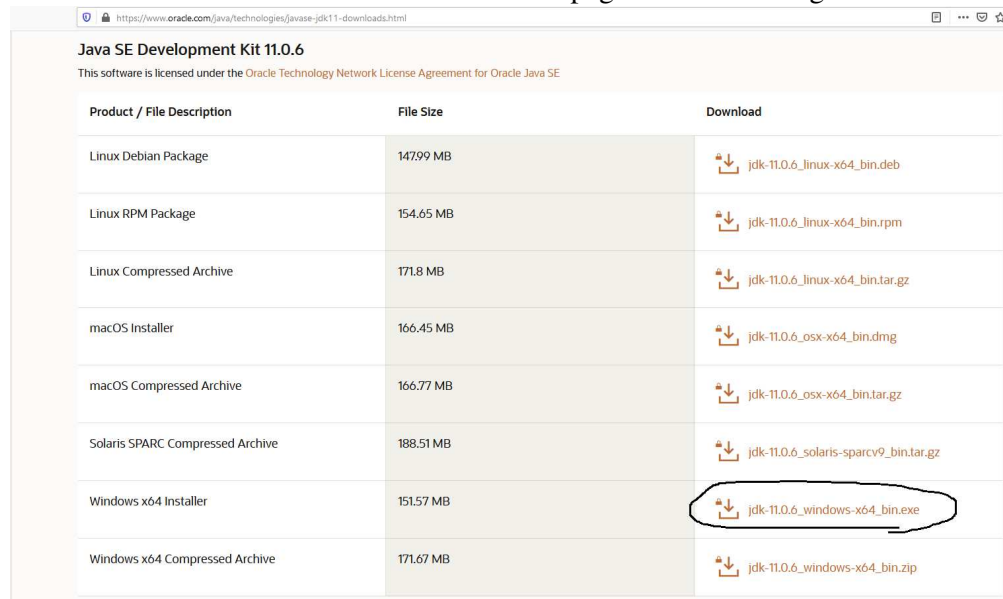# ENVIRONMENT SETUP

Note: You can select a different software version (ex: JDK 17 or Tomcat 10)

1. JDK: *Java Development Kit 11*

➤ Step 1 - Download JDK

Open the browser and search for Download JDK 11 or <u>click here</u> to download from Oracle website. It will show the JDK download page as shown in Figure 1.

Figure 1

Accept the License Agreement and click on the link to download the installer as highlighted in Figure 2. It will start downloading JDK 11 installer for Windows.

Figure 2

➢ Step 2 - Install JDK

Now execute the downloaded JDK installer by double-clicking it. It might ask system permission before starting the installation. Click on **Yes** to allow the installer to execute itself. It shows the installer welcome screen as displayed in Figure 3.
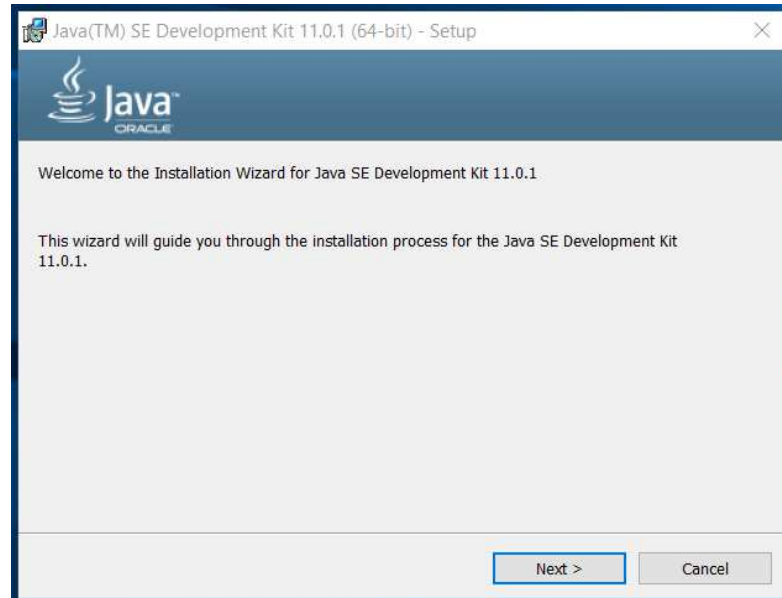
Figure 3

Click on **Next** to initiate the installation process. The next screen shows options to select optional features to be installed together. Leave the default options without making any change. We can also change the installation location on this screen if required as displayed in Figure 4.
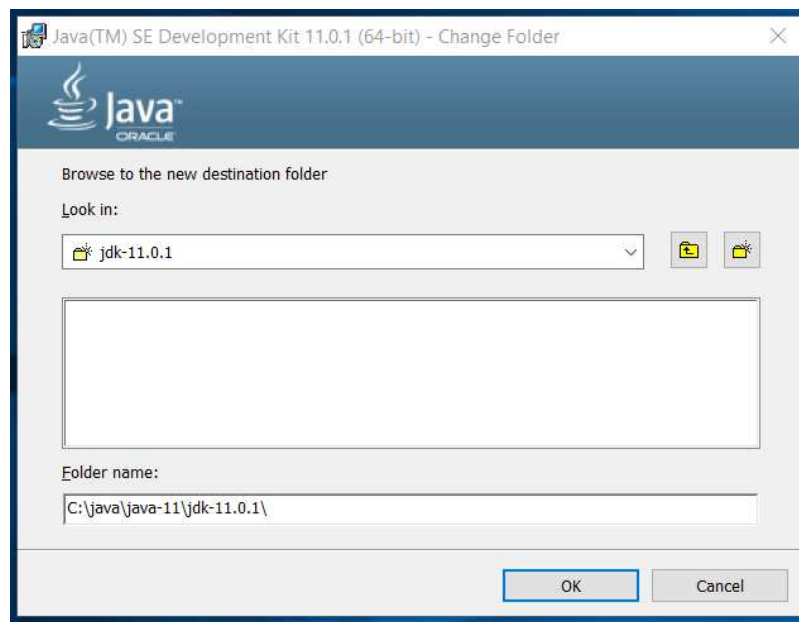
Figure 4

Now click on **Next** button to start the installation. It will show the progress as displayed in Figure 5.
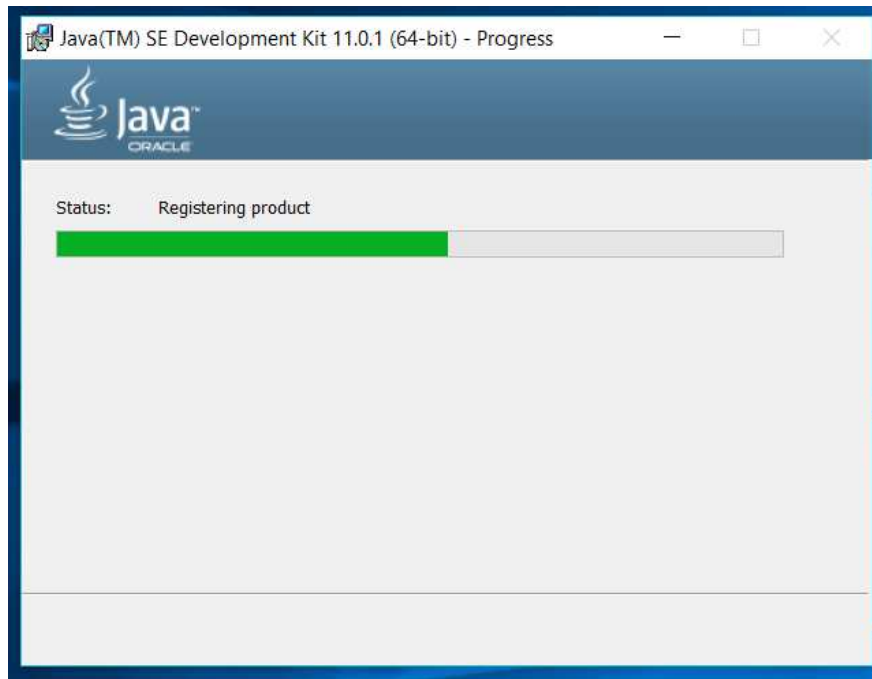
Figure 5

It shows the success screen after completing the installation as mentioned in Figure 6.

