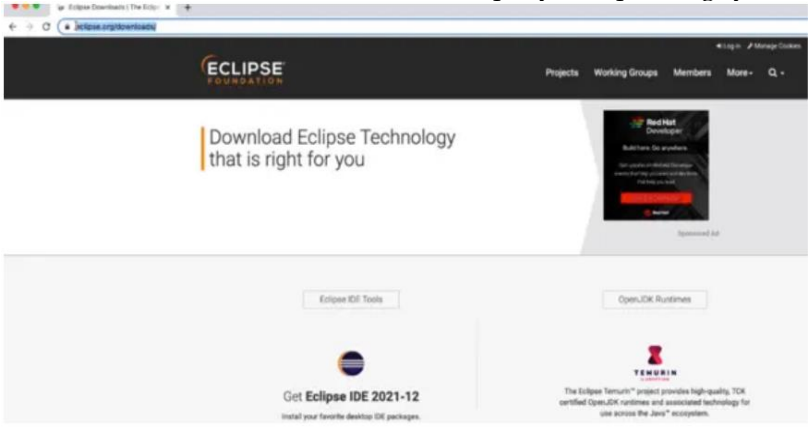
	EXP.NO: 1 **DATE: 23 -06 -2023**

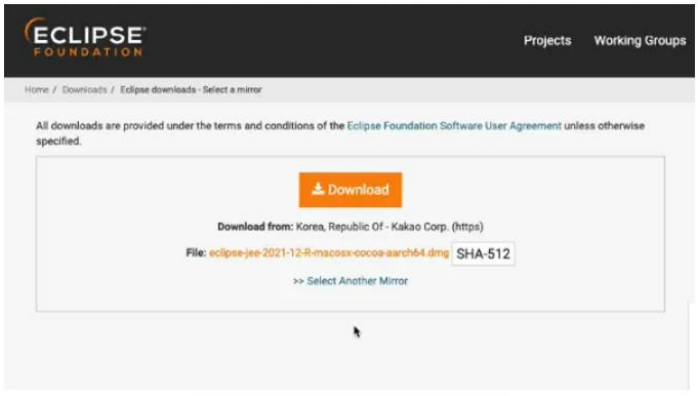
Installation of Eclipse

Eclipse IDE is one of the most popular integrated development environments (IDEs). It is mostly used by Java developers, but it can also support almost every other programming language like C/C++, PHP, Scala, Groovy, Clojure, and many more. It has a rich set of features that include support for various programming languages, code analysis, graphical debugging, and unit testing.
In this shot, we will look at the installation process of Eclipse IDE.

Installation steps:
Step 1 - Download the Eclipse installer
The easiest way to install eclipse IDE is to download and run the installer. To download the Eclipse installer, go to this url and select the installer executable as per your operating system platform.



Then, select the closest mirror site to download the required package.
For Windows users, select the folder, e.g., C:/Users/[username]/Downloads to download the installer.
For Mac users, select the folder /Users/[username]/Downloads.
Here, "[username]" represents the username of the operating system you are using.

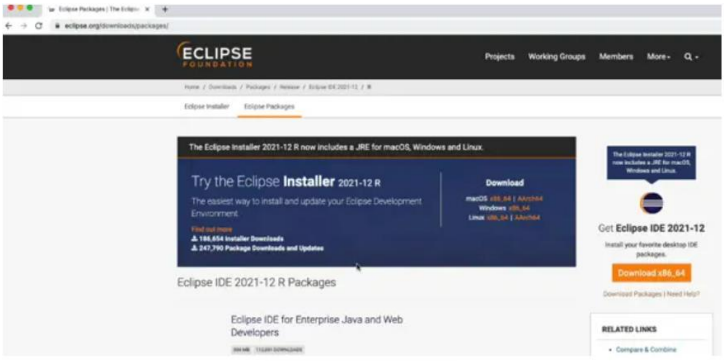


Choosing the closest download mirror site

Step 2 - Running the installer

After the download is completed, execute the Eclipse installer. You may need to extract the content if you use Mac or Linux.

You would also get a security warning for executing a file downloaded from the Internet. Verify if the publisher is the Eclipse Foundation and choose to continue with the file's execution as you can trust this source.



