

Set up for Java

Set up Development Prerequisites

Steps to be followed:

1. Installing the JDK 8
2. Installing the Eclipse IDE
3. Installing the Gradle
4. Linking the Gradle with the Eclipse IDE

Step 1: Installing the JDK 8

1.1 Java should be pre-installed in the lab. Use the following command to check the version:

java -version

```
@ip-172-31-73-193:~$ java -version
openjdk version "1.8.0_292"
OpenJDK Runtime Environment (build 1.8.0_292-8u292-b10-0ubuntu1~16.04.1-b10)
OpenJDK 64-Bit Server VM (build 25.292-b10, mixed mode)
@ip-172-31-73-193:~$
```

1.2 If Java is not installed, then run the following command to install **Open JDK 8**:

sudo apt update

sudo apt install openjdk-8-jdk

```
teerthivardhan@ip-172-31-66-219:~$ sudo apt update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu xenial-security InRelease
Hit:5 http://dl.google.com/linux/chrome/deb stable InRelease
Hit:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial InRelease
```

```
93 packages can be upgraded. Run 'apt list --upgradable' to see them.
keerthivardhank@ip-172-31-66-219:~$ sudo apt install openjdk-8-jdk
Reading package lists... Done
Building dependency tree
Reading state information... Done
openjdk-8-jdk is already the newest version (8u292-b10-0ubuntu1~16.04.1).
0 upgraded, 0 newly installed, 0 to remove and 57 not upgraded.
keerthivardhank@ip-172-31-66-219:~$
```

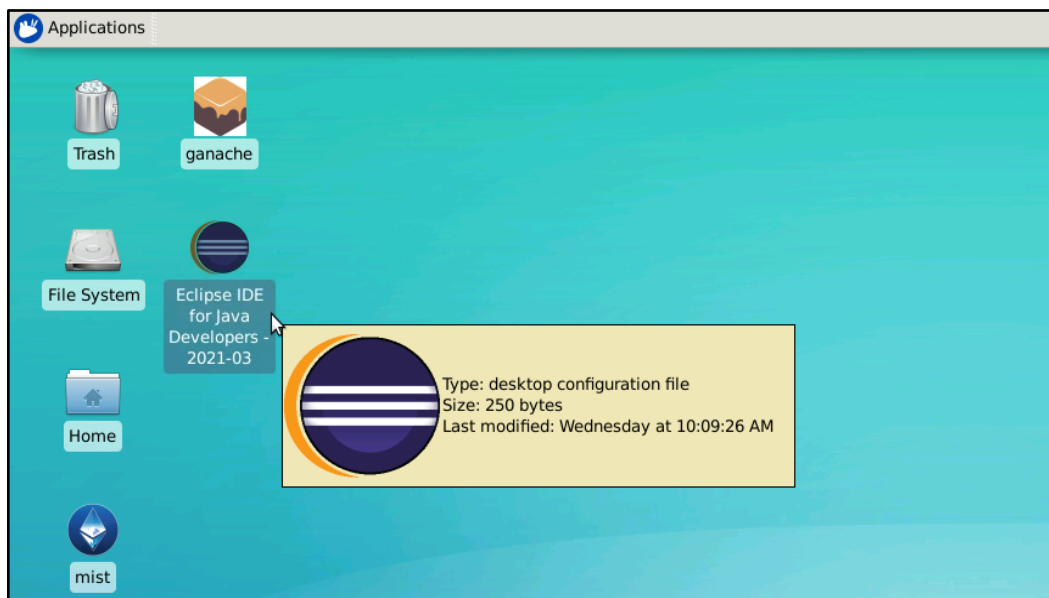
1.3 Run the command to verify the installation:

java -version

```
@ip-172-31-73-193:~$ java -version
openjdk version "1.8.0_292"
OpenJDK Runtime Environment (build 1.8.0_292-8u292-b10-0ubuntu1~16.04.1-b10)
OpenJDK 64-Bit Server VM (build 25.292-b10, mixed mode)
@ip-172-31-73-193:~$
```

Step 2: Installing the Eclipse IDE


2.1 Eclipse IDE should be pre-installed in the lab. Check for **Eclipse IDE** icon on the **Desktop** screen



2.2 If Eclipse IDE is not installed, then go to the following URL and download **Eclipse Installer**:

<https://www.eclipse.org/downloads/packages/installer>

eclipse.org/downloads/packages/installer

ProjectsWorking

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Eclipse Installer

The Eclipse Installer 2021-03 R now includes a JRE for macOS, Windows and Linux.

