

MySQL Installation Guide (Windows)

Step1- Install MySQL

The following description is based on MySQL 8.0.21 for Windows.

Go to MySQL download page (<http://dev.mysql.com/downloads/mysql/>). Click the **Windows MySQL Installer MSI** "Download" button.

[General Availability \(GA\) Releases](#) | [Archives](#) | [Info](#)

MySQL Community Server 8.0.21

Select Operating System:

Microsoft Windows ▼


[Looking for previous GA versions?](#)

Recommended Download:

MySQL Installer for Windows

All MySQL Products. For All Windows Platforms. In One Package.

Starting with MySQL 5.6 the MySQL Installer package replaces the standalone MSI packages.



Windows (x86, 32 & 64-bit), MySQL Installer MSI [Go to Download Page >](#)

Other Downloads:

Windows (x86, 64-bit), ZIP Archive (mysql-8.0.21-winx64.zip)	8.0.21	111.1M	Download
MD5: 06d745c77b254e160807bdc2f5245352 Signature			
Windows (x86, 64-bit), ZIP Archive Debug Binaries & Test Suite (mysql-8.0.21-winx64-debug-test.zip)	8.0.21	510.6M	Download
MD5: a494aaf4cb3da4c709136d23c3cb5f27 Signature			

You will see the following window. Download the Installer.

[General Availability \(GA\) Releases](#)[Archives](#)[i](#)

MySQL Installer 8.0.21

Select Operating System:

Microsoft Windows ▼

[Looking for previous GA versions?](#)

Windows (x86, 32-bit), MSI Installer (mysql-installer-web-community-8.0.21.0.msi)	8.0.21	24.5M	Download
Windows (x86, 32-bit), MSI Installer (mysql-installer-community-8.0.21.0.msi)	8.0.21	427.6M	Download

MD5: cf2b46ba35a4443f41fb8e94a0e91d93 | [Signature](#)

MD5: b52294aa854356c266e9a9aec737ba08 | [Signature](#)

If the website asks you to login, you can just ignore it by clicking the left bottom link.

MySQL Community Downloads

Login Now or Sign Up for a free account.

An Oracle Web Account provides you with the following advantages:

- Fast access to MySQL software downloads
- Download technical White Papers and Presentations
- Post messages in the MySQL Discussion Forums
- Report and track bugs in the MySQL bug system

Login »
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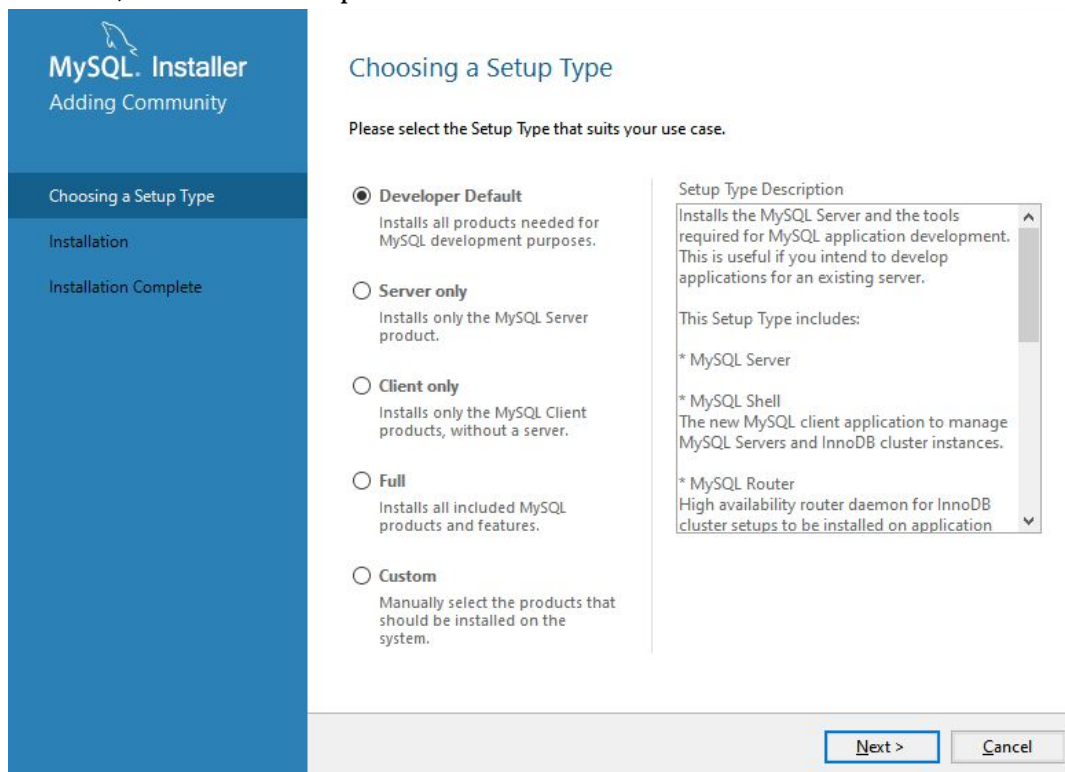
MySQL.com is using Oracle SSO for authentication. If you already have an Oracle Web account, click the Login link. Otherwise, you can signup for a free account by clicking the Sign Up link and following the instructions.

