

St. Francis Institute of Technology, Mumbai-400 103
Department Of Information Technology

A.Y. 2024-2025

Class: TE-ITA/B, Semester: V

Subject: **DevOps Lab**

Experiment – 4: To understand Continuous Integration, install and configure Jenkins with Maven/Ant/Gradle to setup a build Job.

1. **Aim:** To understand Continuous Integration, install and configure Jenkins with Maven
2. **Objectives:** Aim of this experiment is that, the students will be able
 - To Integrate and deploy tools like Jenkins and Maven, which is used to build applications in DevOps environment
3. **Outcomes:** After study of this experiment, the students will be able
 - To understand the importance of Jenkins to Build and deploy Software Applications on server environment.
 - Learn about Jenkins (With Architecture)
 - To have introduction to Maven / Gradle / Ant
4. **Prerequisite:** Knowledge of software engineering concept of integration
5. **Requirements:** Jenkins, JDK, python, ANT, Personal Computer, Windows operating system, browser, Internet Connection, Microsoft Word.
6. **Pre-Experiment Exercise:**
Brief Theory: Refer shared material
7. **Laboratory Exercise**
 - A. **Procedure:**
 - a. **Answer the following:**
 - What is Jenkins?
 - Why use Jenkins?
 - b. **Execute following (Refer the shared material) and attach screenshots:**
 - Install Jenkins
 - Configure Jenkins with Maven and ANT
 - Build 4 basic projects in Jenkins
8. **Post-Experiments Exercise**
 - A. **Extended Theory:**
Nil
 - B. **Questions:**
 - What are the system requirements to install Jenkins?
 - Give some important plugins in Jenkins.
 - What is Maven and ANT?
 - C. **Conclusion:**
 - Write what was performed in the experiment.
 - Write the significance of the topic studied in the experiment.
 - D. **References:**
 - <https://jenkins.io/doc/>
 - <https://www.cloudbees.com/jenkins/what-is-jenkins>
 - <https://vmokshagroup.com/blog/what-is-jenkins/>
 - <https://www.infoworld.com/article/3239666/what-is-jenkins-the-ci-server-explained.html>
 - <https://hackr.io/blog/jenkins-interview-questions>

7. LABORATORY EXERCISE:

1) What is Jenkins?

Answer: Jenkins is an open-source automation server that facilitates the process of continuous integration and continuous delivery (CI/CD) in software development. Originally developed as Hudson, Jenkins is a Java-based tool that automates various tasks related to building, testing, and deploying software. Jenkins integrates with numerous version control systems, including Git, Subversion, and Mercurial, and can automate tasks across various platforms and environments.

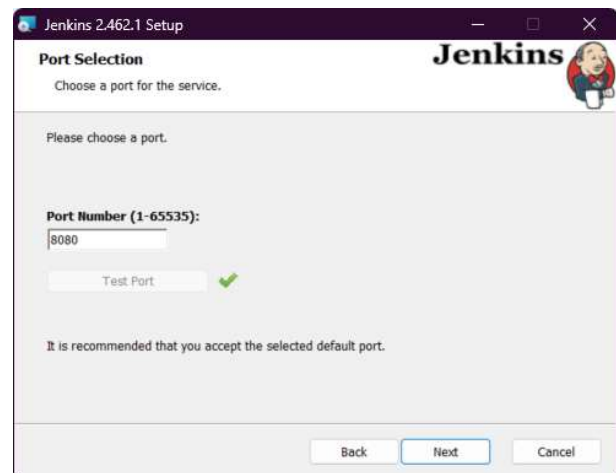
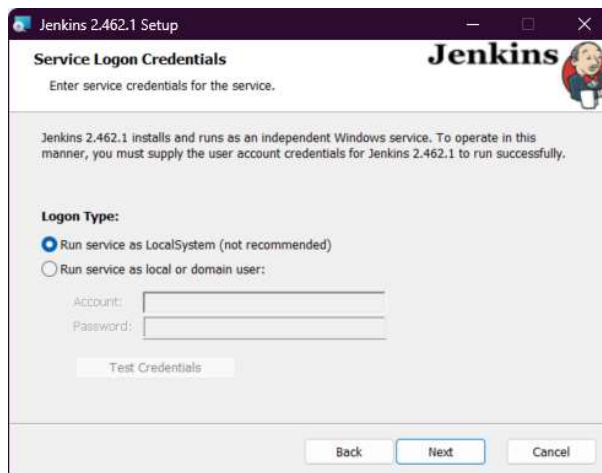
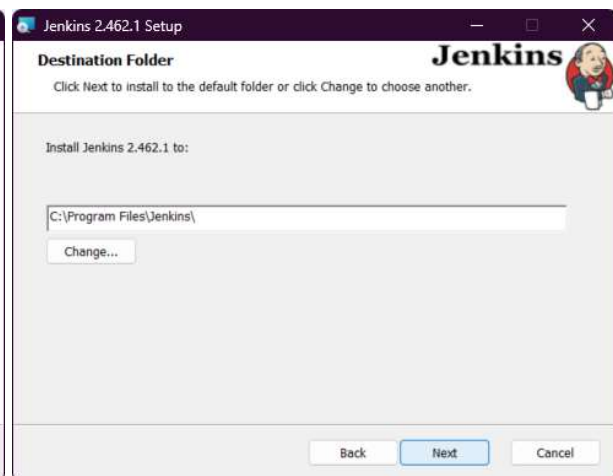
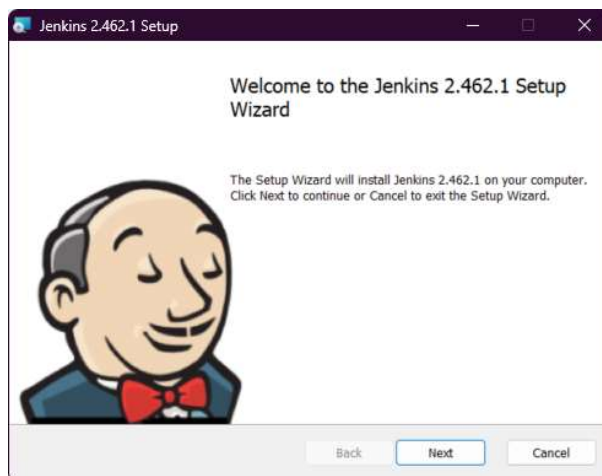
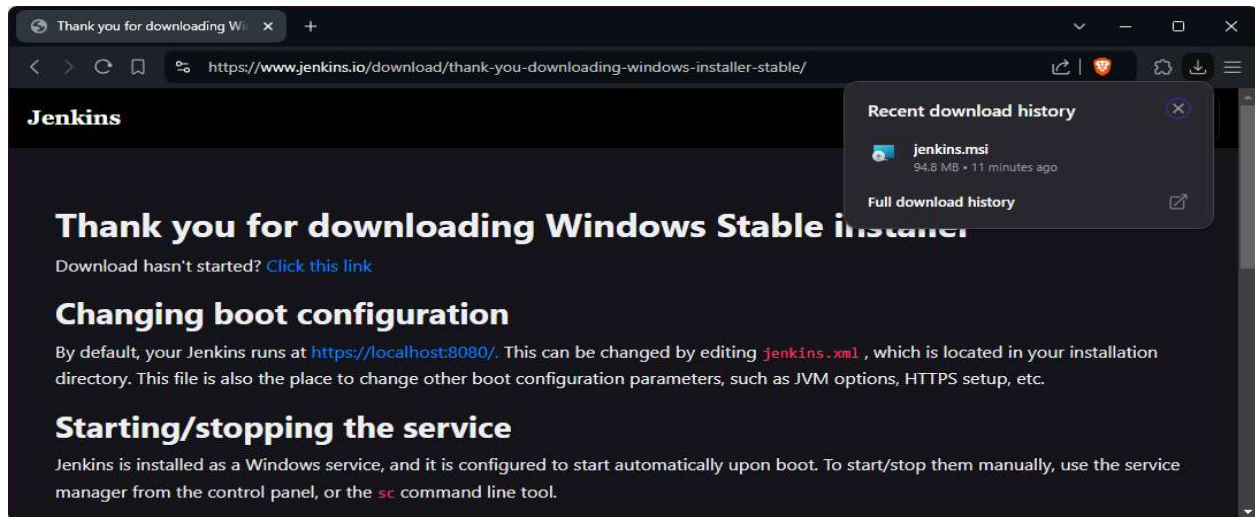
2) Why use Jenkins?