Figure 6

We might need to set the environment variable in case the installed JDK is not detected by the system.

Right Click on **This PC** ⇨ **Properties** ⇨ **Advanced System Settings**
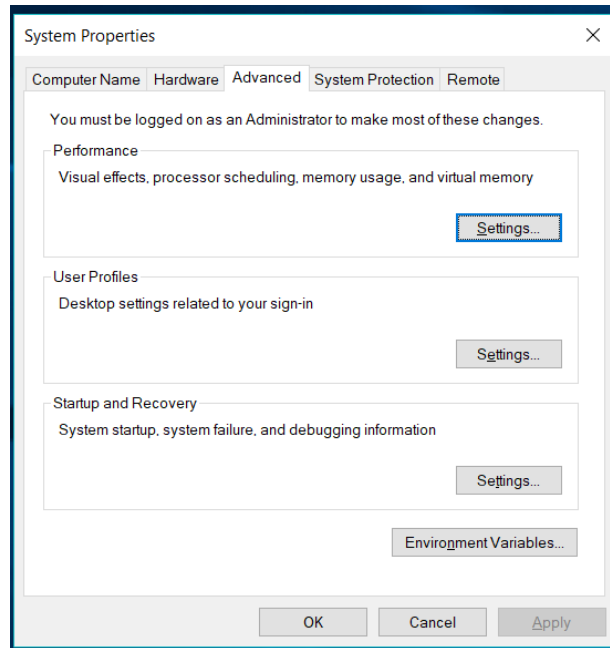
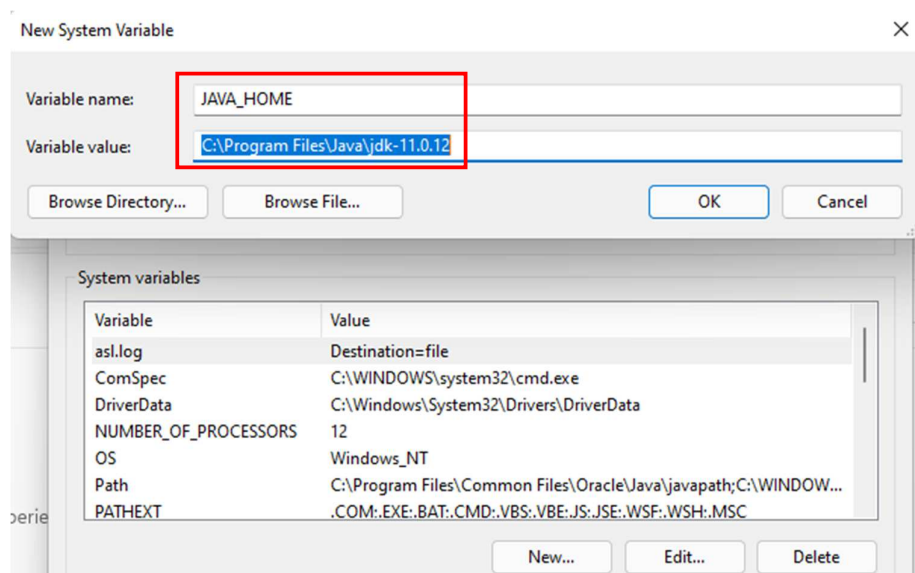The above steps will open the Windows settings panel as shown in Figure 7.

Figure 7

Now click on **Environment Variables** and **Add** new **System variables** (Figure 8)
Variable name: JAVA_HOME
Variable value: C:\Program Files\Java\jdk-11.0.12

Figure 8

Next add new **Environment variable** (Figure 9)
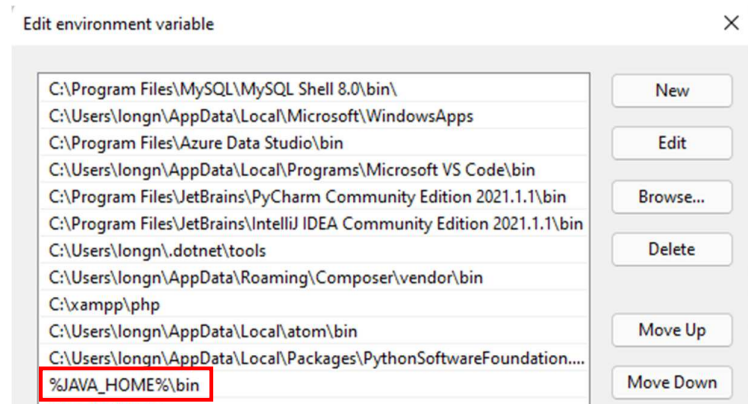*Variable value:* %JAVA_HOME%\bin

Figure 9

Now open the **Command Prompt** and check for Java version as shown in Figure 10.

Figure 10

2. **IntelliJ:** *IntelliJ IDEA Ultimate 2021*
➢ **Step 1 - Download IntelliJ IDEA**
Download the executable file from here.
Select **Windows** ⇨ **Ultimate** ⇨ **Download** as shown in Figure 1
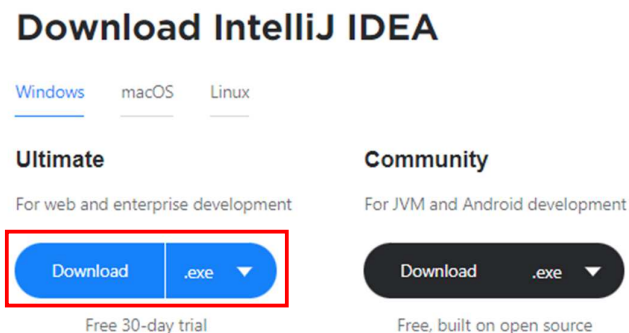