[No thanks, just start my download.](#)

Once the installer is finished downloading:

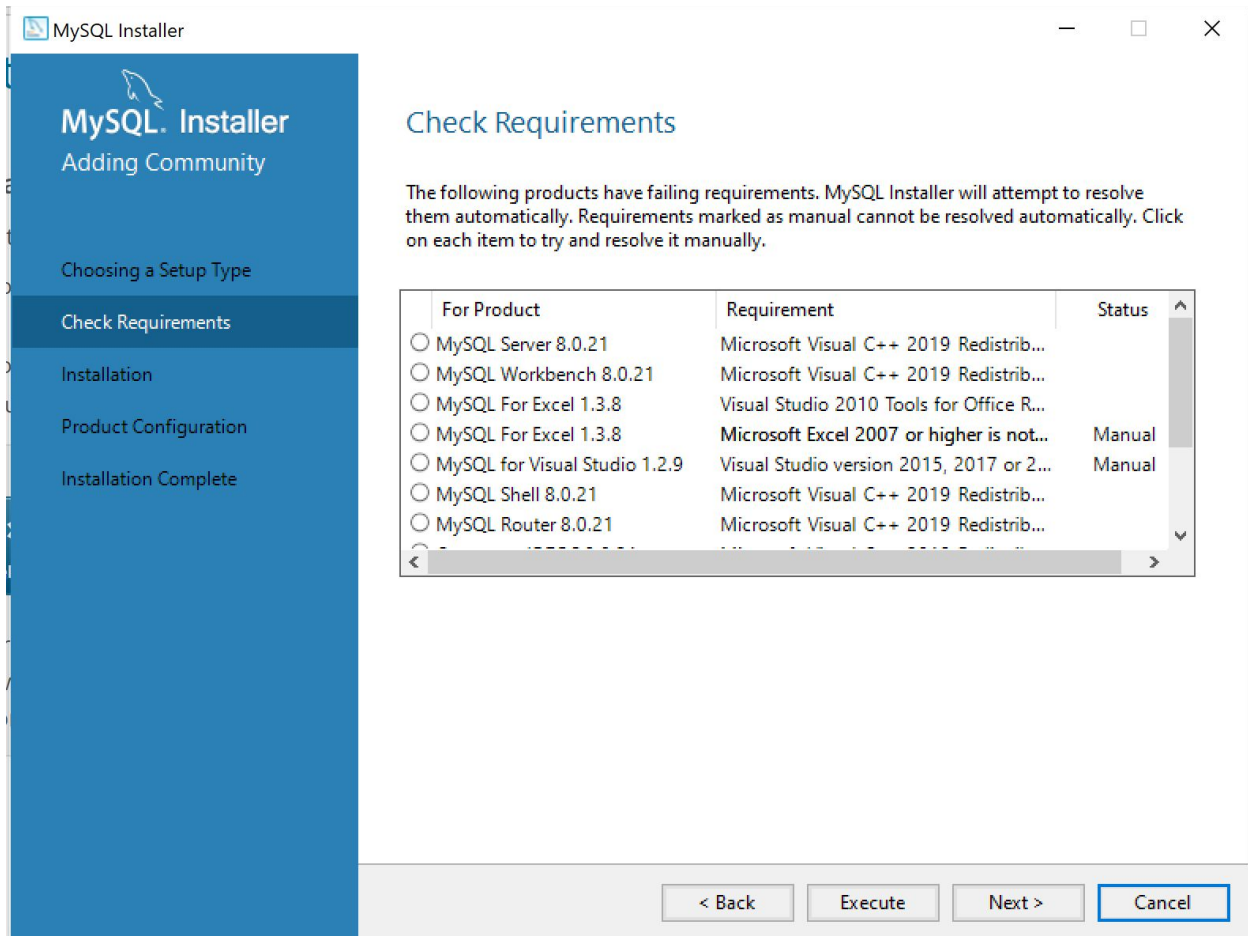
1. Execute the installer. Microsoft will ask permission to run the program.