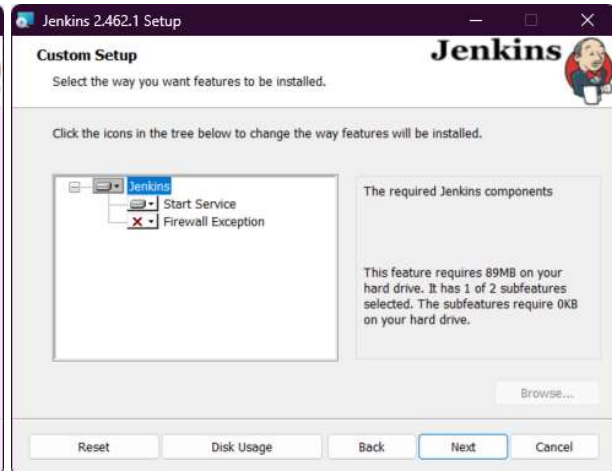
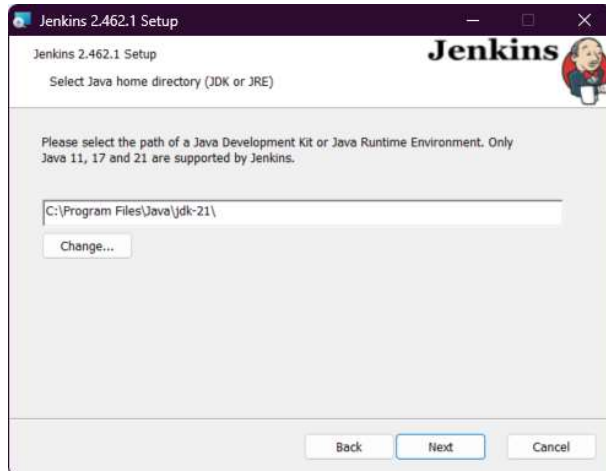
Answer:

- **Automation:** Jenkins automates tasks such as compiling code, running unit tests, and deploying applications. This reduces the risk of human error and saves time, allowing teams to focus on more complex and creative work.
- **Continuous Integration:** With Jenkins, every time a developer commits code to the repository, the system automatically triggers a build and test process. This ensures that any integration issues are detected and resolved quickly, maintaining the stability of the project.
- **Continuous Delivery:** Jenkins can be configured to automatically deploy software to different environments (e.g., staging, production) after successful tests. This speeds up the release cycle, ensuring that new features and bug fixes reach users faster.
- **Extensibility:** Jenkins has a vast ecosystem of plugins (over 1,500) that allow it to integrate with various tools, platforms, and technologies. Whether it's Docker, GitHub, or AWS, Jenkins can be customized to fit into almost any development pipeline.
- **Scalability:** Jenkins supports distributed builds, meaning tasks can be executed across multiple machines. This is particularly useful for large projects, as it can significantly reduce build times and manage more complex workflows.

