

**Ex: No: 6**

## **SIMPLE GRADLE APPLICATION**

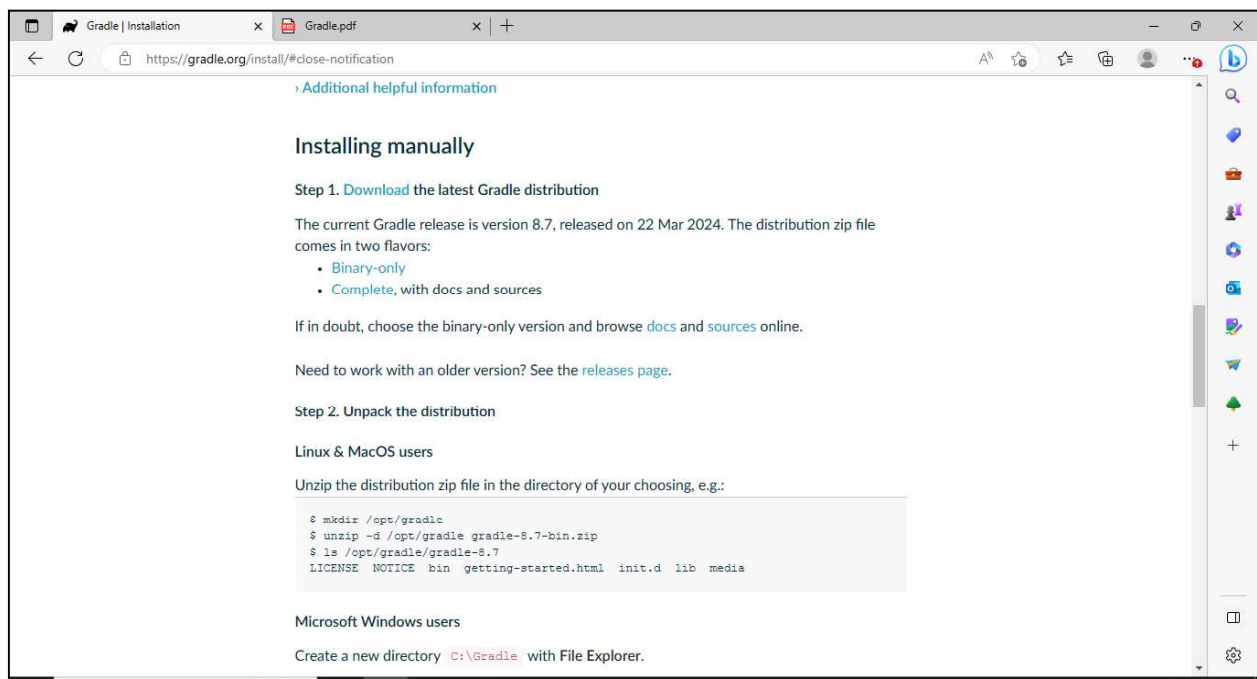
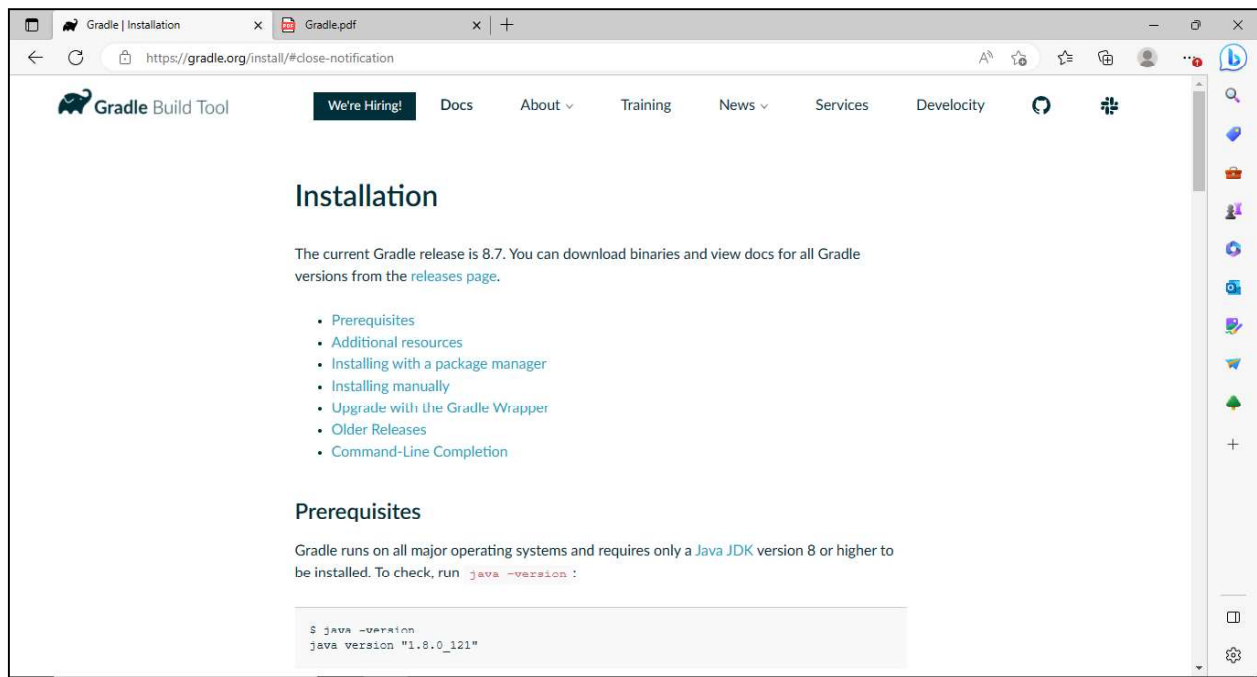
**DATE :**