2. When asked, choose “Developer Default” and click “Next”.

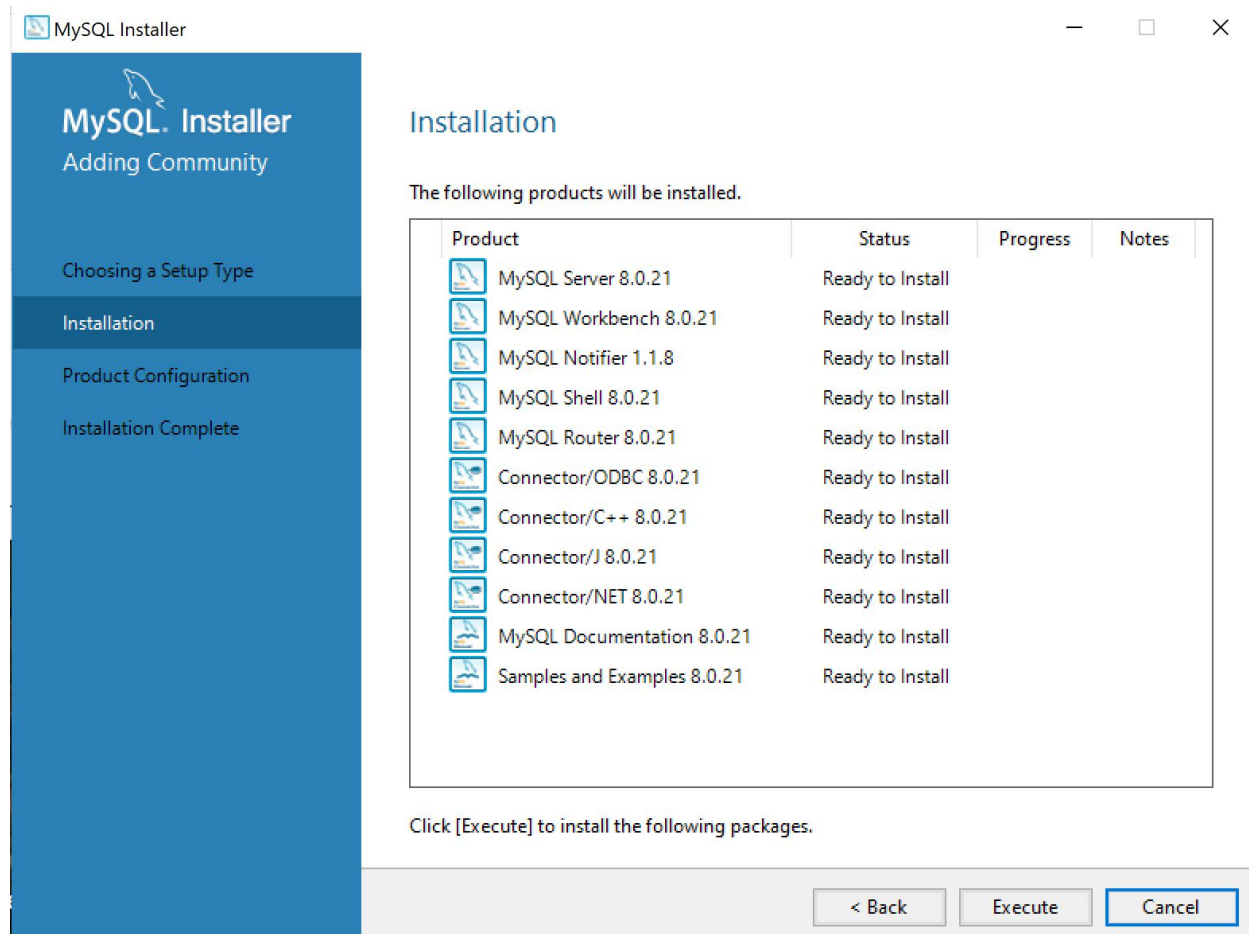


3. It may ask to resolve certain requirements. You can safely ignore these requirements if you are not planning to use the listed softwares to access MySQL. If you want to resolve these requirements, you may click the radial button on each and follow the instructions.

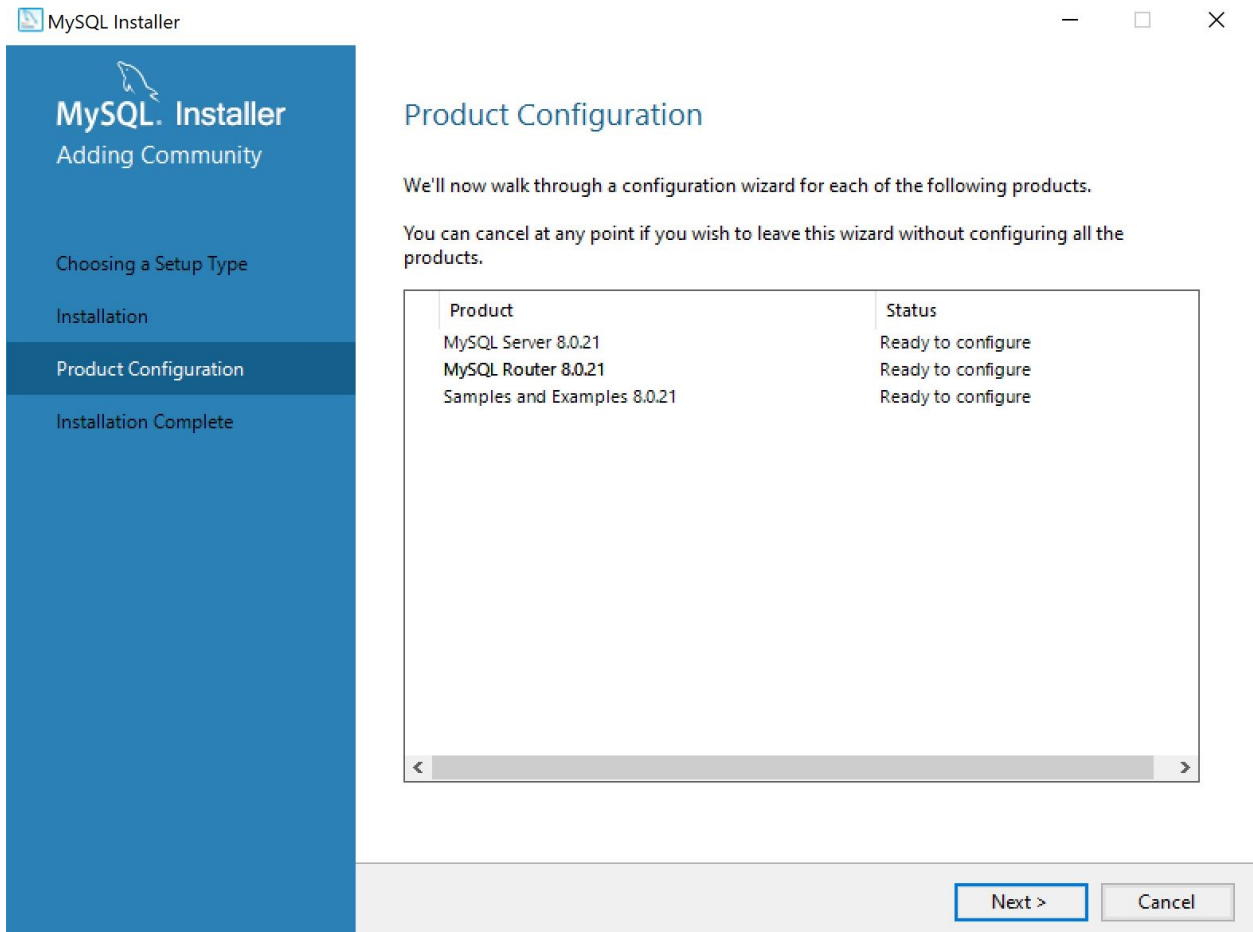
Once you have resolved these requirements, the radial buttons will have a green check. Click “Next” to continue. Or just ignore the requirement if you are not planning to use those softwares.