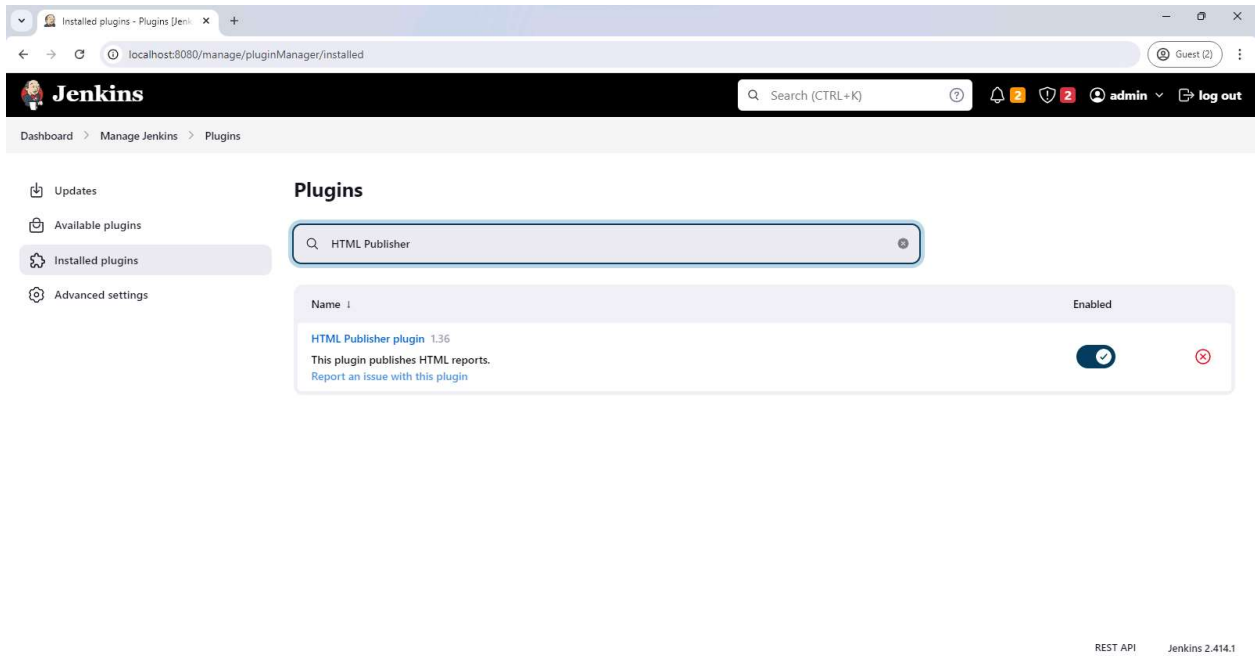
B. Execute following (Refer the shared material) and attach screenshots:

- Install Jenkins





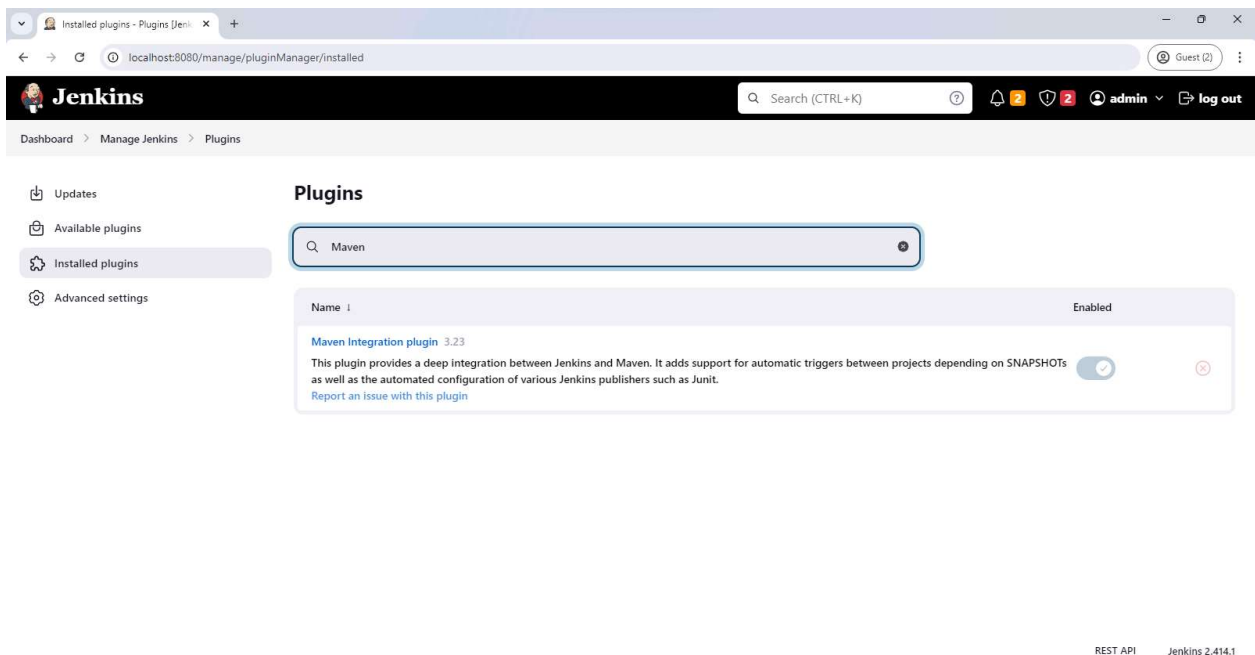
- **Configure Jenkins with Maven/Ant/Gradle - Global tool configuration, manage plugins**



The screenshot shows the Jenkins web interface at `localhost:8080/manage/pluginManager/installed`. The left sidebar contains links for Updates, Available plugins, Installed plugins (selected), and Advanced settings. The main content area is titled "Plugins" and features a search bar with "HTML Publisher" entered. Below the search bar, a table lists installed plugins. The first entry is "HTML Publisher plugin 1.36", which is described as publishing HTML reports and is currently enabled, indicated by a blue toggle switch. The bottom right corner of the interface shows "REST API" and "Jenkins 2.414.1".

Name	Enabled
HTML Publisher plugin 1.36 This plugin publishes HTML reports. Report an issue with this plugin	<input checked="" type="checkbox"/>

HTML Publisher



This screenshot shows the same Jenkins interface but with "Maven" entered in the search bar. The search results show the "Maven Integration plugin 3.23", which provides deep integration between Jenkins and Maven for automatic triggers and configuration. This plugin is also enabled, shown by a blue toggle switch. The bottom right corner displays "REST API" and "Jenkins 2.414.1".