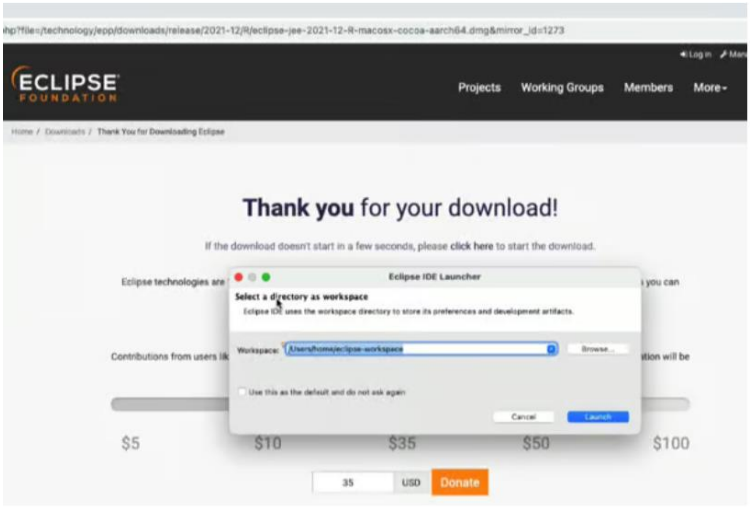
Eclipse IDE package download

Step 3 - Choosing the installation directory/folder

When the installer prompts you to choose the installation location, keep this as your default user directory and begin the installation process. Windows users can also create start menu entries and desktop shortcuts.

Step 4 - Launching the Eclipse IDE

After the installation is complete, go to the local folder on your system where you installed the application in the previous step. Find the executable file for the Eclipse IDE and run it to launch the IDE.



Selecting workspace directory

During the first run, Eclipse asks users to specify a folder to create the workspace for their projects. After this is provided, the Eclipse IDE gets launched. This completes the installation process.

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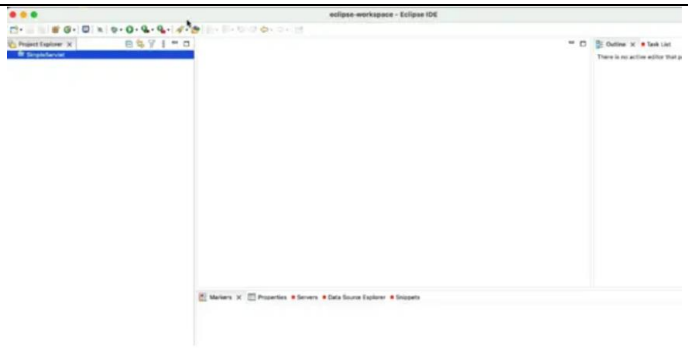
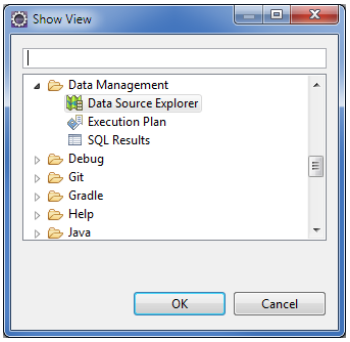


Eclipse IDE

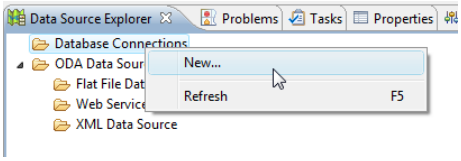
Now you can enjoy coding using the Eclipse IDE!

Setup Database Connection in MySQL

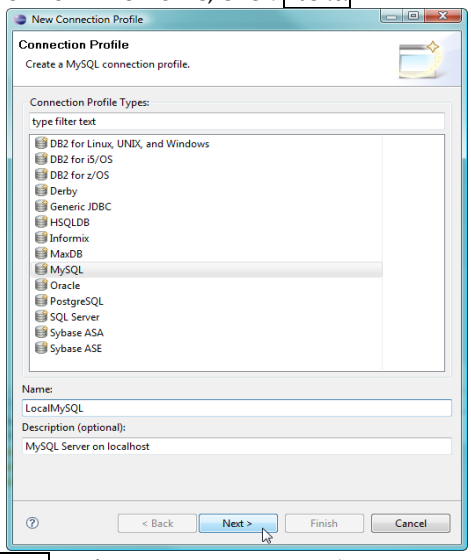
Open Data Source Explorer via [Window]/ [Show View]/ [Other...]/ [Data Management/ [Data Source Explorer]:



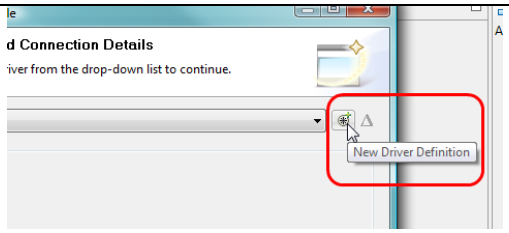
Right click the Database Connection folder, select [New...]