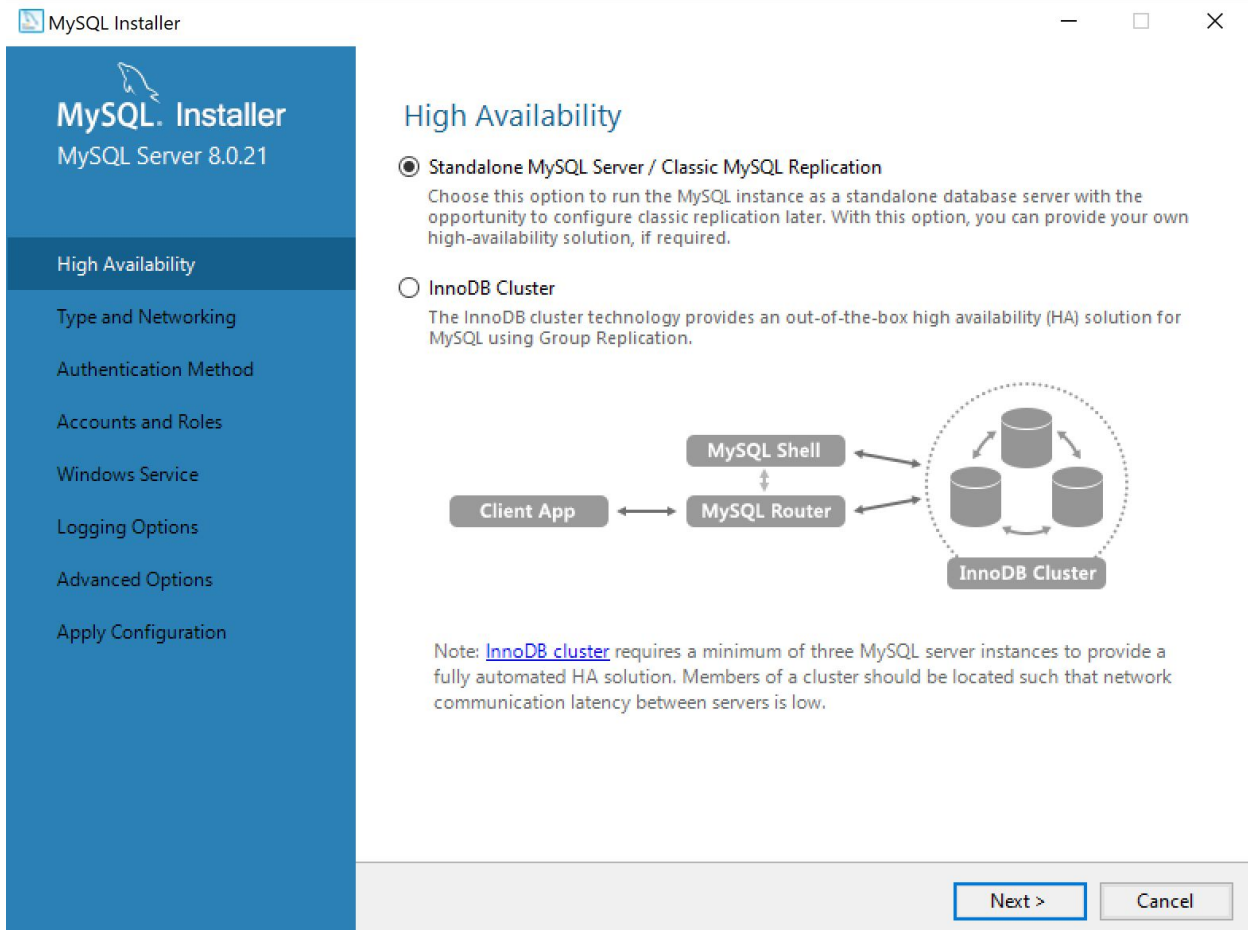
4. A list that contains the products that are going to be installed will appear. Click “Execute”. The installer is going to install these products.