Name	Enabled
Maven Integration plugin 3.23 This plugin provides a deep integration between Jenkins and Maven. It adds support for automatic triggers between projects depending on SNAPSHOTS as well as the automated configuration of various Jenkins publishers such as Junit. Report an issue with this plugin	<input checked="" type="checkbox"/>

Maven

Installed plugins - Plugins Jenkins

localhost:8080/manage/pluginManager/installed

Guest (2)

Jenkins

Search (CTRL+K)

admin log out

Dashboard > Manage Jenkins > Plugins

Updates

Available plugins

Installed plugins

Advanced settings

Plugins

Python

Name	Enabled
Pyenv Pipeline Plugin 2.1.2 Allows a Durable Task (sh or bat) to be executed within a Python virtualenv Report an issue with this plugin	<input checked="" type="checkbox"/>
Python Plugin 1.3 Adds the ability to execute python scripts as build steps. Report an issue with this plugin <div>This plugin is deprecated. In general, this means that it is either obsolete, no longer being developed, or may no longer work. Learn more.</div>	<input checked="" type="checkbox"/>
ShiningPanda Plugin 0.24 This plugin adds Python support to Jenkins with some useful builders (standard Python builder, virtualenv builder, ...) and the ability to use a Python axis in multi-configuration projects (for testing on multiple versions of Python). Report an issue with this plugin	<input checked="" type="checkbox"/>

Python

Installed plugins - Plugins Jenkins

localhost:8080/manage/pluginManager/installed

Guest (2)

Jenkins

Search (CTRL+K)

admin log out

Dashboard > Manage Jenkins > Plugins

Updates

Available plugins

Installed plugins

Advanced settings

Plugins

Selenium

Name	Enabled
Selenium Auto Exec Server(AES) plugin 0.5 This plugin is for continuous regression test by Selenium Auto Exec Server (AES). Report an issue with this plugin	<input checked="" type="checkbox"/>
Selenium Builder plugin 1.14 Jenkins plugin which invokes scripts using the Selenium Builder interpreter Report an issue with this plugin	<input checked="" type="checkbox"/>
Selenium Capability Axis 0.0.6 Axis for current capabilities of a Selenium Server Report an issue with this plugin	<input checked="" type="checkbox"/>
Selenium HTML report 1.1 This is a Jenkins plugin to visualize the results of Selenium tests Report an issue with this plugin	<input checked="" type="checkbox"/>
Selenium Plugin 3.141.59 Report an issue with this plugin <div>Warning: The currently installed plugin version may not be safe to use. Please review the following security notices:</div>	<input checked="" type="checkbox"/>

Selenium

Installed plugins - Plugins Jenkins

localhost:8080/manage/pluginManager/installed

Guest (2)

Jenkins

Search (CTRL+K)

admin log out

Dashboard > Manage Jenkins > Plugins

Updates

Available plugins

Installed plugins

Advanced settings

Plugins

Q Docker

Name	Enabled
Docker API Plugin 3.3.6-90.ve7c5c7535ddd This plugin provides docker-java API for other plugins. Report an issue with this plugin <div>This plugin is up for adoption! We are looking for new maintainers. Visit our Adopt a Plugin initiative for more information.</div>	<input checked="" type="checkbox"/>
Docker Commons Plugin 439.va_3cb_0a_6a_fb_29 Provides the common shared functionality for various Docker-related plugins. Report an issue with this plugin	<input checked="" type="checkbox"/> 439 va...
Docker Pipeline 580.vc0c340686b_54 Build and use Docker containers from pipelines. Report an issue with this plugin	<input checked="" type="checkbox"/> 580 vc...
Docker plugin 1.5 This plugin integrates Jenkins with Docker Report an issue with this plugin	<input checked="" type="checkbox"/> 1.5

Docker

Installed plugins - Plugins Jenkins

localhost:8080/manage/pluginManager/installed

Guest (2)

Jenkins

Search (CTRL+K)

admin log out

Dashboard > Manage Jenkins > Plugins

Updates

Available plugins

Installed plugins

Advanced settings

Plugins

Q Build Pipeline

Name	Enabled
Docker Pipeline 580.vc0c340686b_54 Build and use Docker containers from pipelines. Report an issue with this plugin	<input checked="" type="checkbox"/> 580 vc...
Pipeline: Build Step 540.vb_e8849e1a_b_d8 Adds the Pipeline step build to trigger builds of other jobs. Report an issue with this plugin	<input checked="" type="checkbox"/> 540 vb...
Pipeline: Multibranch 770.v1a_d0708dd1f6 Enhances Pipeline plugin to handle branches better by automatically grouping builds from different branches. Report an issue with this plugin	<input checked="" type="checkbox"/> 770 v1...
Pipeline: Stage Step 312.v8cd10304c27a_ Adds the Pipeline step stage to delineate portions of a build. Report an issue with this plugin	<input checked="" type="checkbox"/> 312 v8...
Pipeline: Step API 639.v6eca_cd8c04a_a_ API for asynchronous build step primitive. Report an issue with this plugin	<input checked="" type="checkbox"/>

Build Pipeline

Tools [jenkins] x +

localhost:8080/manage/configureTools/ Guest (2)

Dashboard > Manage Jenkins > Tools

JDK installations

JDK installations ^ Edited

Add JDK

JDK

Name

JDK

JAVA_HOME

C:\Program Files\Java\jdk-17

☐ Install automatically ?

Add JDK

Git installations

Save Apply

Setting JDK Path

Tools [jenkins] x +

localhost:8080/manage/configureTools/ Guest (2)

Dashboard > Manage Jenkins > Tools

Add JDK

Git installations

Git

Name

Git

Path to Git executable ?

C:\Program Files\Git\bin\git.exe

☐ Install automatically ?