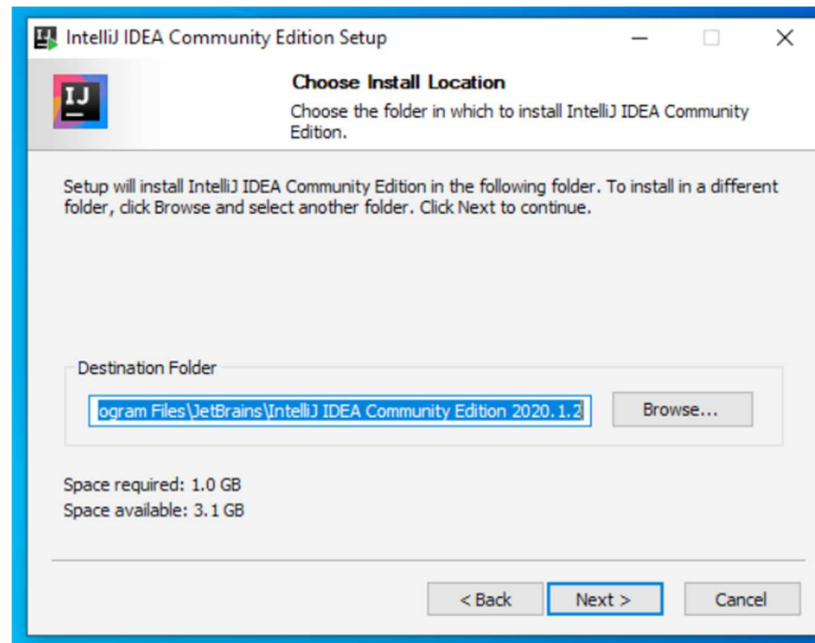**Figure 1**

➢ Step 2 - Install IntelliJ IDEA

Run the downloaded executable file
The installation window appear. Click **Next** to start as shown in Figure 2
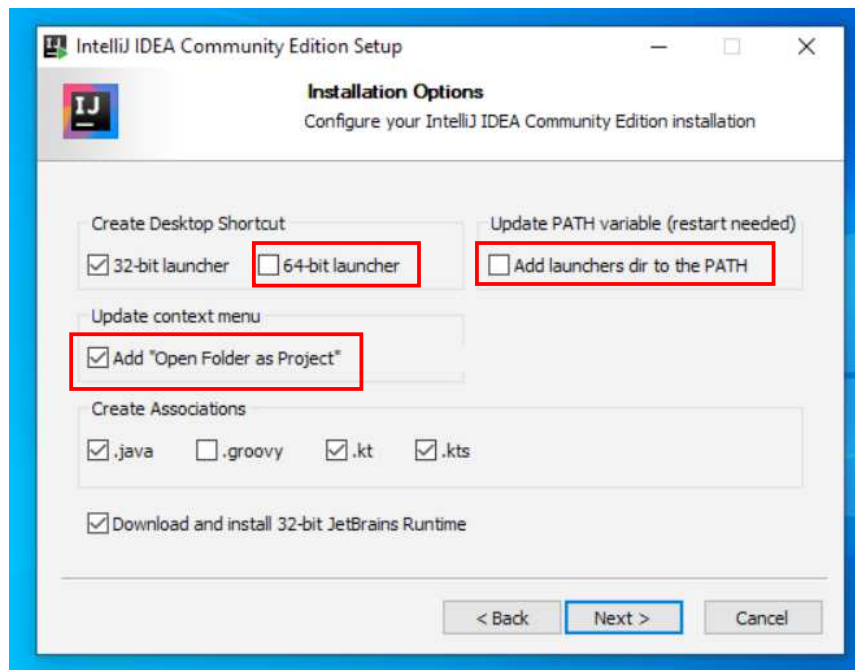

Figure 2

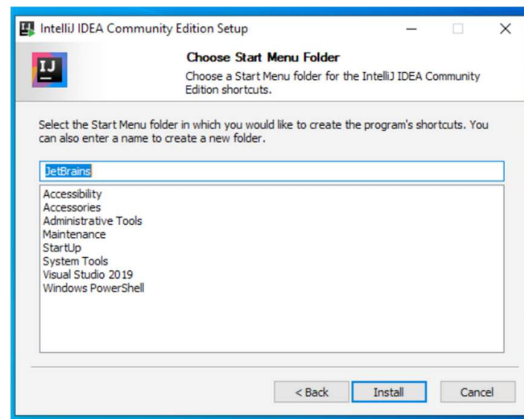Choose the default install location and menu as shown in Figure 3

Figure 3

Select these options: **Create Desktop Shortcut for 64-bit laucher, Add "Open Folder as Project"** and **Add launchers dir to the PATH** then click **Next** as shown in Figure 4

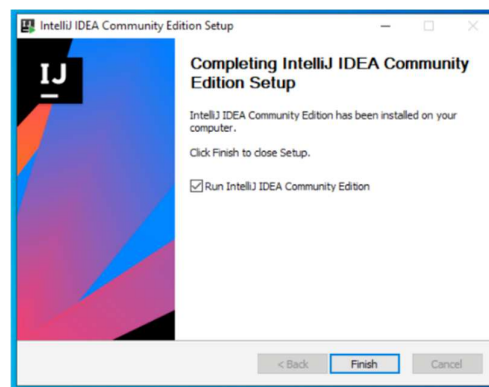**Figure 4**

Click **Install** (Figure 5) and **Finish** to complete the installation (Figure 6)

Figure 5

Figure 6

3. Tomcat: *Apache Tomcat 9*

➢ Step 1 - Download Tomcat

Download the executable file from this link.

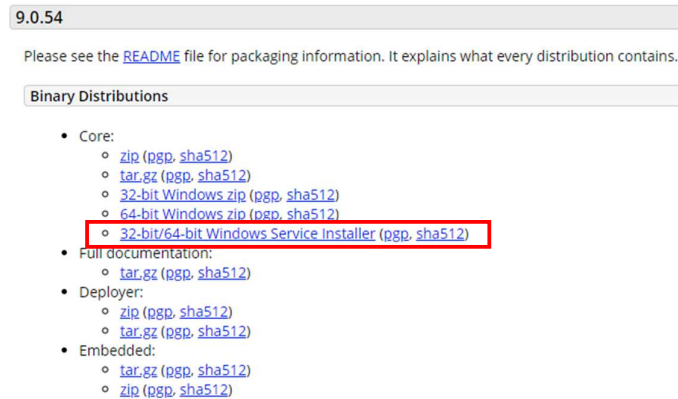Select **32-bit/64-bit Windows Service Installer** to download as shown in Figure 1