5. After done, it will ask you to configure the MySQL Server. Click “Next”.



6. For Group Replication, select “Standalone MySQL server / Classic MySQL Replication” and press “Next”.



7. For the Config Type, choose “Development Computer”. For Connectivity, choose “TCP/IP” and enter 3306 as the port number. Also click “Show Advanced and Logging Options” then click “Next”

MySQL Installer

MySQL Server 8.0.21

High Availability

Type and Networking

Authentication Method

Accounts and Roles

Windows Service

Logging Options

Advanced Options

Apply Configuration

Type and Networking

Server Configuration Type

Choose the correct server configuration type for this MySQL Server installation. This setting will define how much system resources are assigned to the MySQL Server instance.

Config Type: Development Computer

Connectivity

Use the following controls to select how you would like to connect to this server.

☒ TCP/IP Port: 3306 X Protocol Port: 33060

☒ Open Windows Firewall ports for network access

☐ Named Pipe Pipe Name: MYSQL

☐ Shared Memory Memory Name: MYSQL

Advanced Configuration

Select the check box below to get additional configuration pages where you can set advanced and logging options for this server instance.

☒ Show Advanced and Logging Options

< Back Next > Cancel

8. For Authentication Method, Select “Use Strong Password Encryption for Authentication (RECOMMENDED)”. Press “Next” to continue.

9. Set the root password. The length should be at least 4 characters. Also, you can create a user account.

MySQL. Installer

MySQL Server 8.0.21

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Accounts and Roles


Root Account Password

Enter the password for the root account. Please remember to store this password in a secure place.

MySQL Root Password: Repeat Password: Password strength: **Weak**

MySQL User Accounts

Create MySQL user accounts for your users and applications. Assign a role to the user that consists of a set of privileges.

MySQL User Name	Host	User Role	
 sqluser	%	DB Admin	<div><div>Add User</div><div>Edit User</div><div>Delete</div></div>

< Back

Next >

Cancel

Please specify the user name, password, and database role.