Try the Eclipse **Installer** 2021-03 R


The easiest way to install and update your Eclipse Development Environment.

677,782 Installer Downloads
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macOS **x86_64**
Windows **x86_64**
Linux **x86_64** | **AArch64**

eclipse.org/downloads/download.php?file=/oomph/epp/2021-03/R/eclipse-inst-jre-linux64.tar.gz

ProjectsWork

Home / Downloads / Eclipse downloads - Select a mirror

All downloads are provided under the terms and conditions of the [Eclipse Foundation Software User Agreement](#) unless otherwise specified.

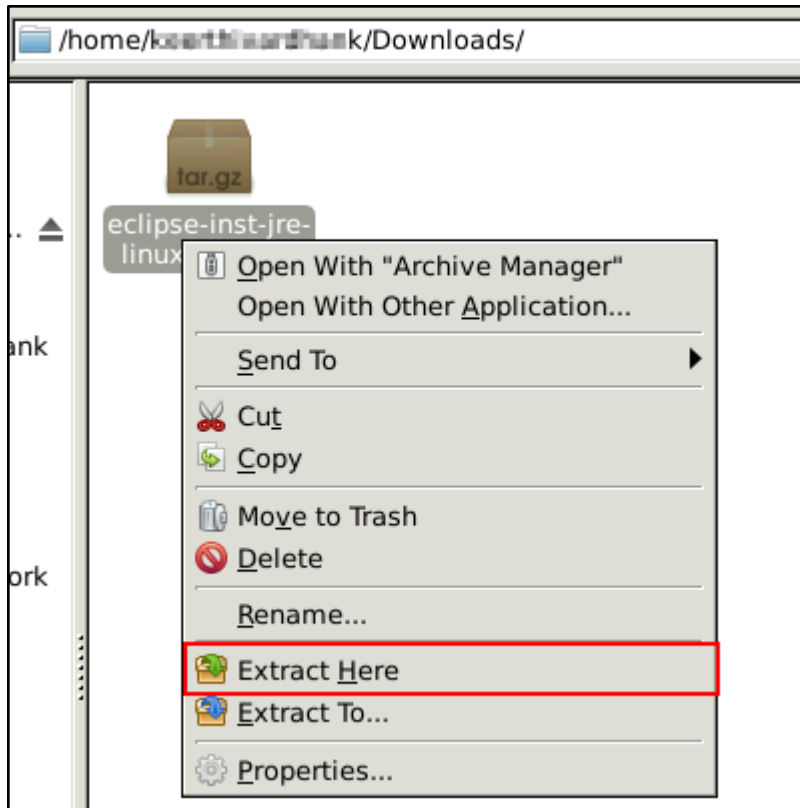
Download

Download from: United States - Jevin Canders (https)

File: [eclipse-inst-jre-linux64.tar.gz](#) SHA-512

>> [Select Another Mirror](#)