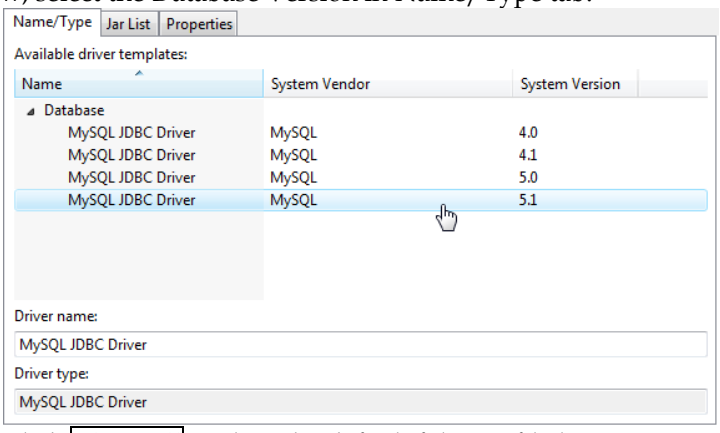
Select the Database you suppose to connect (MySQL 5.1 as the example in this document), you can type custom name and description for mnemonic, click **Next.**



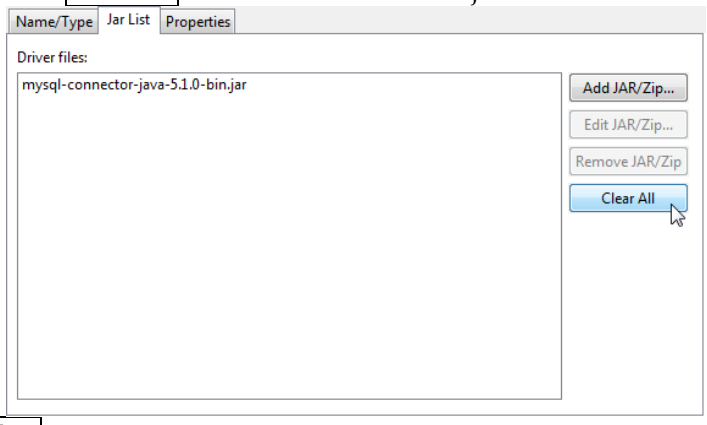
On next page, click the **New Driver** Definition icon next to the Drivers: list box.



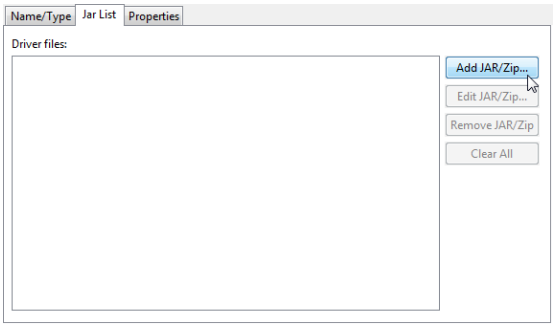
On the popup window, select the Database Version in Name/Type tab.



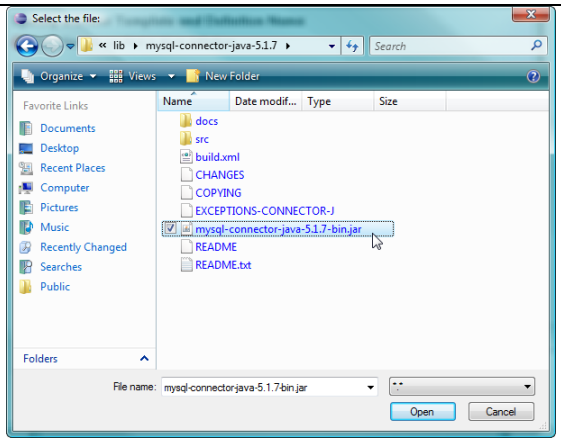
Switch to Jar List tab, click **Clear All** to clear the default false jar file location.



then click **Add JAR/Zp...**.



Locate the jar file inside the folder that just extracted from downloaded MySQL Connector/J zip file.



