stage('Deploy') {  
18      steps {  
19        echo 'This is the deployment stage'  
20      }  
21    }  
22  }  
23 }  
24
```

Below the script text area is a checkbox labeled 'Use Groovy Sandbox' which is checked. At the bottom of the page are three buttons: 'Save', 'Syntax', and 'Apply'.

Step 10 : Check console output again.

The screenshot shows the Jenkins Dashboard. On the left, there's a sidebar with 'My Views' and two expandable sections: 'Build Queue' (showing 'No builds in the queue.') and 'Build Executor Status' (showing two idle executors). The main area displays a table of builds:

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀	first project	6 days 23 hr #1	N/A	0.29 sec
✓	☀	Maven Build	6 days 23 hr #1	N/A	7.3 sec
✓	☀	Pipeline Project	5.2 sec #2	N/A	0.81 sec

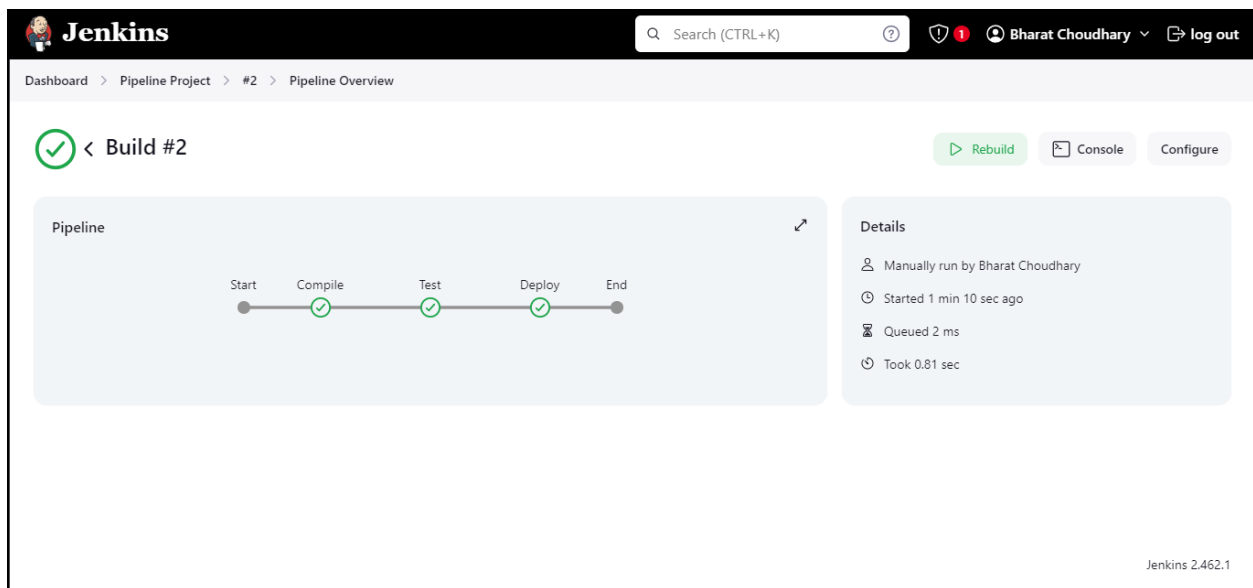
Below the table, there's a 'Pipeline Project' section with a dropdown menu open. The menu options are: Changes, Console Output (highlighted), Edit Build Information, Delete build '#2', Timings, Pipeline Overview, Pipeline Console, Restart from Stage, Replay, Pipeline Steps, and Workspaces. The status bar at the bottom shows 'localhost:8080/job/Pipeline Project/lastSuccessfulBuild/console'.

Step 11 : Console output is visible.

The screenshot shows the Jenkins Pipeline Project console output for build #2. The left sidebar contains navigation links: Edit Build Information, Delete build '#2', Timings, Pipeline Overview, Pipeline Console (selected), Restart from Stage, Replay, Pipeline Steps, Workspaces, and Previous Build. The main area displays the console output:

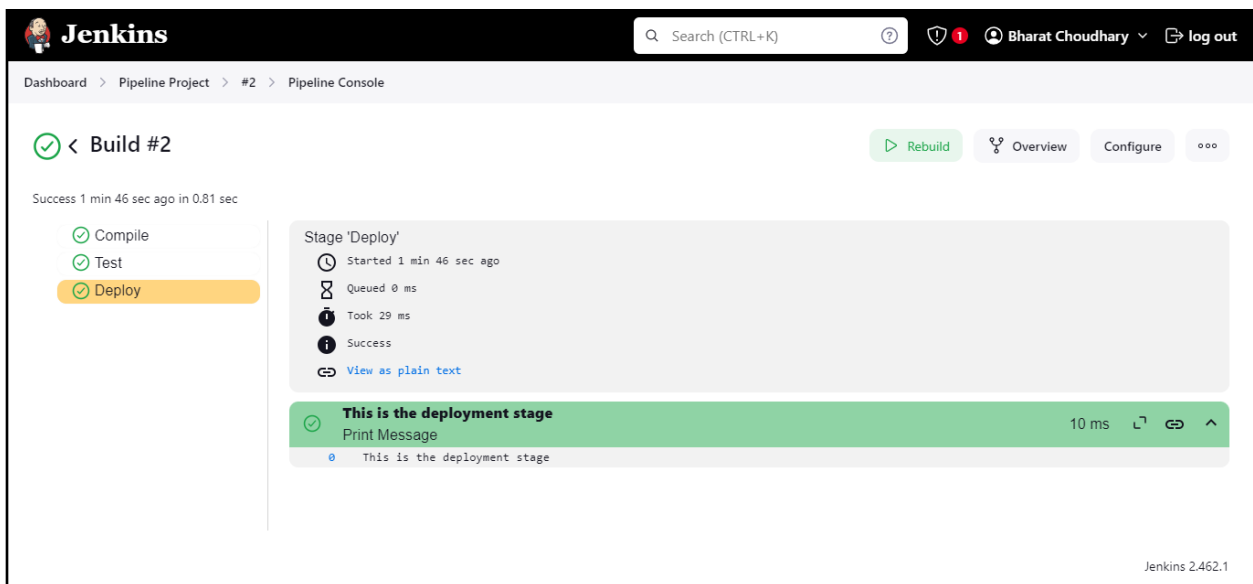
```
[Pipeline] node
Running on Jenkins in C:\ProgramData\Jenkins\jenkins\workspace\Pipeline Project
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Compile)
[Pipeline] echo
This is the compilation stage
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Test)
[Pipeline] echo
This is the testing stage
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deploy)
[Pipeline] echo
This is the deployment stage
[Pipeline] }
[Pipeline] // stage
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