**AIM:**

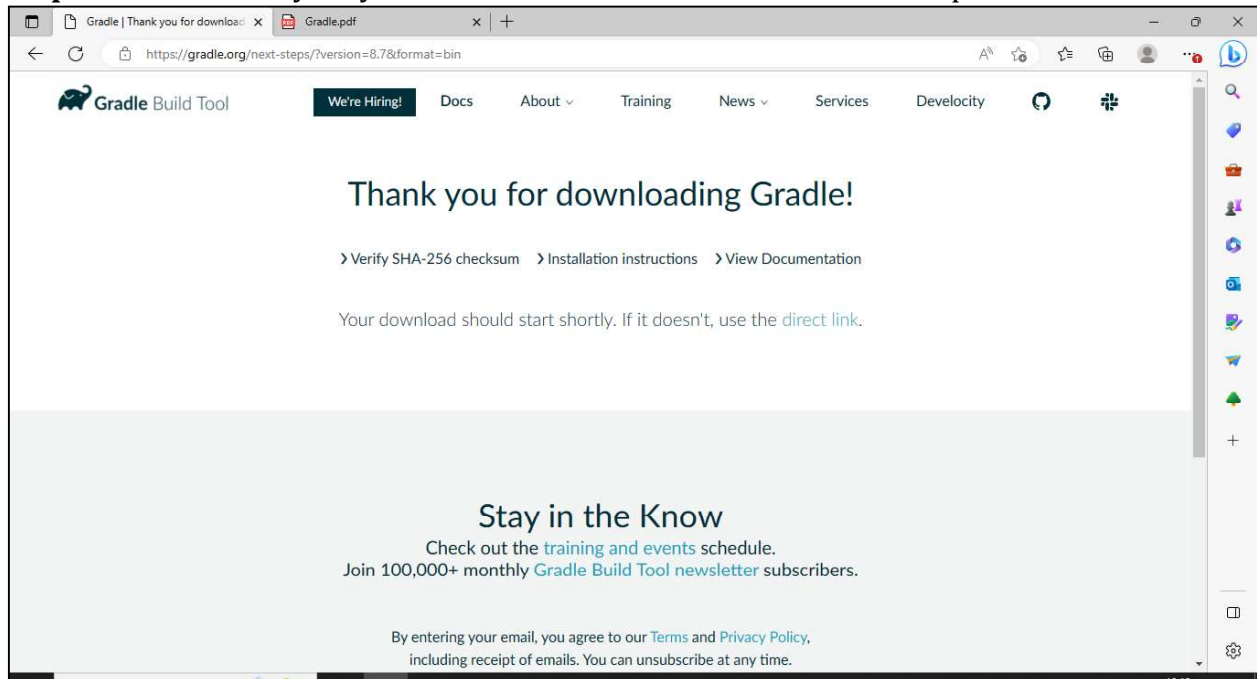
To develop a simple application using Gradle.

**PROCEDURE:**

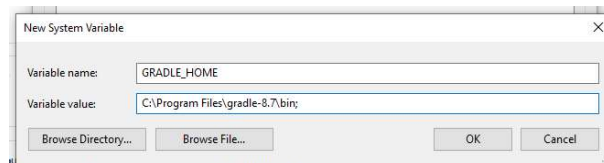
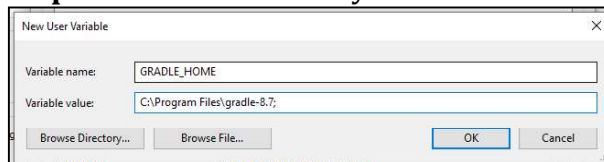
**Step 1:** Download and install the latest Gradle distribution.