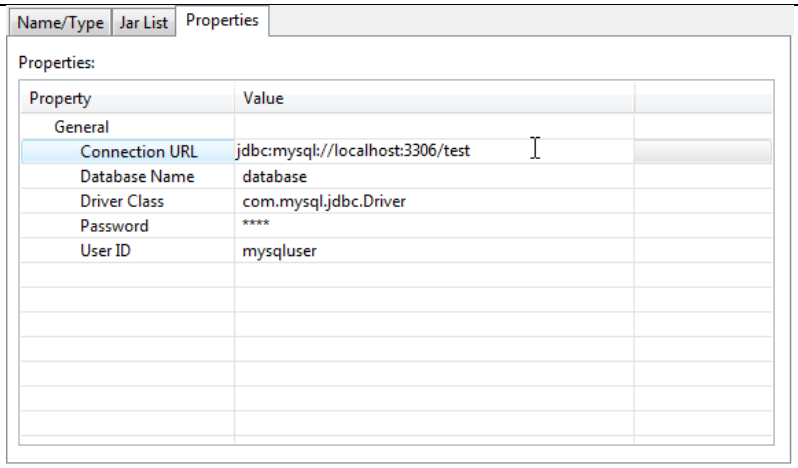
Switch to '"Properties" tab, modify the database connection setting according to your MySQL Database configuration, then click **OK**.

'Note: The JDBC URL format for MySQL Connector/J is as follows, with items in square brackets ([,]) being optional:

jdbc:mysql://[host:port],[host:port].../[database][?propertyName1][=propertyValue1][&propertyName2][=propertyValue2]...

If the hostname is not specified, it defaults to 127.0.0.1. If the port is not specified, it defaults to 3306, the default port number for MySQL servers. In above image the database name is test.

jdbc:mysql://localhost:3306/test



To verify if the setup is functional, click **Test Connection**.

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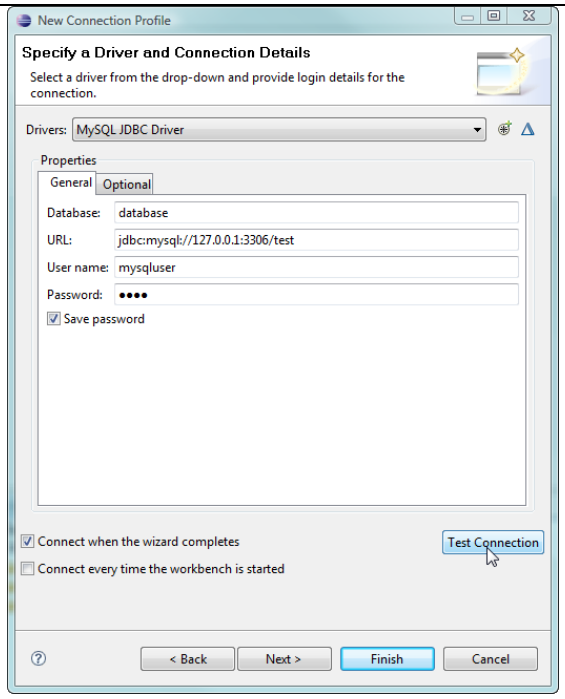
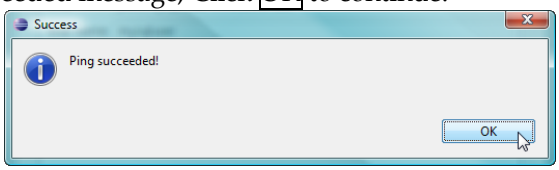
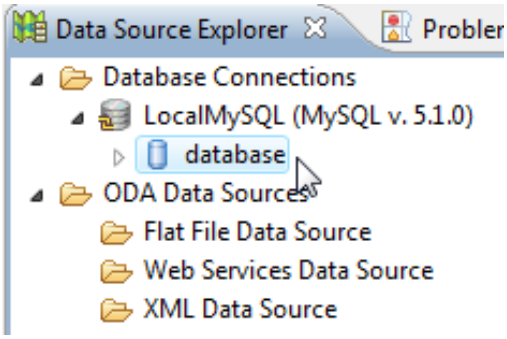


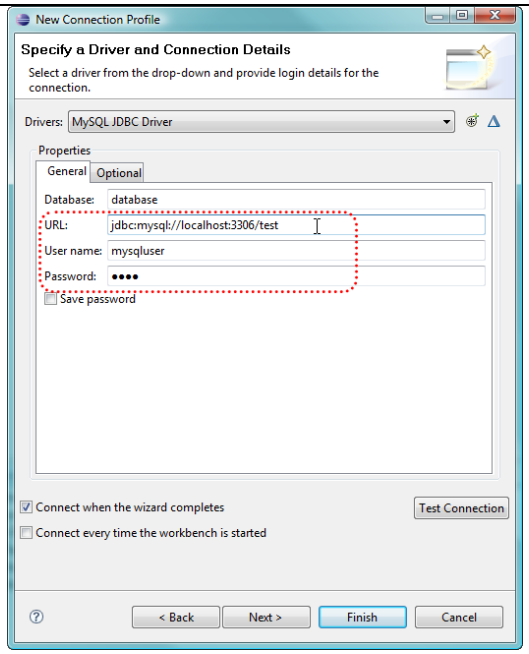
It should popup a Ping succeeded message, Click OK to continue.