User Name: Host: Role: Authentication: ☒ MySQL

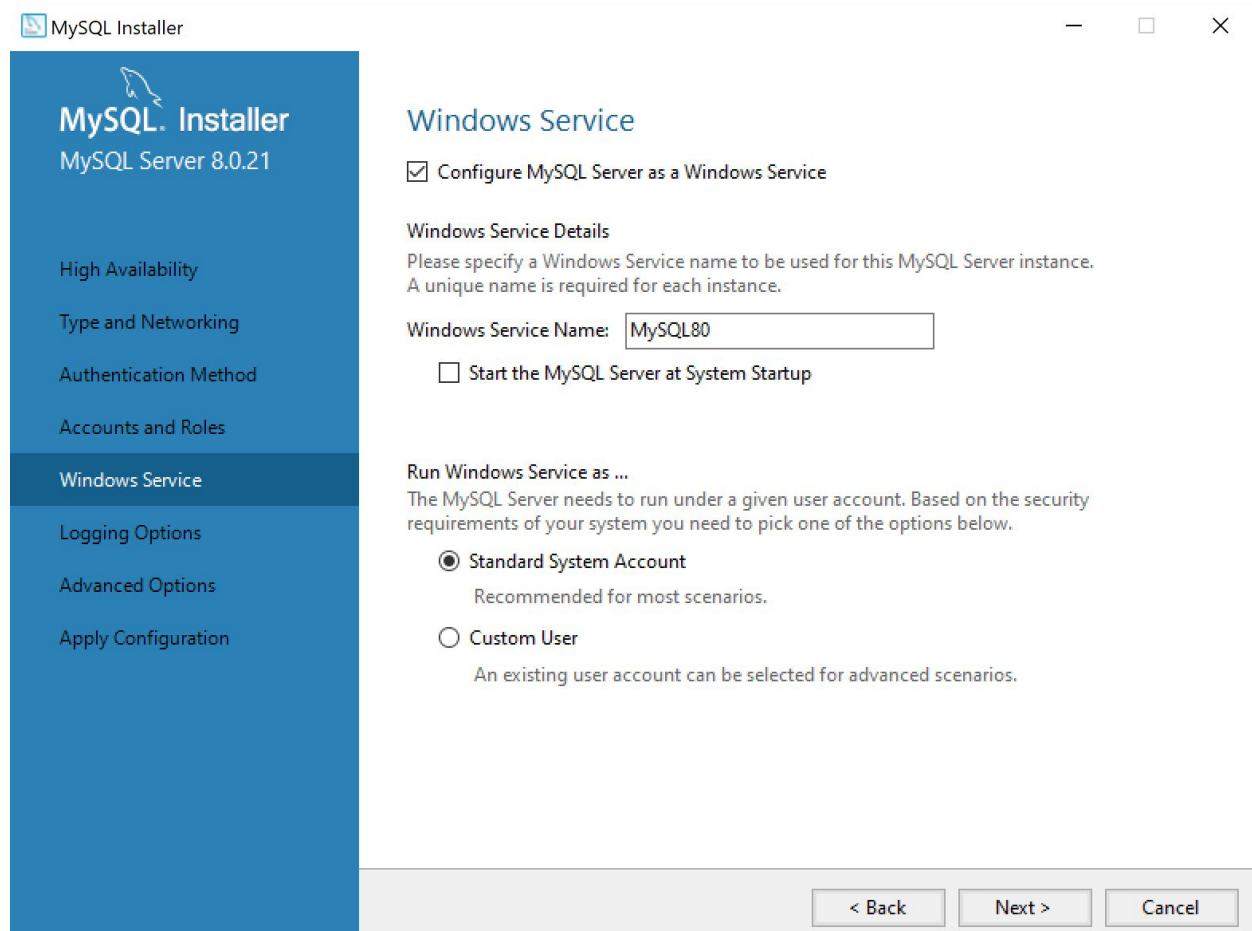
MySQL user credentials

Password: Confirm Password: Password strength: **Weak**

OK

Cancel

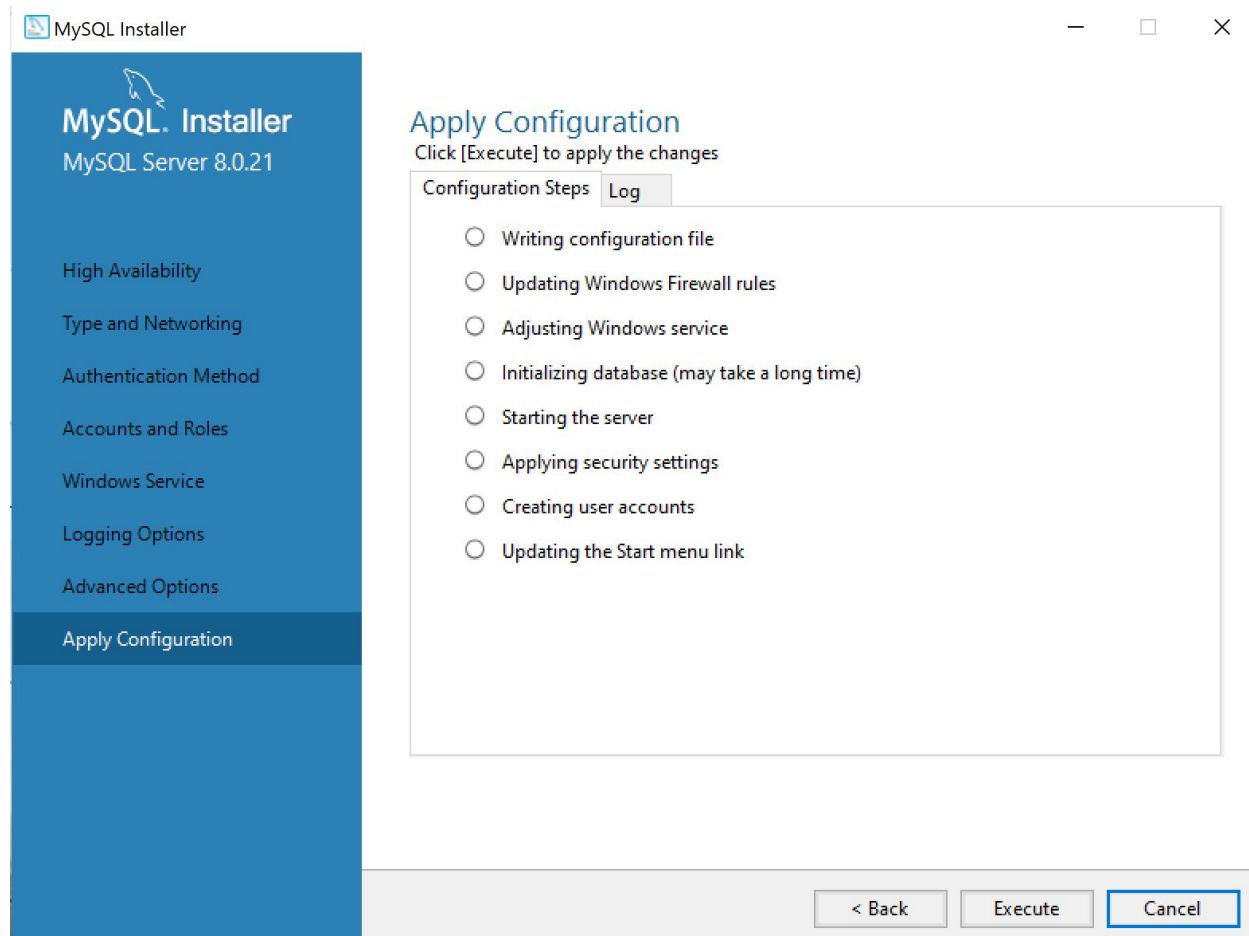
10. Select “Configure MySQL Server as a Windows Service”. Check the box to “Start the MySQL Server at System Startup”. If you don’t check the box, you will have to start the MySQL service manually after you reboot your computer. Select “Standard System Account”. Press “Next” to continue.