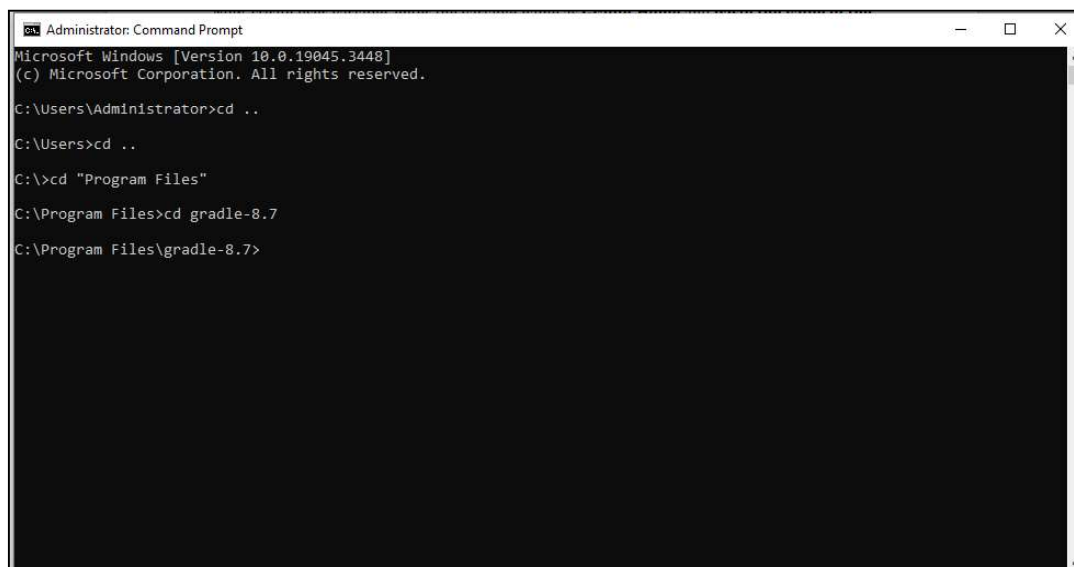
## Step 2: Choose Binary only distribution which would start download process.