Note: Make sure the MySQL database is up and running. If it is not running, the Test Connection will fail. If you don't know how to find if MySQL is running then please google search it
Press Finish to close the setup wizard window, and you should be able to see there's a Database icon in the Database Connections folder.



Note: Firewall of the System that install Database or security setting of the Database may prevent you from connect the DB successfully. If you had specified the right MySQL Connector/J jar file before, then Step 4 & 5 can be skipped, you can directly modify the following field to match your MySQL Database configuration:

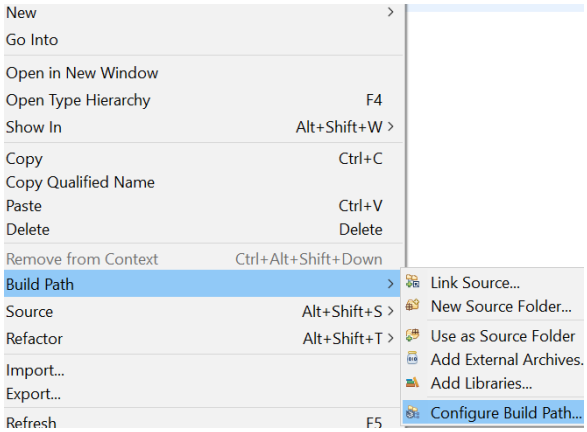


then proceed the subsequent steps to finish setup.

Configuration of MySQL connection from Java Eclipse

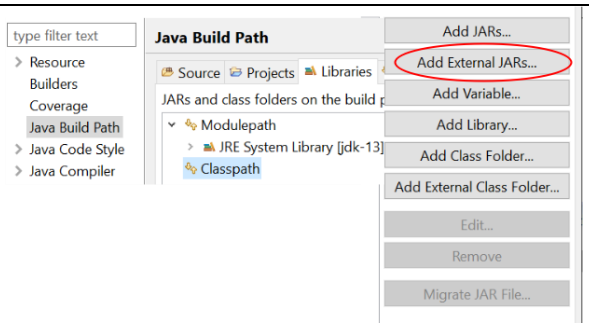
Download mysql-connector.jar file.

Open Package Explorer, select your Java Project, right click and go to Build Path Then select Configure Build Path.

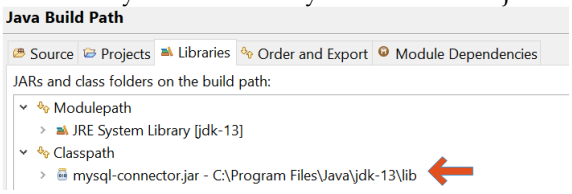


You will get the window for Build Path. Ensure that Class path is selected (Don't select Module path). In this window right side, you will get a button saying Add External Jars.

Point to your downloaded jar file to upload or add. Finally in your Build Path window click Apply & Close



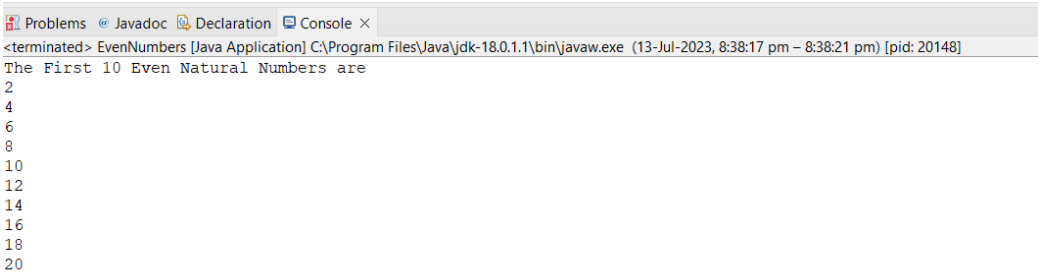
If you reopen the Build Path window you should see your connection jar file like this.



Program:

```
package pkg;
public class EvenNumbers {
	public static void main(String[] args) {
		System.out.println("The First 10 Even Natural Numbers are");
		for(int i = 1; i <= 10; i++)
		{
			System.out.println(2 * i);
		}
	}
}
```

OUTPUT:



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