Figure 1

➢ Step 2 - Install Tomcat

Double click the setup file to start

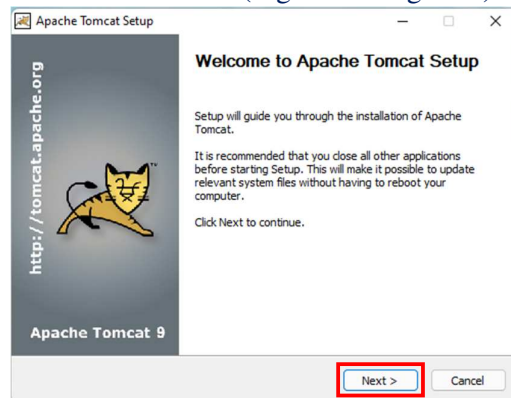Leave all default parameters until finish (Figure 2 – Figure 7)
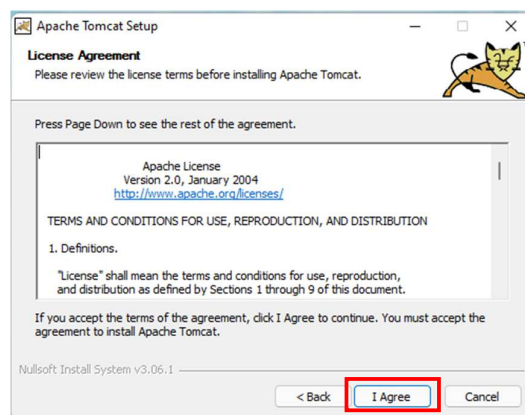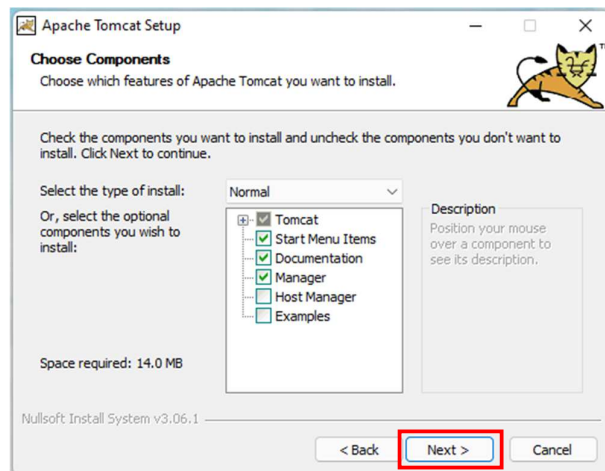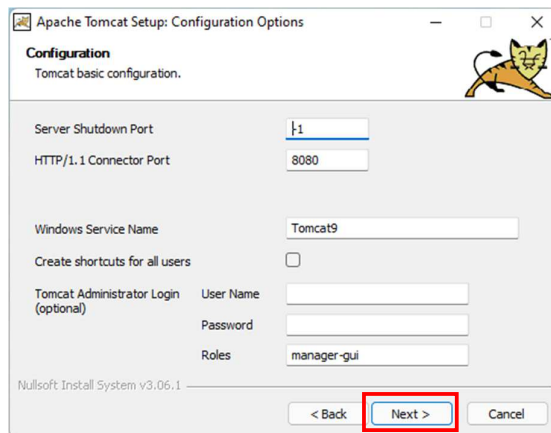

Figure 2

Figure 3
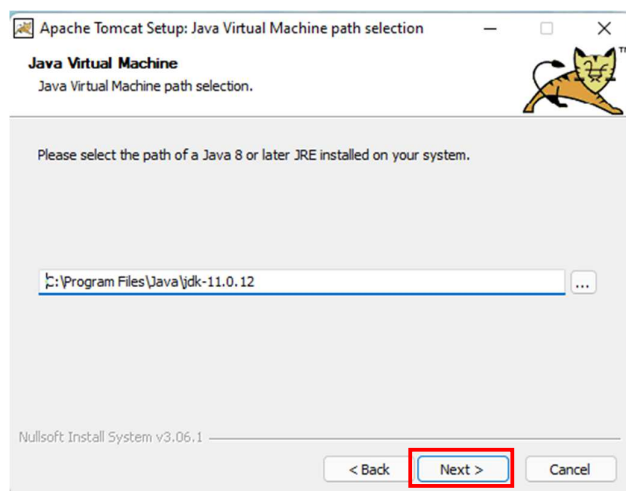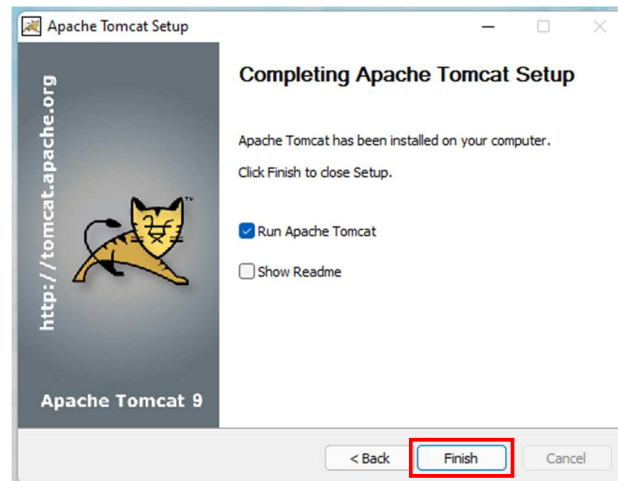
Figure 4

Figure 5

Figure 6

Figure 7

> ## ➢ Step 3 – Config Tomcat server in IntelliJ

Click menu **File** ⇨ **Settings** (**Ctrl+Alt+S**)
Select **Build, Execution, Deployment** ⇨ **Application Server**
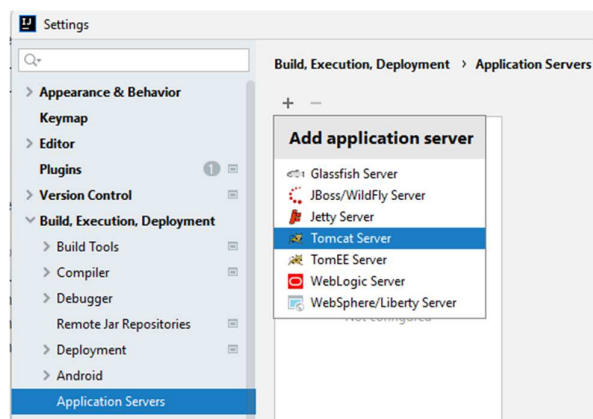Click the **Add** button and select **Tomcat** (Figure 8)

Figure 8

Specify the path to the Tomcat server install location (Figure 9)
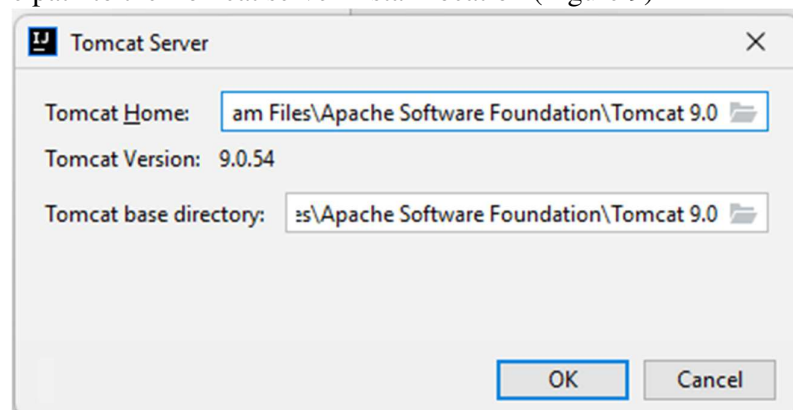

Figure 9

IntelliJ IDEA detects and sets the name and version appropriately (Figure 10)
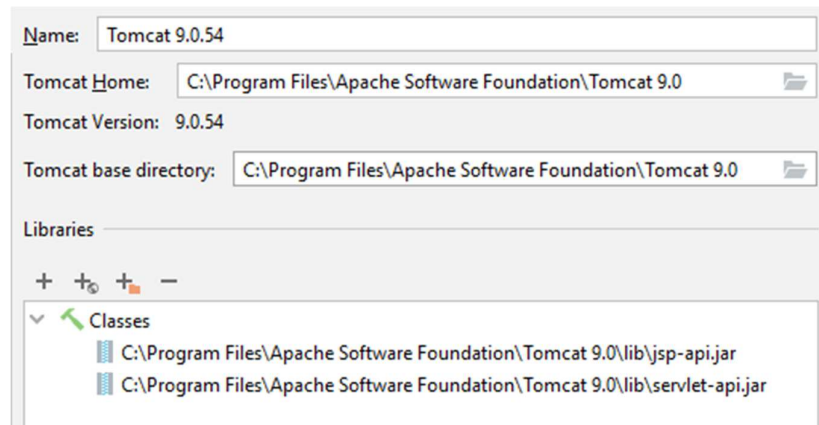
Figure 10