Add Git

Gradle installations

Gradle installations v Edited

Save Apply

Setting Git Path

The screenshot shows the Jenkins 'Tools' configuration page for 'Gradle installations'. The breadcrumb trail is 'Dashboard > Manage Jenkins > Tools'. The page title is 'Gradle installations'. Below the title, there is a link 'Gradle installations ^' and a status 'Edited'. A dashed box contains the configuration form. At the top of the form is an 'Add Gradle' button. The form has a 'Gradle name' field with the value 'Gradle'. Below it is a checked checkbox 'Install automatically'. Underneath is a section titled 'Install from Gradle.org' with a 'Version' dropdown menu set to 'Gradle 8.9'. At the bottom of this section is an 'Add Installer' button. Below the dashed box is another 'Add Gradle' button. At the very bottom of the page are 'Save' and 'Apply' buttons.

Automatically installing Gradle

The screenshot shows the Jenkins 'Tools' configuration page for 'Ant installations'. The breadcrumb trail is 'Dashboard > Manage Jenkins > Tools'. The page title is 'Ant installations'. Below the title, there is a link 'Ant installations ^' and a status 'Edited'. A dashed box contains the configuration form. At the top of the form is an 'Add Ant' button. The form has an 'Ant Name' field with the value 'Ant'. Below it is a checked checkbox 'Install automatically'. Underneath is a section titled 'Install from Apache' with a 'Version' dropdown menu set to '1,10,14'. At the bottom of this section is an 'Add Installer' button. Below the dashed box is another 'Add Ant' button. At the very bottom of the page are 'Save' and 'Apply' buttons.

Automatically installing Ant

The screenshot shows the Jenkins 'Tools' configuration page for 'Maven installations'. The page has a breadcrumb trail: 'Dashboard > Manage Jenkins > Tools'. Below the title 'Maven installations', there is a link to 'Add Maven' and a status 'Edited'. A dashed box contains the configuration for a new Maven installation. Inside this box, the 'Name' field is set to 'Maven'. The 'Install automatically' checkbox is checked. Below this, there is a section titled 'Install from Apache' with a 'Version' dropdown menu set to '3.9.8'. At the bottom of the dashed box is an 'Add Installer' button. Below the dashed box is another 'Add Maven' button. At the very bottom of the page are 'Save' and 'Apply' buttons.

Automatically installing Maven

The screenshot shows the Jenkins 'Tools' configuration page for 'Python installations'. The page has a breadcrumb trail: 'Dashboard > Manage Jenkins > Tools'. Below the title 'Python installations', there is a link to 'Add Python' and a status 'Edited'. A dashed box contains the configuration for a new Python installation. Inside this box, the 'Name' field is set to 'Pythhon' (note the typo). The 'Home or executable' field is set to 'C:\Python311'. The 'Install automatically' checkbox is unchecked. Below the dashed box is another 'Add Python' button. At the very bottom of the page are 'Save' and 'Apply' buttons.

Setting the Python Path

- Build jobs in Jenkins

1. Freestyle project (Simple Windows batch command) – echo

The image shows two screenshots of the Jenkins web interface. The top screenshot is the 'New Item' page, where a new job named 'Vishal_EXP4.1' is being created. The 'Freestyle project' option is selected. The bottom screenshot is the 'Configure' page for the 'Vishal_EXP4.1' job. The 'General' tab is active, showing the job's description as 'Vishal Rajesh Mahajan Roll no 62 SEITA4'. The 'Enabled' checkbox is checked. The 'Commit agent's Docker container' checkbox is also checked. The 'Save' button is visible at the bottom.

Top Screenshot: New Item [Jenkins]

Enter an item name

Vishal_EXP4.1

Required field

Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

Pipeline
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

External Job
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system.

Multi-configuration project
Useful for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific etc.

Bottom Screenshot: Vishal_EXP4.1 Config [Jenkins]

Dashboard > Vishal_EXP4.1 > Configuration

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

General

Enabled ☒

Description

Vishal Rajesh Mahajan Roll no 62 SEITA4

Plain text [Preview](#)

☒ Commit agent's Docker container ?

☐ Define a Docker template

☐ Discard old builds ?

☐ GitHub project

☐ This project is parameterized ?

☐ Throttle builds ?

[Save](#) [Apply](#)

Vishal_EXP4.1 Config [Jenkins] x +

localhost:8080/job/Vishal_EXP4.1/configure

Guest (2)

Dashboard > Vishal_EXP4.1 > Configuration

Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps**
- Post-build Actions

Build Steps

Execute Windows batch command ?

Command

See the list of available environment variables

```
echo "VishalRahajan"
```

Advanced ▾

Add build step ▾

Post-build Actions

Add post-build action ▾

Save Apply

REST API Jenkins 2.414.1

Vishal_EXP4.1 #1 Console [Jenkins] x +

localhost:8080/job/Vishal_EXP4.1/1/console

Guest (2)

Jenkins Search (CTRL+K) admin log out

Dashboard > Vishal_EXP4.1 > #1 > Console Output

- Status
- Changes
- Console Output**
- View as plain text
- Edit Build Information
- Delete build '#1'

Console Output

```
Started by user admin
Running as SYSTEM
Building in workspace C:\ProgramData\Jenkins\jenkins\workspace\Vishal_EXP4.1
[Vishal_EXP4.1] $ cmd /c call C:\WINDOWS\TEMP\jenkins15407910776336233357.bat

C:\ProgramData\Jenkins\jenkins\workspace\Vishal_EXP4.1>echo "VishalRahajan"
"VishalRahajan"

C:\ProgramData\Jenkins\jenkins\workspace\Vishal_EXP4.1>exit 0
Finished: SUCCESS
```

REST API Jenkins 2.414.1

2. Freestyle parameterized project (Windows batch command) -string, Boolean and choice parameters with echo

The screenshot shows the Jenkins configuration page for a project named 'Vishal_EXP4.2'. The 'General' tab is selected in the left sidebar. The 'Description' field contains the text: 'This is Second Project of Vishal Rajesh Mahajan TEITA4 Roll no 62'. Below the description, there are several checkboxes: 'Commit agent's Docker container', 'Define a Docker template', 'Discard old builds', 'GitHub project', and 'This project is parameterized'. The 'This project is parameterized' checkbox is checked. Below this, there is a section for 'String Parameter' with a red 'x' icon in the top right corner. At the bottom, there are 'Save' and 'Apply' buttons.