Step 12 : Pipeline overview.



The screenshot shows the Jenkins Pipeline Overview page for Build #2. The top navigation bar includes the Jenkins logo, a search bar, and user information. The breadcrumb trail is Dashboard > Pipeline Project > #2 > Pipeline Overview. The main content area features a green checkmark icon and the text "< Build #2". To the right are buttons for Rebuild, Console, and Configure. The Pipeline section displays a horizontal flow diagram with stages: Start, Compile, Test, Deploy, and End. The Compile, Test, and Deploy stages are marked with green checkmarks. The Details section on the right provides information about the build: "Manually run by Bharat Choudhary", "Started 1 min 10 sec ago", "Queued 2 ms", and "Took 0.81 sec". The Jenkins version 2.462.1 is noted in the bottom right corner.

Step 13 : Stages can be seen.



The screenshot shows the Jenkins Pipeline Console page for Build #2. The top navigation bar is identical to the previous screenshot. The breadcrumb trail is Dashboard > Pipeline Project > #2 > Pipeline Console. The main content area features a green checkmark icon and the text "< Build #2". To the right are buttons for Rebuild, Overview, Configure, and a menu icon. The console output shows the build status: "Success 1 min 46 sec ago in 0.81 sec". On the left, a list of stages (Compile, Test, Deploy) is shown, with Deploy highlighted in orange. The main console area displays the details for the 'Deploy' stage, including its start time, duration, and success status. A specific step within the Deploy stage is highlighted in green, showing the command "Print Message" and its output "This is the deployment stage". The Jenkins version 2.462.1 is noted in the bottom right corner.