2.3 Extract the zip or rar file



2.4 Double-click on **eclipse-inst** file to start eclipse



2.5 Choose **Eclipse IDE for Java developers** option



Step 3: Installing the Gradle

3.1 Gradle should be pre-installed in the lab. Use the following command to check the version:

gradle -v

```
@ip-172-31-73-193:~$ gradle -version

-----
Gradle 7.0
-----

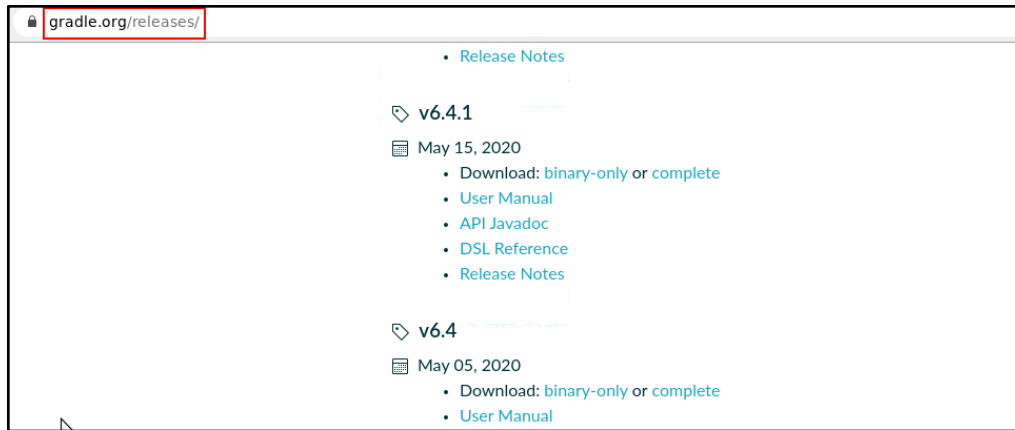
Build time:   2021-04-09 22:27:31 UTC
Revision:     d5661e3f0e07a8caff705f1badf79fb5df8022c4

Kotlin:       1.4.31
Groovy:       3.0.7
Ant:          Apache Ant(TM) version 1.10.9 compiled on September 27 2020
JVM:          1.8.0_292 (Private Build 25.292-b10)
OS:           Linux 4.4.0-1128-aws amd64

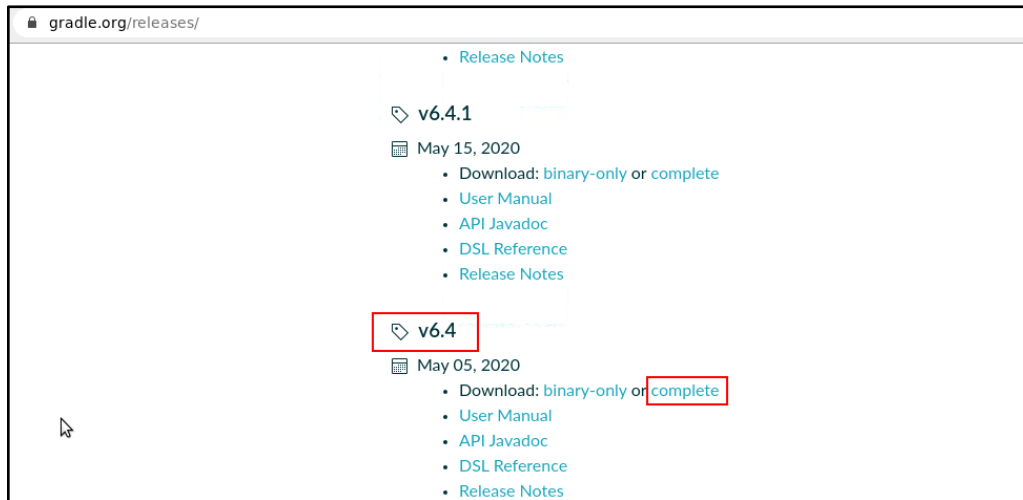
@ip-172-31-73-193:~$
```