This screenshot shows the configuration for a 'String Parameter' in the Jenkins project. The 'String Parameter' section is expanded, showing fields for 'Name' (containing 'FName'), 'Default Value' (empty), and 'Description' (containing 'Enter Your First Name'). There is a 'Plain text' link and a 'Preview' link below the description. A 'Trim the string' checkbox is also present. At the bottom, there are 'Save' and 'Apply' buttons.

Vishal_EXP4.2 Config [Jenkins]

DevOps EXP 4 Output - Google

localhost:8080/job/Vishal_EXP4.2/configure

Guest (2)

Dashboard > Vishal_EXP4.2 > Configuration

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

String Parameter

Name

LName

Default Value

Description

Enter your Last Name

Plain text

Preview

☐ Trim the string

Boolean Parameter

Name

IsStudent

Save

Apply

Vishal_EXP4.2 Config [Jenkins]

DevOps EXP 4 Output - Google

localhost:8080/job/Vishal_EXP4.2/configure

Guest (2)

Dashboard > Vishal_EXP4.2 > Configuration

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Boolean Parameter

Name

IsStudent

☒ Set by Default

Description

Are you a student?

Plain text

Preview

Delete

Choice Parameter

Name

State

Choices

Maharashtra

Gujrat

Save

Apply

Vishal_EXP4.2 Config [Jenkins] x DevOps EXP 4 Output - Google x +

localhost:8080/job/Vishal_EXP4.2/configure

Dashboard > Vishal_EXP4.2 > Configuration

Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps
- Post-build Actions

Choice Parameter ?

Name ?

State

Choices ?

Maharashtra
Gujrat
Tamil Nadu
Kerala

Description ?

Where do you belong ?

Plain text [Preview](#)

[Add Parameter](#)

☐ Throttle builds ?

[Save](#) [Apply](#)

Vishal_EXP4.2 Config [Jenkins] x DevOps EXP 4 Output - Google x +

localhost:8080/job/Vishal_EXP4.2/configure

Dashboard > Vishal_EXP4.2 > Configuration

Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps
- Post-build Actions

Build Steps

Execute Windows batch command ?

Command

See [the list of available environment variables](#)

```
echo "Your First name is %FirstName%"  
echo "Your Last name is %LastName%"  
echo "Are you a student? %isStudent%"  
echo "You Belong to %State%"
```

[Advanced](#)

[Add build step](#)

Post-build Actions

[Add post-build action](#)

[Save](#) [Apply](#)

REST API Jenkins 2.414.1

Jenkins

DevOps EXP 4 Output - Google

localhost:8080/job/Vishal_EXP4.2/build?delay=0sec

Guest (2)

Dashboard > Vishal_EXP4.2

Status

Changes

Workspace

Build with Parameters

Configure

Delete Project

Rename

Build History trend

No builds

Atom feed for all Atom feed for failures

Project Vishal_EXP4.2

This build requires parameters:

FName
Enter Your First Name
Vishal

LName
Enter your Last Name
Mahajan

IsStudent
Are you a student?
☒

State
Where do you belong ?
Maharashtra

Build Cancel

Jenkins 2.414.1

Vishal_EXP4.2 #1 Console [Jen]

DevOps EXP 4 Output - Google

localhost:8080/job/Vishal_EXP4.2/1/console

Guest (2)

Jenkins

Search (CTRL+K)

admin log out

Dashboard > Vishal_EXP4.2 > #1 > Console Output

Status

Changes

Console Output

View as plain text

Edit Build Information

Delete build '#1'

Parameters

Console Output

```
Started by user admin
Running as SYSTEM
Building in workspace C:\ProgramData\Jenkins\jenkins\workspace\Vishal_EXP4.2
[Vishal_EXP4.2] $ cmd /c call C:\WINDOWS\TEMP\jenkins19023978792165297.bat

C:\ProgramData\Jenkins\jenkins\workspace\Vishal_EXP4.2>echo "Your First name is Vishal"
"Your First name is Vishal"

C:\ProgramData\Jenkins\jenkins\workspace\Vishal_EXP4.2>echo "Your Last name is Mahajan"
"Your Last name is Mahajan"

C:\ProgramData\Jenkins\jenkins\workspace\Vishal_EXP4.2>echo "Are you a student? true"
"Are you a student? true"

C:\ProgramData\Jenkins\jenkins\workspace\Vishal_EXP4.2>echo "You Belong to Maharashtra"
"You Belong to Maharashtra"

C:\ProgramData\Jenkins\jenkins\workspace\Vishal_EXP4.2>exit 0
Finished: SUCCESS
```

REST API Jenkins 2.414.1

3. Java freestyle project -Hello world

The image displays two screenshots of the Jenkins web interface, specifically the configuration page for a job named 'Vishal_EXP4.3'.