11. For Logging Options, use the default settings and press “Next”.

12. For Advanced Options, use the default settings and press “Next”.

13. Click “Execute” to continue. After this step is done, click “Finish”.



14. At the Product Configuration, click “Finish”.

MySQL Installer

MySQL Router 8.0.21

MySQL Router Configuration

MySQL Router Configuration

☐ Bootstrap MySQL Router for use with InnoDB cluster

This wizard can bootstrap MySQL Router to direct traffic between MySQL applications and a MySQL InnoDB cluster. Applications that connect to the router will be automatically directed to an available read/write or read-only member of the cluster.

The bootstrapping process requires a connection to the InnoDB cluster. In order to register the MySQL Router for monitoring, use the current Read/Write instance of the cluster.

Hostname:

Port:

Management User:

Password:

Test Connection

MySQL Router requires specification of a base port (between 80 and 65532). The first port is used for classic read/write connections. The other ports are computed sequentially after the first port. If any port is indicated to be in use, please change the base port.

Classic MySQL protocol connections to InnoDB cluster:

Read/Write:

Read Only:

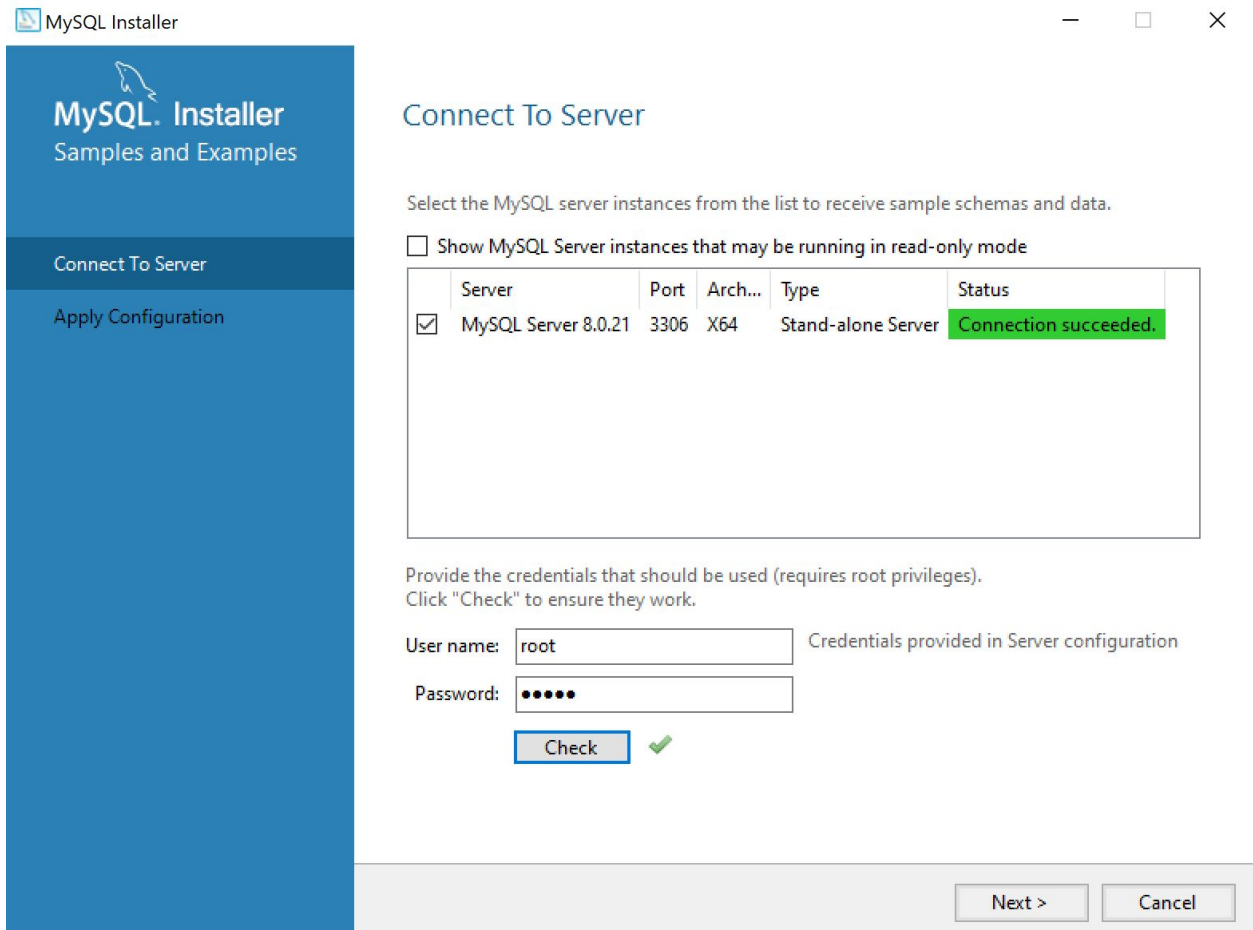
MySQL X protocol connections to InnoDB cluster:

Read/Write:

Read Only:

Finish Cancel

15. Type in the password for the root user, and click “Check” to check the connection. If it works well a green bar in Status will appear. Click “Next” and then click “Execute” in the next screen.