4. MySQL: *MySQL Community Server 8*
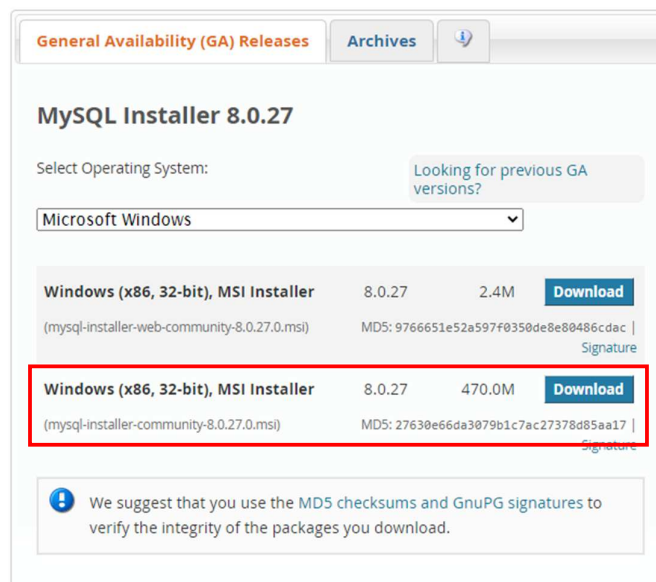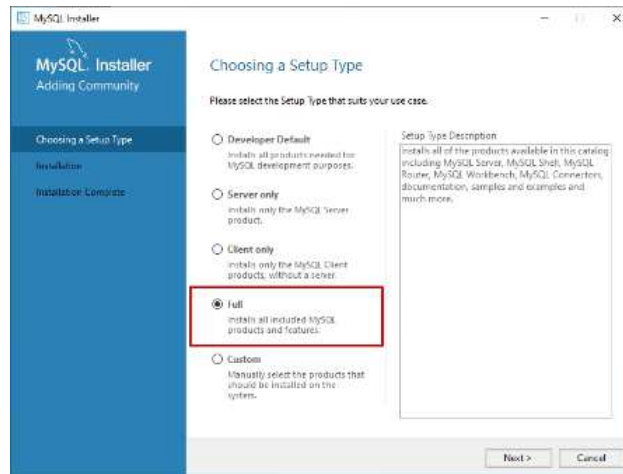### ➢ Step 1 – Download MySQL

Figure 1

➢ Step 2 - Install MySQL

Double click the downloaded file. A dialogue box appears.

Select **Full** option in **Setup Type**

Then select **Next** as shown in Figure 2
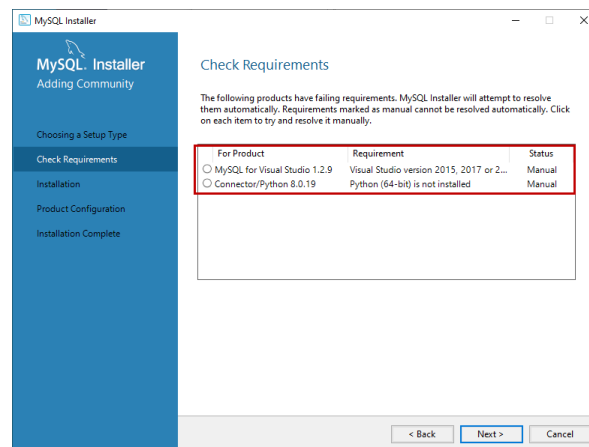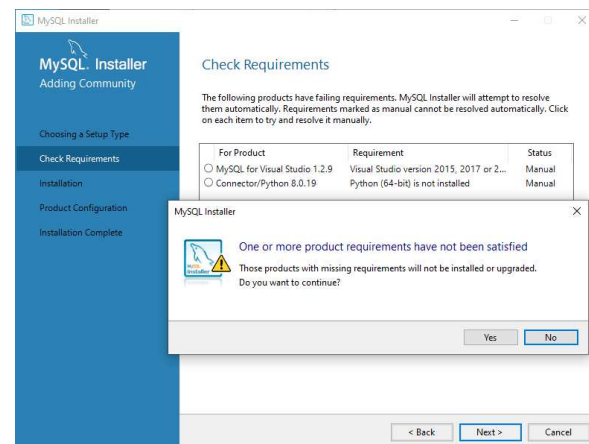
Figure 2

Before installation begins, the installer checks all the prerequisites that are required to install all the components of the MySQL database server.

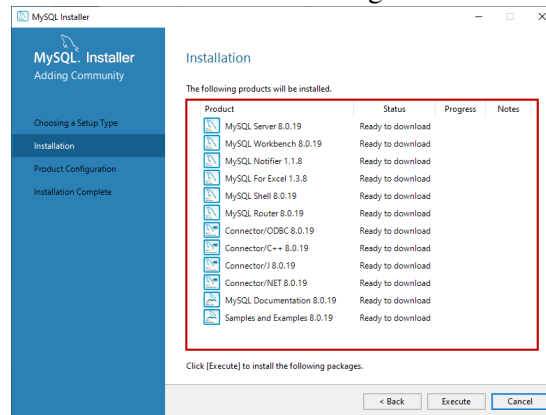Just click on **Next** as shown in Figure 3

Figure 3

An installer gives us a warning. We can continue our installation without installing the Visual Studio and Python. Click on **Yes** as shown in Figure 4

Figure 4

On the Installation screen, you can see the list of the MySQL products/software that are going to be installed on computer.

Review the list and click on **Execute** as shown in Figure 5

Figure 5

Wait for installation finish then click **Next** as shown in Figure 6
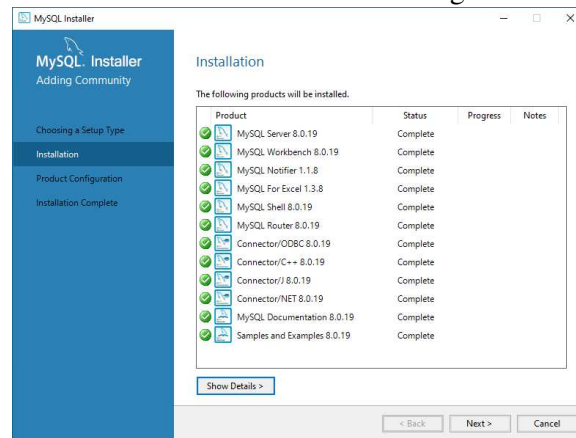
Figure 6

On the Product configuration screen, you can see the list of the products that need to be configured.