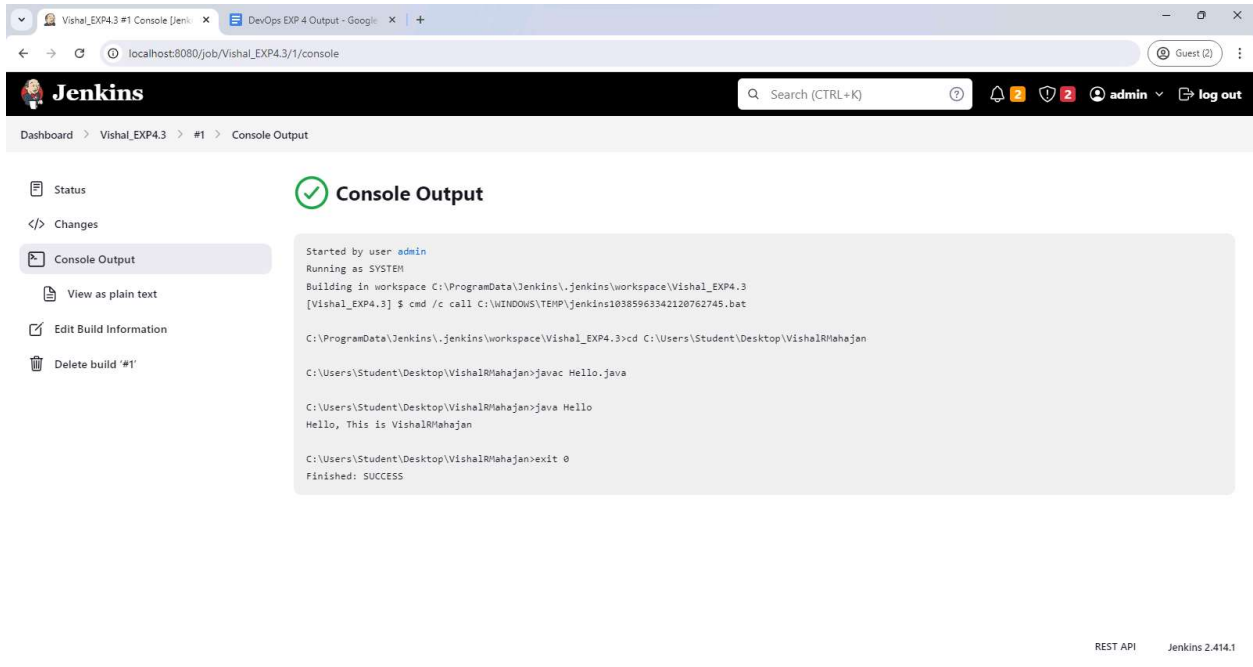
Top Screenshot (General Tab):

- Page Header:** Jenkins logo, search bar (Search (CTRL+K)), and user information (admin, log out).
- Breadcrumbs:** Dashboard > Vishal_EXP4.3 > Configuration
- Left Sidebar (Configure):**
 - General (selected)
 - Source Code Management
 - Build Triggers
 - Build Environment
 - Build Steps
 - Post-build Actions
- General Tab Content:**
 - Description:** This is Third demo project of Vishal Rajesh Mahajan from TE IT A 4 Roll no 62
 - Plain text:** [Preview](#)
 - Checkboxes:**
 - ☐ Commit agent's Docker container ?
 - ☐ Define a Docker template
 - ☐ Discard old builds ?
 - ☐ GitHub project
 - ☐ This project is parameterized ?
 - ☐ Throttle builds ?
 - Buttons:** Save, Apply

Bottom Screenshot (Build Steps Tab):

- Page Header:** Same as the top screenshot.
- Breadcrumbs:** Dashboard > Vishal_EXP4.3 > Configuration
- Left Sidebar (Configure):**
 - General
 - Source Code Management
 - Build Triggers
 - Build Environment (selected)
 - Build Steps
 - Post-build Actions
- Build Steps Tab Content:**
 - Checkboxes:**
 - ☐ Create Selenium RC instance ?
 - ☐ Inspect build log for published build scans
 - ☐ Terminate a build if it's stuck
 - ☐ With Ant ?
 - Build Steps:**
 - Execute Windows batch command ?**
 - Command:** See [the list of available environment variables](#)

```
cd C:\Users\Student\Desktop\VishalRajMahajan
javac Hello.java
java Hello
```
 - Advanced:** (dropdown)
 - Add build step:** (button)
 - Buttons:** Save, Apply