## Step 3: Set the user and system environment variable as shown below.

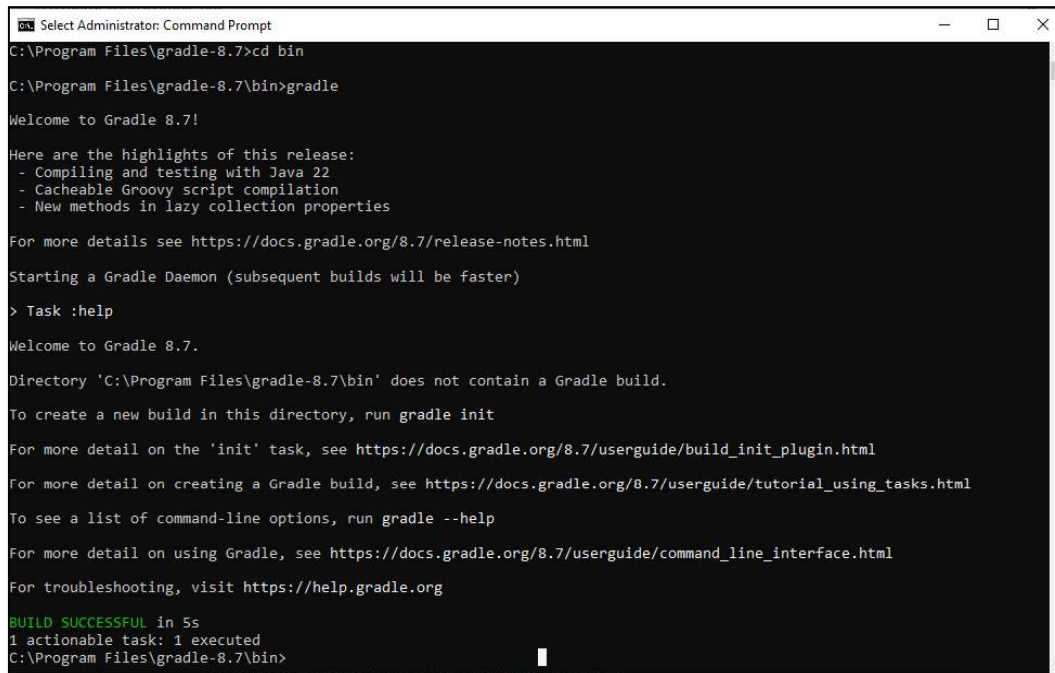


## Step 4: Open the Command Prompt and change the path to where the gradle is located.



**Step 5:** Execute the commands as shown below.

C:\Program Files\gradle-8.7\bin> gradle - will display version and initialized for developing application.



```
Select Administrator: Command Prompt
C:\Program Files\gradle-8.7>cd bin
C:\Program Files\gradle-8.7\bin>gradle

Welcome to Gradle 8.7!

Here are the highlights of this release:
- Compiling and testing with Java 22
- Cacheable Groovy script compilation
- New methods in lazy collection properties

For more details see https://docs.gradle.org/8.7/release-notes.html

Starting a Gradle Daemon (subsequent builds will be faster)

> Task :help

Welcome to Gradle 8.7.

Directory 'C:\Program Files\gradle-8.7\bin' does not contain a Gradle build.

To create a new build in this directory, run gradle init

For more detail on the 'init' task, see https://docs.gradle.org/8.7/userguide/build_init_plugin.html
For more detail on creating a Gradle build, see https://docs.gradle.org/8.7/userguide/tutorial_using_tasks.html
To see a list of command-line options, run gradle --help
For more detail on using Gradle, see https://docs.gradle.org/8.7/userguide/command_line_interface.html
For troubleshooting, visit https://help.gradle.org

BUILD SUCCESSFUL in 5s
1 actionable task: 1 executed
C:\Program Files\gradle-8.7\bin>
```

C:\Program Files\gradle-8.7\bin>gradle -version

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Gradle 8.7  
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Build time: 2024-03-22 15:52:46 UTC

Revision: 650af14d7653aa949fce5e886e685efc9cf97c10

Kotlin: 1.9.22

Groovy: 3.0.17

Ant: Apache Ant(TM) version 1.10.13 compiled on January 4 2023

JVM: 20.0.2 (Oracle Corporation 20.0.2+9-78)

OS: Windows 10 10.0 amd64

C:\Program Files\gradle-8.7\bin>gradle init

Select type of build to generate:

1: Application

2: Library

3: Gradle plugin

4: Basic (build structure only)

Enter selection (default: Application) [1..4] 1

Select implementation language:

- 1: Java
- 2: Kotlin
- 3: Groovy
- 4: Scala
- 5: C++
- 6: Swift

Enter selection (default: Java) [1..6] 1

Enter target Java version (min: 7, default: 21): 21

Project name (default: bin): javaappln

Select application structure:

- 1: Single application project
- 2: Application and library project

Enter selection (default: Single application project) [1..2] 1

Select build script DSL:

- 1: Kotlin
- 2: Groovy

Enter selection (default: Kotlin) [1..2] 1

Select test framework:

- 1: JUnit 4
- 2: TestNG
- 3: Spock
- 4: JUnit Jupiter

Enter selection (default: JUnit Jupiter) [1..4] 1

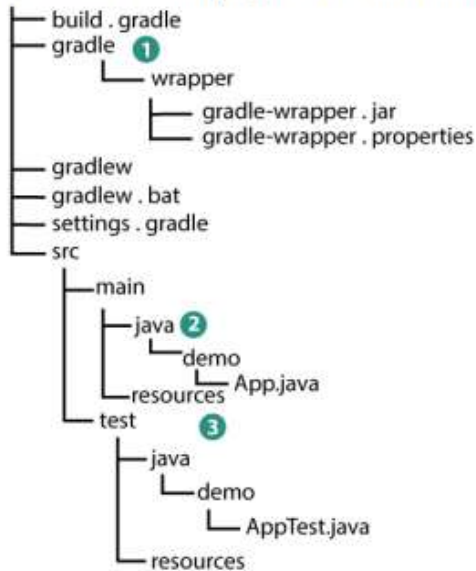
Generate build using new APIs and behavior (some features may change in the next minor release)? (default: no) [yes, no] yes

Step7: Enter the project name; by default, it will take the directory name as the project name.

Step8: Enter the source package; by default, it will take the directory name as a source package.

Now the init task is successfully executed, and we have created a Java application using Gradle Init API.

It creates a Gradle project with the following structure:



1. A generated wrapper package that contains the wrapper files.
2. Default Java Source folder
3. Default Java test folder

To execute a gradle build, run the build task along with gradlew command.

C:\Program Files\gradle-8.7\bin\java\_application>gradlew build

The build task compiles the classes, runs the tests, and creates the test reports.

First, use the task command to display the added tasks by the plugin:

C:\Program Files\gradle-8.7\bin\java\_application>gradlew tasks

Now, run the application by using the run command.

C:\Program Files\gradle-8.7\bin\java\_application>gradlew run

### Output:(Command Prompt)

> Task : run

Hello world.

BUILD SUCCESSFUL in 3s.

### RESULT:

Thus, the simple Java application is developed using Gradle.