First, let configure the MySQL Server. Click on **Next** as shown in Figure 7

Figure 7

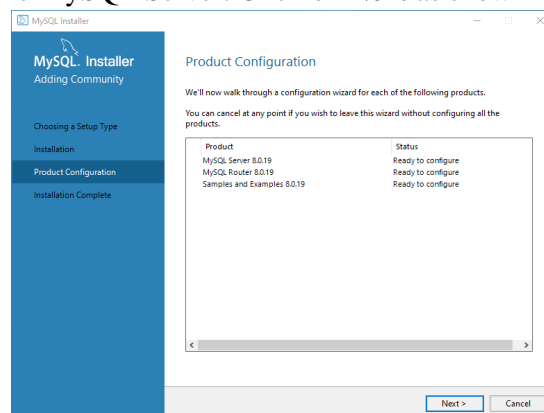In **High Availability**, select **Standalone MySQL Server** then click on **Next** as shown in Figure 8
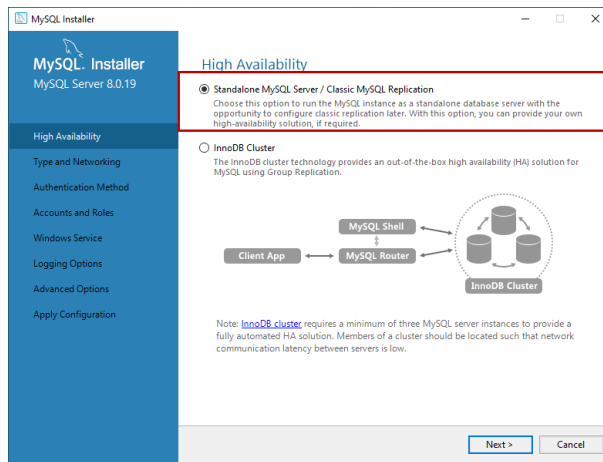

Figure 8

In **Server Configuration Type**, select **Development Computer** then click on **Next** as shown in Figure 9
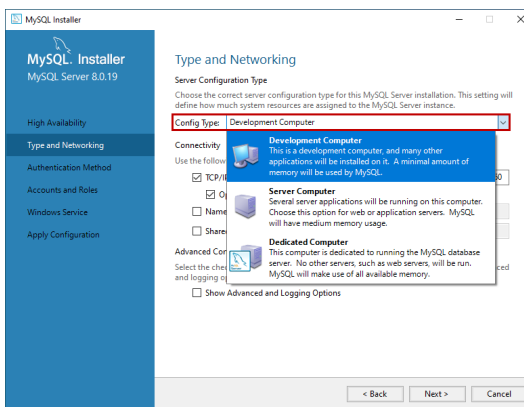

Figure 9

In **Connectivity**, enter the **Port 3306 (**default port for SQL) then click on **Next** as shown in Figure 10
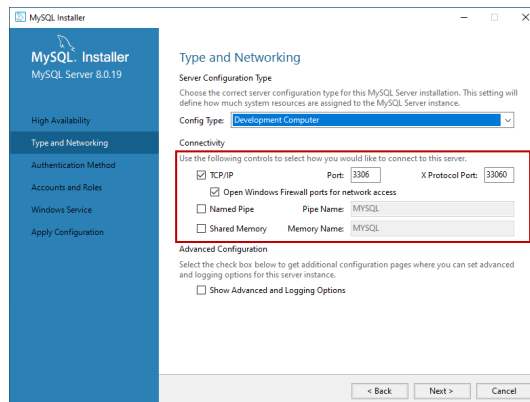

Figure 10

In **Authentication Method**, select **Use Strong Password Encryption** then click on **Next** as shown in Figure 11
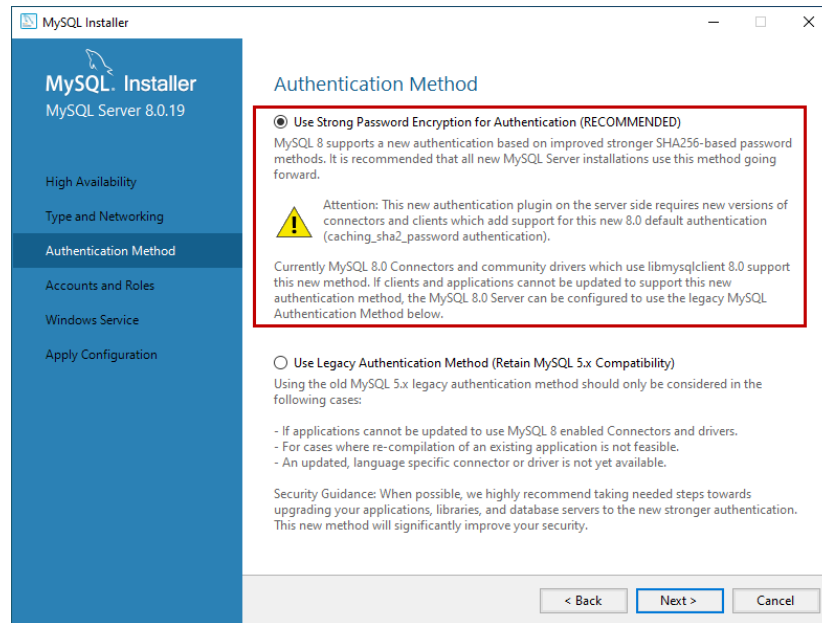