3.2 If Gradle is not installed, then download the installer from the following URL:

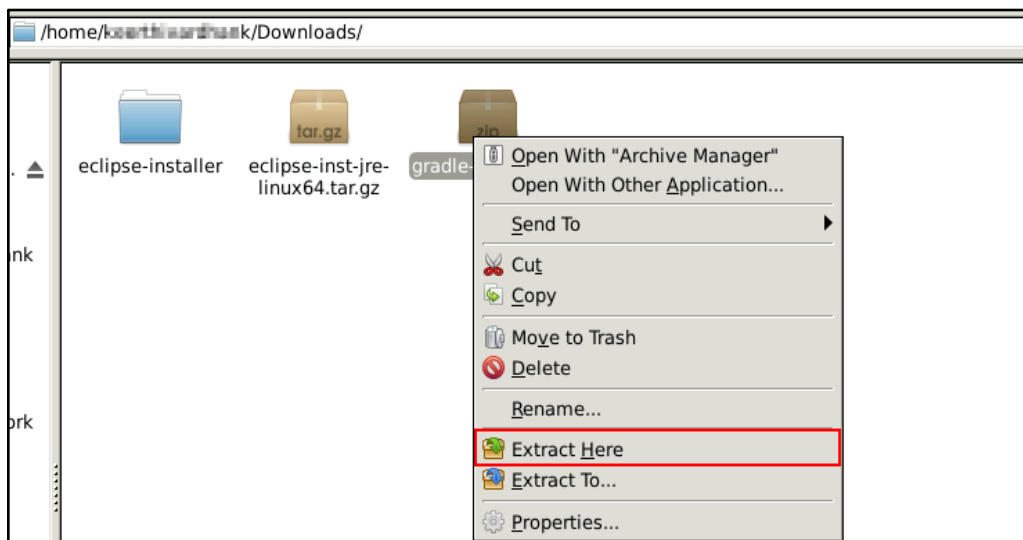
<https://gradle.org/releases/>



3.3 Go to **v6.4** version and download the complete setup by clicking on the **complete** option

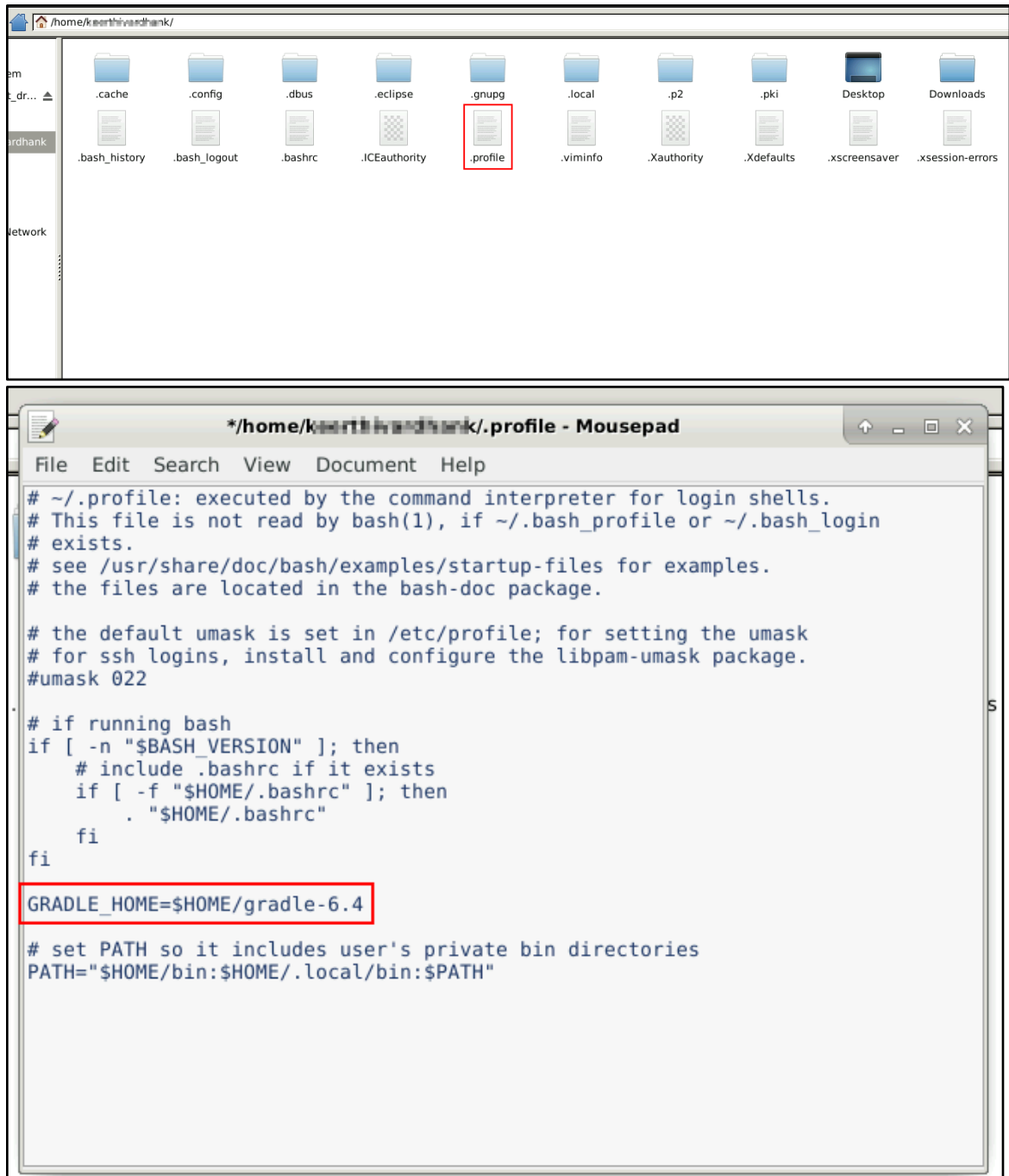


3.4 Extract the zip folder



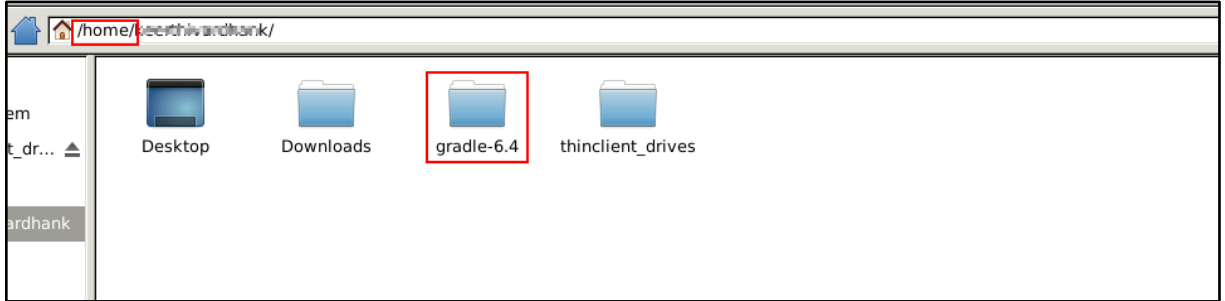
3.5 Press **CTRL + H** to show the hidden files on the homepage. Then click on the **.profile** file and add the variables:

GRADLE_HOME=\$HOME/gradle-6.4



3.6 Move **gradle-6.4** folder from **Downloads** to **Home** directory and update the path variables as you need to append the path to gradle-6.4 variables:

\$HOME/gradle-6.4/bin



```
keerthivardhank@ip-172-31-66-219:~$ $HOME/gradle-6.4/bin