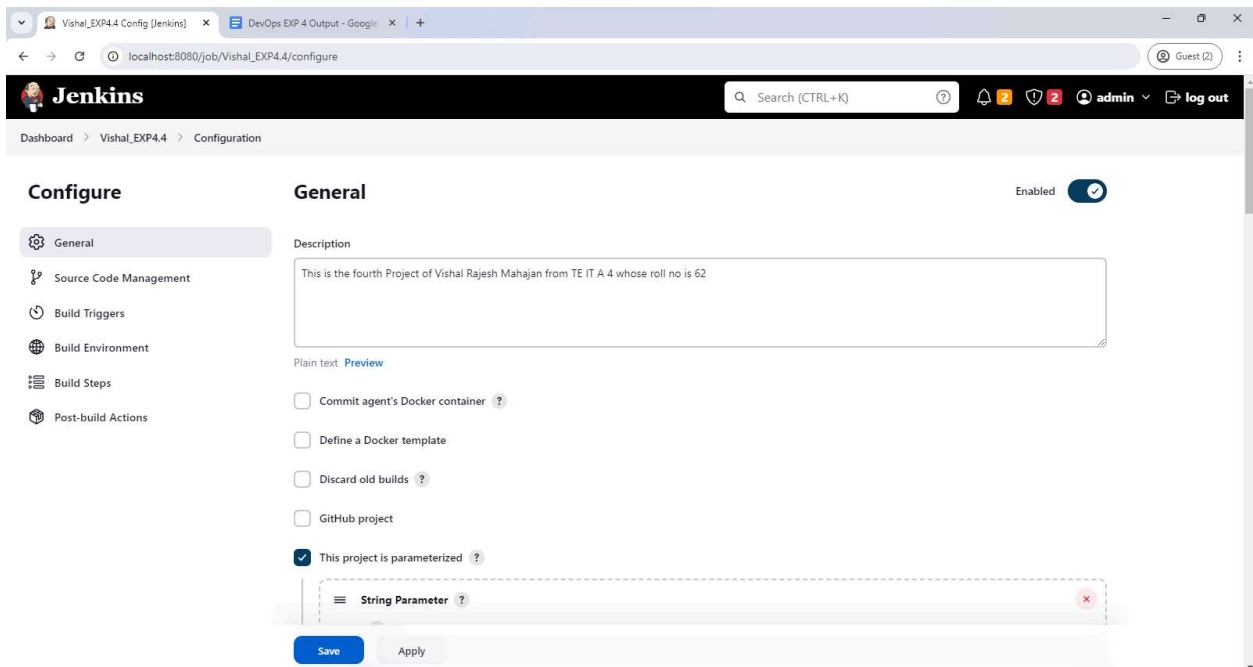


The screenshot shows the Jenkins web interface for the job 'Vishal_EXP4.3'. The 'Console Output' tab is selected, displaying a green checkmark icon and the text 'Console Output'. The output shows the build was started by user 'admin', running as 'SYSTEM'. The workspace is 'C:\ProgramData\Jenkins\jenkins\workspace\Vishal_EXP4.3'. The build script executed is 'cmd /c call C:\WINDOWS\TEMP\jenkins10385963342120762745.bat'. The script changes the directory to 'C:\Users\Student\Desktop\VishalRMahajan' and runs 'javac Hello.java'. The output of the compilation is 'C:\Users\Student\Desktop\VishalRMahajan>java Hello' and 'Hello, This is VishalRMahajan'. The build finished successfully.

Dashboard > Vishal_EXP4.3 > #1 > Console Output

REST API Jenkins 2.414.1

4. Java freestyle project (parameterized) - 2 String parameter



The screenshot shows the Jenkins web interface for the job 'Vishal_EXP4.4' in the 'Configuration' page. The 'General' tab is selected. The 'Description' field contains the text 'This is the fourth Project of Vishal Rajesh Mahajan from TE IT A 4 whose roll no is 62'. The 'Plain text' option is selected. The 'Commit agent's Docker container' checkbox is unchecked. The 'Define a Docker template' checkbox is unchecked. The 'Discard old builds' checkbox is unchecked. The 'GitHub project' checkbox is unchecked. The 'This project is parameterized' checkbox is checked. A 'String Parameter' is added to the configuration. The 'Save' button is highlighted.

Dashboard > Vishal_EXP4.4 > Configuration

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

General

Enabled

Description

This is the fourth Project of Vishal Rajesh Mahajan from TE IT A 4 whose roll no is 62

Plain text Preview

☐ Commit agent's Docker container

☐ Define a Docker template

☐ Discard old builds

☐ GitHub project

☒ This project is parameterized

String Parameter

Save Apply

Vishal_EXP4.4 Config [Jenkins]

DevOps EXP 4 Output - Google

localhost:8080/job/Vishal_EXP4.4/configure

Guest (2)

Dashboard > Vishal_EXP4.4 > Configuration

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

☐ GitHub project

☒ This project is parameterized ?

String Parameter ?

Name ?

FName

Default Value ?

Description ?

Enter your First Name:

Plain text Preview

☐ Trim the string ?

String Parameter ?

Name ?

Default Value ?

Description ?

Plain text Preview

☐ Trim the string ?

Save

Apply

Vishal_EXP4.4 Config [Jenkins]

DevOps EXP 4 Output - Google

localhost:8080/job/Vishal_EXP4.4/configure

Guest (2)

Dashboard > Vishal_EXP4.4 > Configuration

Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

☐ Trim the string ?

String Parameter ?

Name ?

LName

Default Value ?

Description ?

Enter Your Last Name:

Plain text Preview

☐ Trim the string ?

Add Parameter

Save

Apply

Vishal_EXP4.4 Config [Jenkins] x DevOps EXP 4 Output - Google x +

localhost:8080/job/Vishal_EXP4.4/configure

Dashboard > Vishal_EXP4.4 > Configuration

Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps**
- Post-build Actions

Build Steps

Execute Windows batch command ?

Command

See the list of available environment variables

```
cd C:\Users\Student\Desktop\VishalRMahajan
javac program4.java
java program4 %FileName% %UserName%
```

Advanced ▾

Add build step ▾

Post-build Actions

Add post-build action ▾

Save Apply

REST API Jenkins 2.414.1

Jenkins x DevOps EXP 4 Output - Google x +

localhost:8080/job/Vishal_EXP4.4/build?delay=0sec

Guest (2)

Jenkins

Search (CTRL+K)

admin log out

Dashboard > Vishal_EXP4.4 >

- Status
- Changes
- Workspace
- Build with Parameters
- Configure**
- Delete Project
- Rename

Project Vishal_EXP4.4

This build requires parameters:

FName
Enter your First Name:
Vishal

LName
Enter Your Last Name:
Mahajan

Build Cancel

Build History

trend ▾

Filter builds... /

Aug 6, 2024, 12:04 PM

Atom feed for all Atom feed for failures

Jenkins 2.414.1

Vishal_EXP4.4 #2 Console [Jenki...DevOps EXP 4 Output - Google...+localhost:8080/job/Vishal_EXP4.4/2/consoleGuest (2)

Jenkins

Search (CTRL+K)

admin log out

Dashboard > Vishal_EXP4.4 > #2 > Console Output

Status

Changes

Console Output

View as plain text

Edit Build Information

Delete build '#2'

Parameters

Console Output

Started by user admin
Running as SYSTEM
Building in workspace C:\ProgramData\Jenkins\jenkins\workspace\Vishal_EXP4.4
[Vishal_EXP4.4] \$ cmd /c call C:\WINDOWS\TEMP\jenkins15402995517822099628.bat

C:\ProgramData\Jenkins\jenkins\workspace\Vishal_EXP4.4>cd C:\Users\Student\Desktop\VishalMahajan

C:\Users\Student\Desktop\VishalMahajan>javac program4.java

C:\Users\Student\Desktop\VishalMahajan>java program4 Vishal Mahajan
Your first name is Vishal
Your Last name is Mahajan

C:\Users\Student\Desktop\VishalMahajan>exit 0
Finished: SUCCESS

localhost:8080/job/Vishal_EXP4.4/2/consoleTextREST APIJenkins 2.414.1