Figure 11

On **Accounts and Roles** screen, you can specify the MySQL root account password (Ex: root) or you can a new User then click **Next** as shown in Figure 12
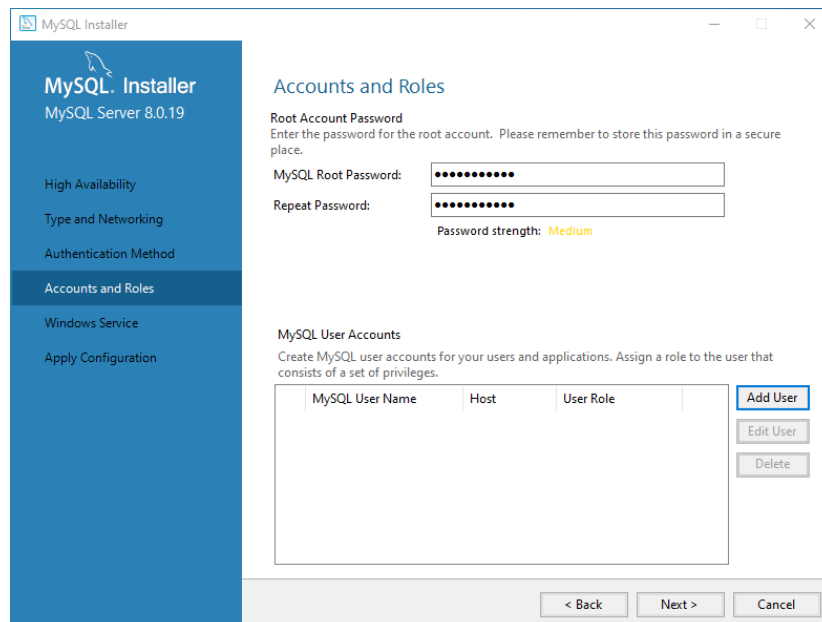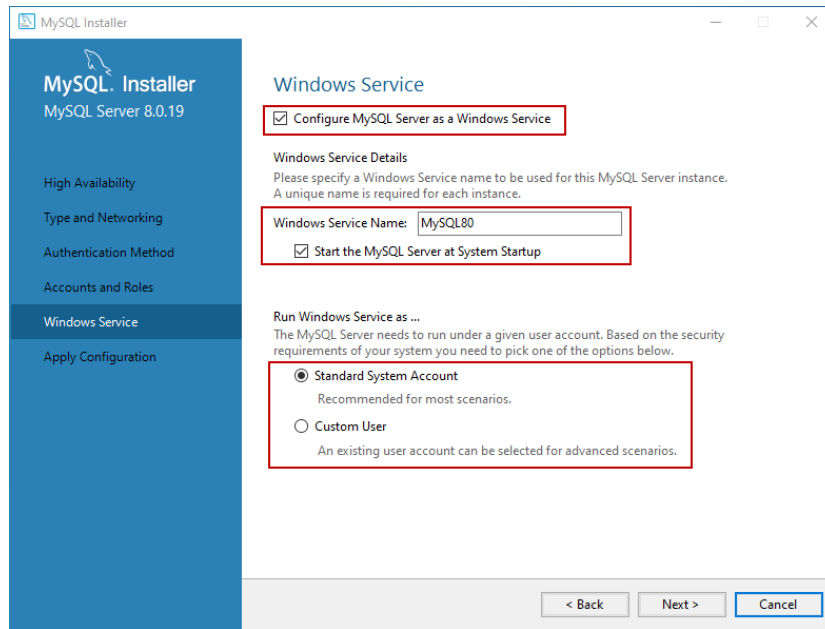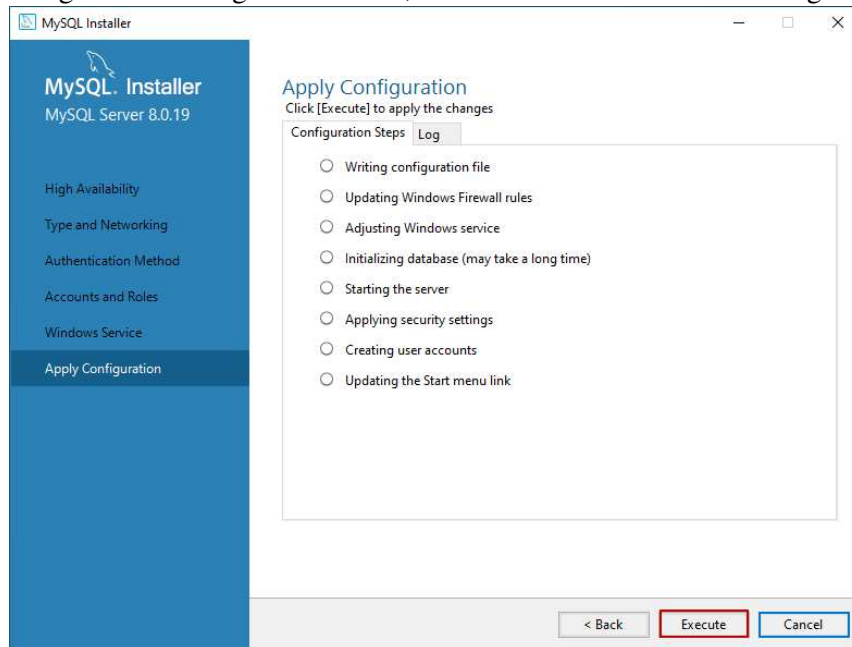

Figure 12

On the **Windows Service** screen, make configuration as shown in Figure 13

Figure 13

On the **Apply Configuration** screen, you can see the list of confirmation steps. Once all the configuration settings are verified, click on **Execute** as shown in Figure 14
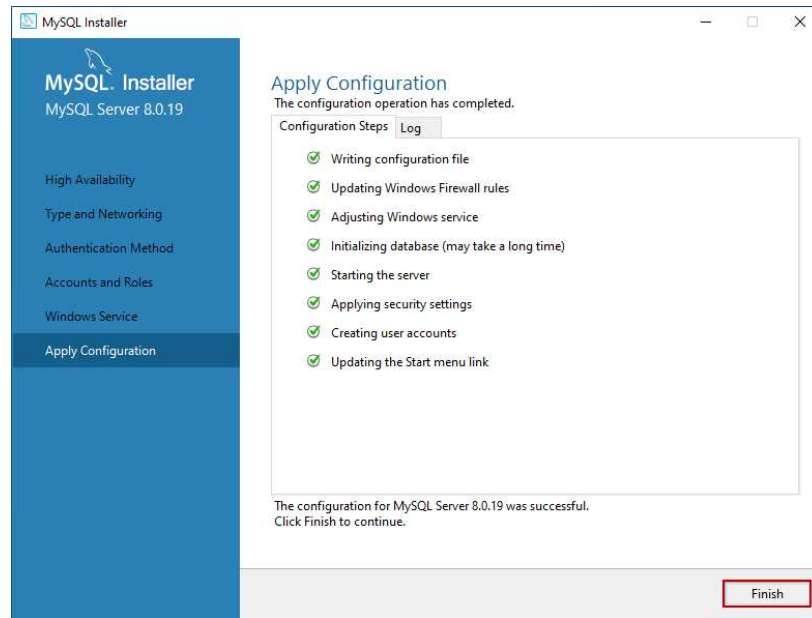

Figure 14

The MySQL installation process starts. You can view the installation process in the **Log** tab.

Once installation completes successfully, click on **Finish** to close the installer as shown in Figure 15
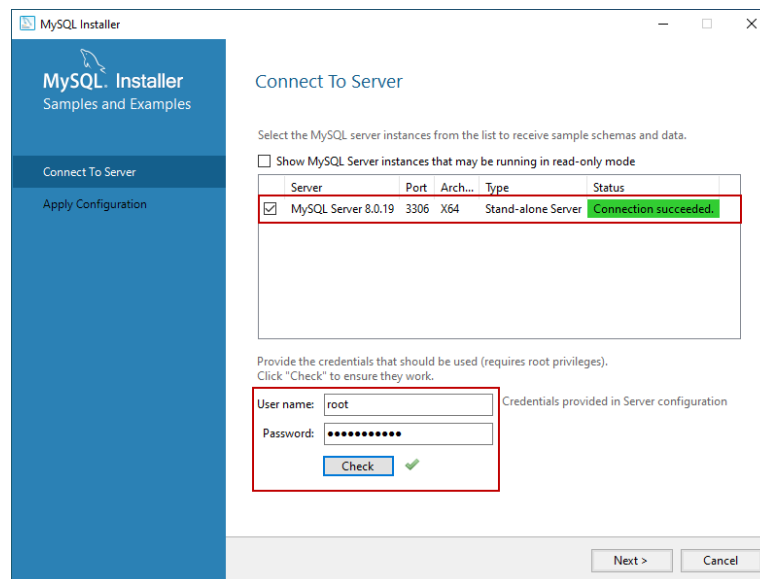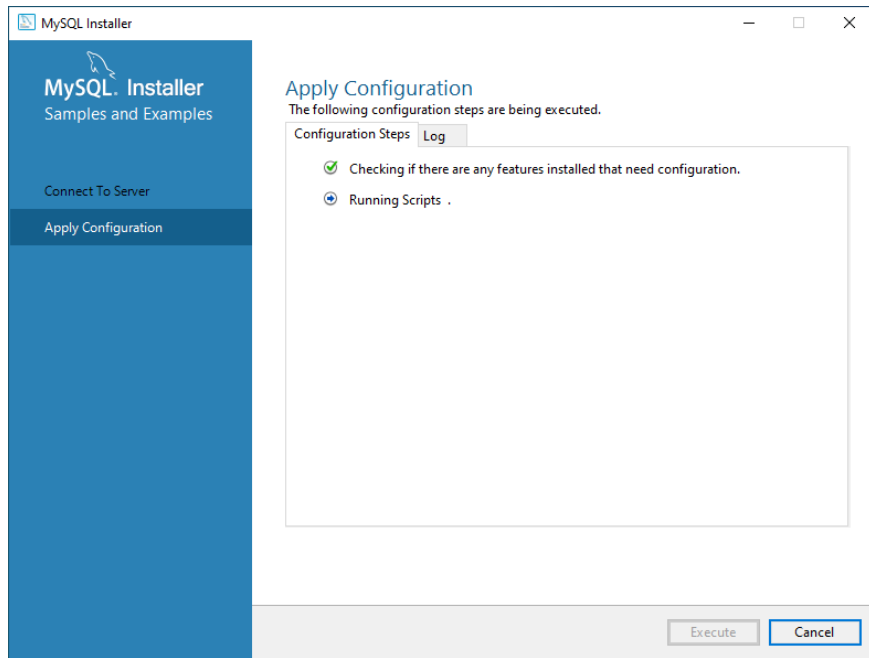
Figure 15