bash: /home/keerthivardhank/gradle-6.4/bin: Is a directory
keerthivardhank@ip-172-31-66-219:~$
```

3.7 Verify Gradle installation by running the command:

gradle -v

```
keerthivardhank@ip-172-31-66-219:~$ gradle -v

Welcome to Gradle 7.0!

Here are the highlights of this release:
- File system watching enabled by default
- Support for running with and building Java 16 projects
- Native support for Apple Silicon processors
- Dependency catalog feature preview

For more details see https://docs.gradle.org/7.0/release-notes.html

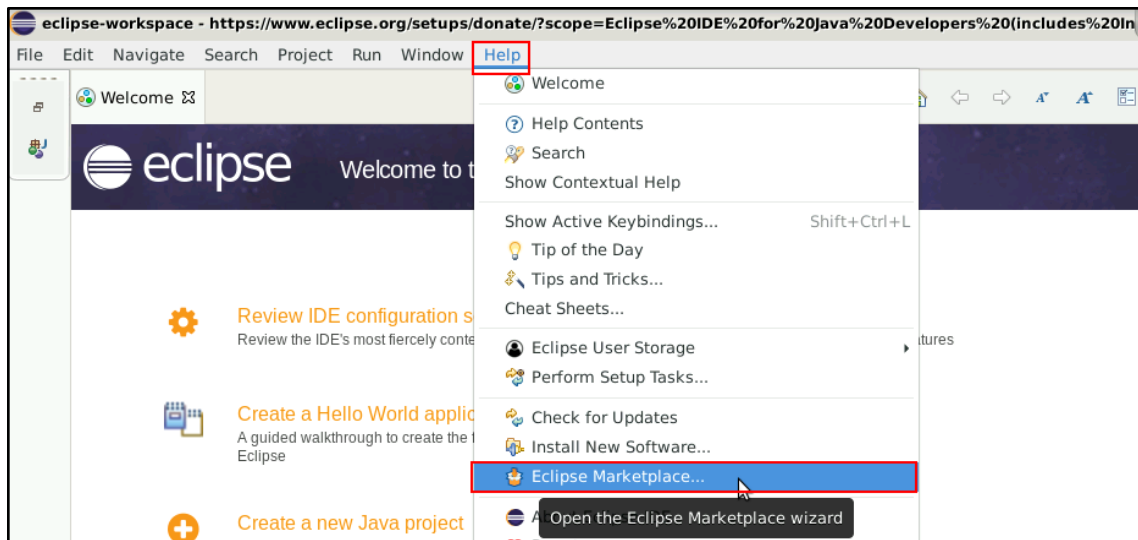
-----
Gradle 7.0
-----

Build time:   2021-04-09 22:27:31 UTC
Revision:     d5661e3f0e07a8caff705f1badf79fb5df8022c4

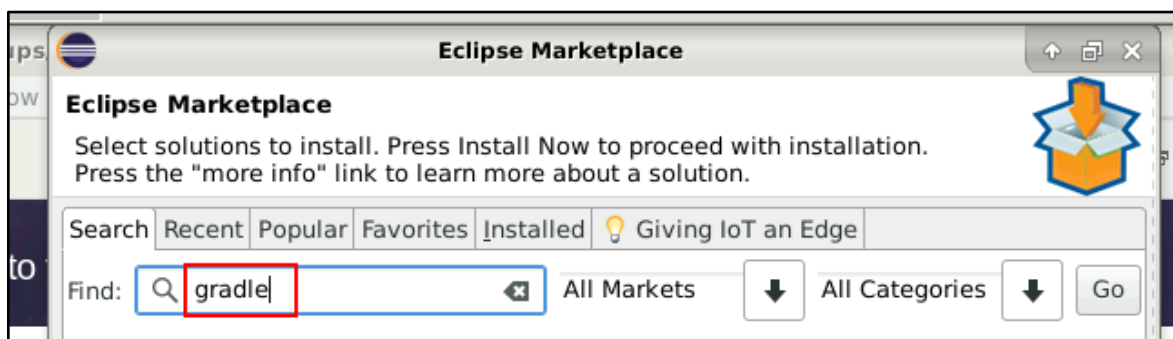
Kotlin:       1.4.31
```