MySQL installer moves to **Sample and Example** screen. On this screen, provide username and password of the user that has root/sysadmin privileges and click on Check (Ex: root – root).
If the connection establishes successfully, click on **Next** as shown in Figure 16
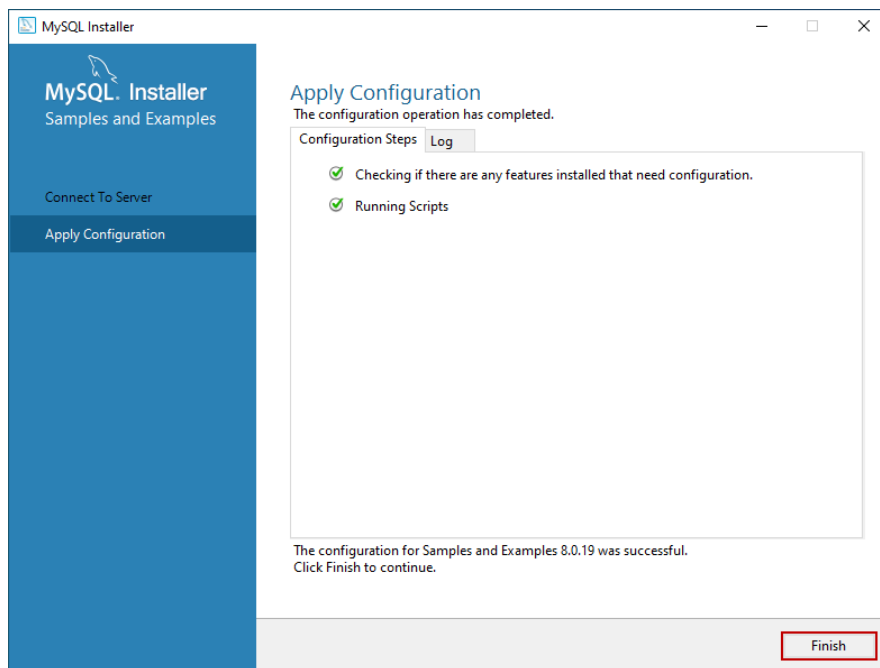

Figure 16

On the **Apply Configuration** Screen, click on **Execute** to start the installation of the Sample database as shown in Figure 17
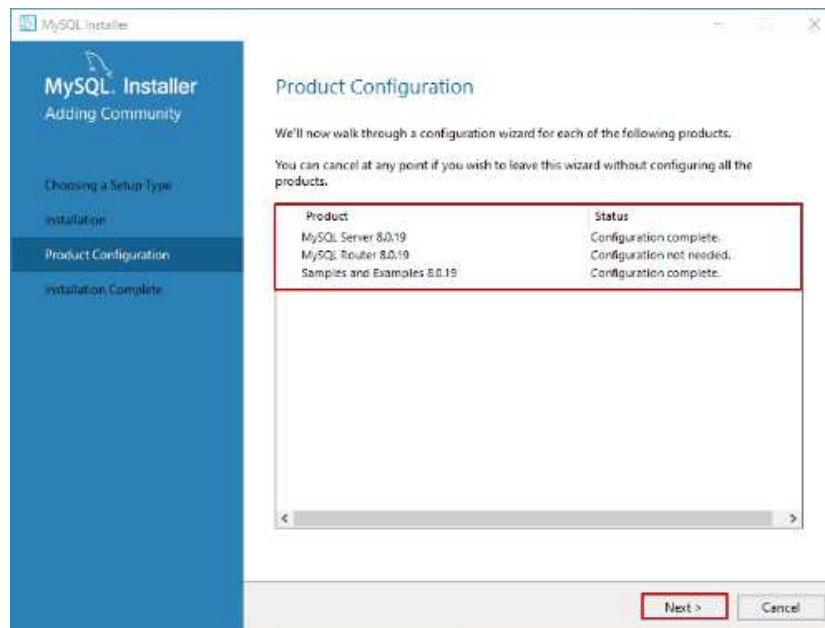
Figure 17

Once the sample database has been installed, click on the **Finish** button as shown in Figure 18
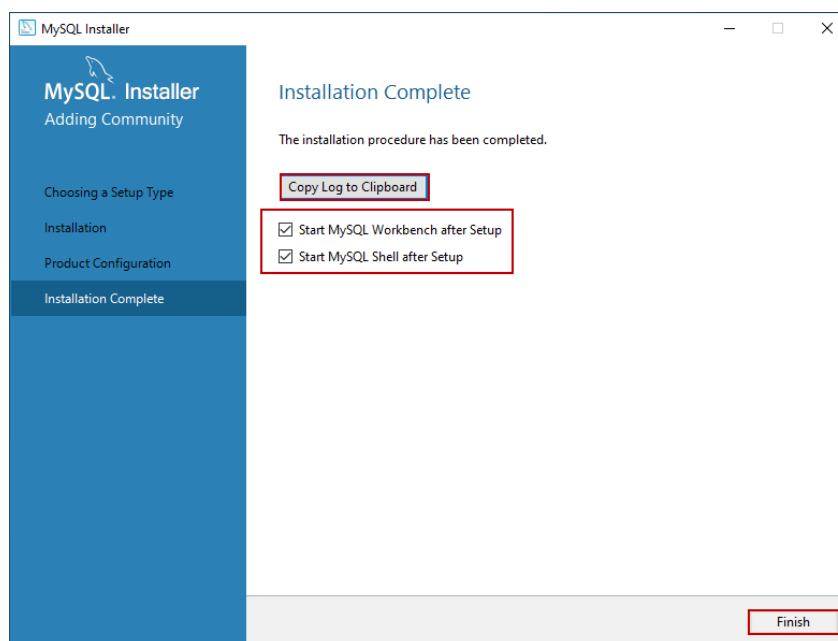

Figure 18

The installer continues to the **Product Configuration** screen. On this screen, you can see that the installation has been completed successfully as shown in Figure 19

Figure 19

The installation has been completed. Now you can select **Start MySQL Workbench after Setup** and **Start MySQL Shell after Setup** and click on **Finish** as shown in Figure 20

Figure 20