Step 4: Linking the Gradle with the Eclipse IDE

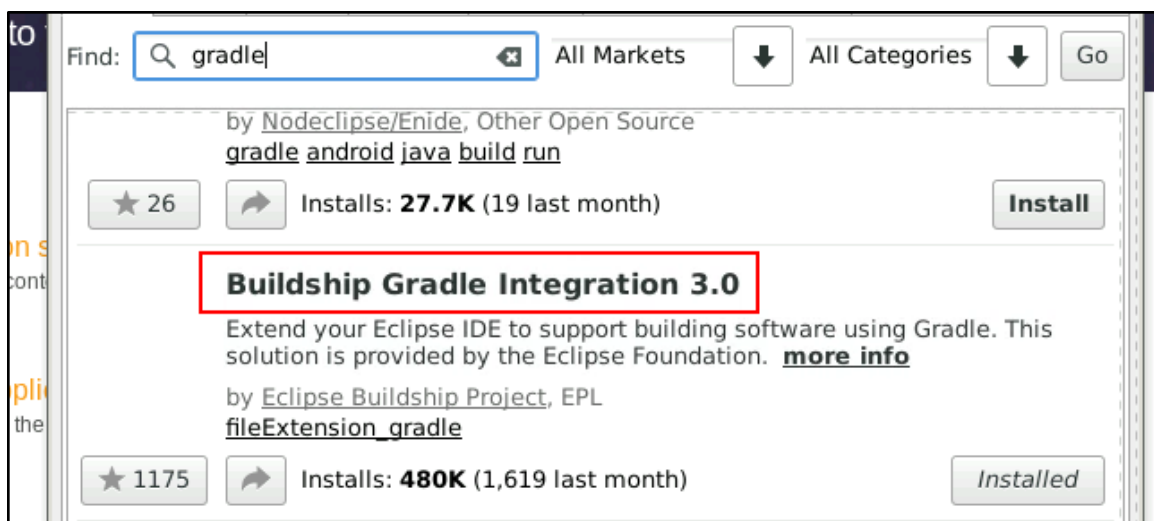
4.1 Open **Eclipse**, go to **Help**, and click on **Eclipse Marketplace**



4.2 In the **Find** box, enter **Gradle** and click on **Go** button




4.3 Go to **Buildship Gradle Integration** extension and check if it is already installed or not




4.4 If the extension is not installed, click on the **Install** button

Find: All Markets All Categories Go

by [Nodeclipse/Enide](#), Other Open Source
[gradle](#) [android](#) [java](#) [build](#) [run](#)

★ 26  Installs: **27.7K** (19 last month) [Install](#)

Buildship Gradle Integration 3.0
Extend your Eclipse IDE to support building software using Gradle. This solution is provided by the Eclipse Foundation. [more info](#)
by [Eclipse Buildship Project](#), EPL
[fileExtension_gradle](#)

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