16. Once this configuration is completed, click “Finish”. If the following windows come up, click Execute and Next respectively.

MySQL. Installer

Samples and Examples

Connect To Server

Apply Configuration

Apply Configuration

Click [Execute] to apply the changes

Configuration Steps

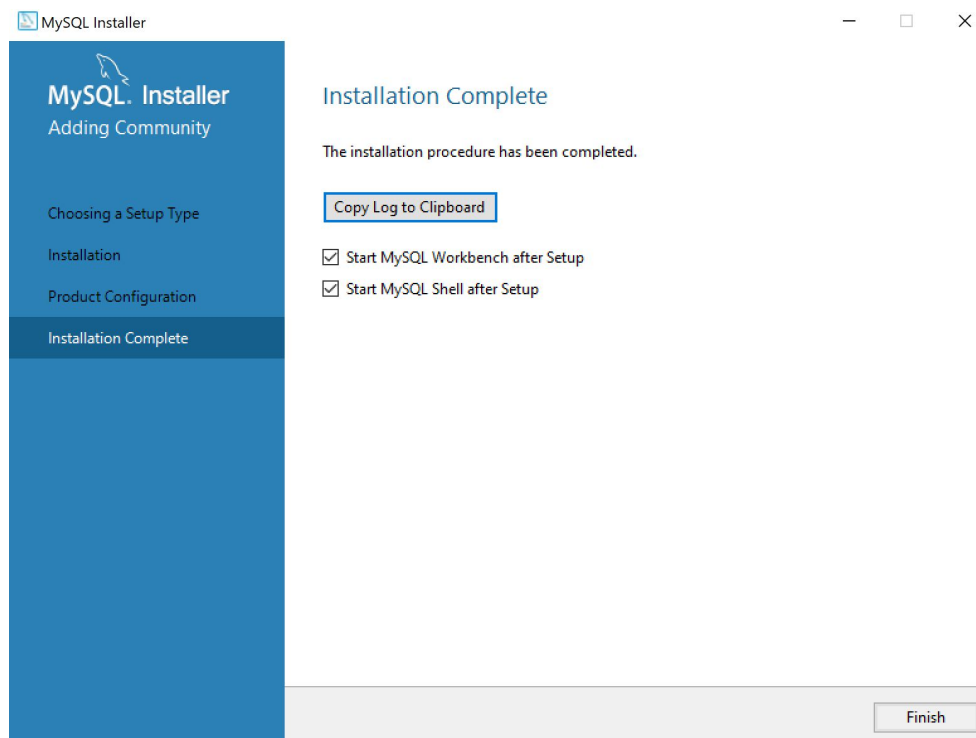
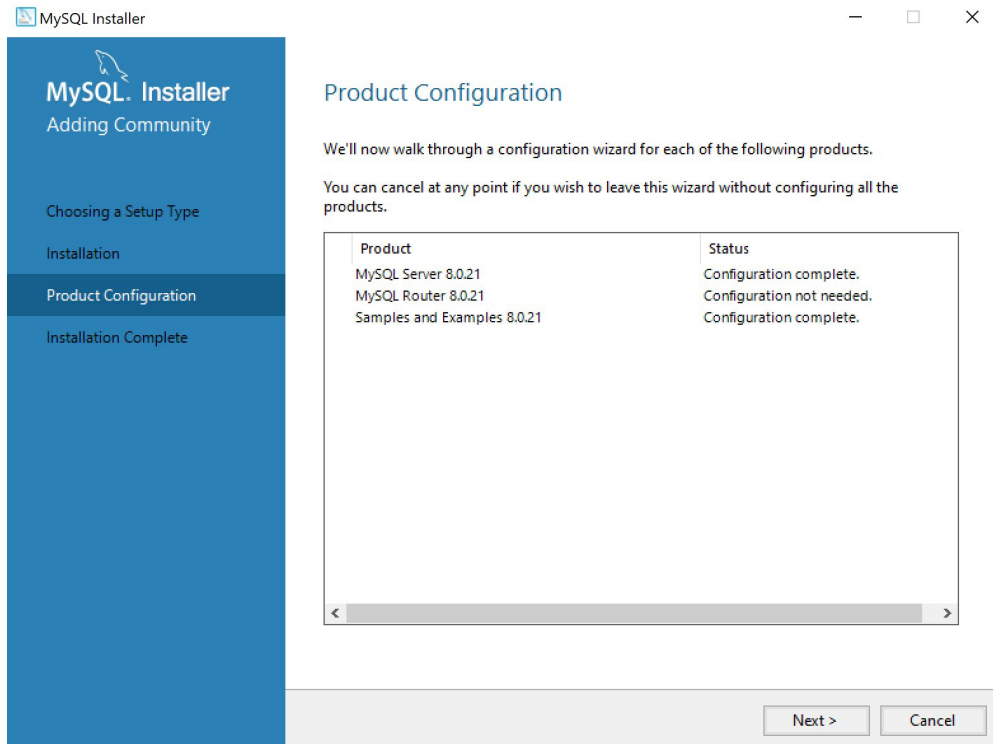
Log

- ☐ Checking if there are any features installed that need configuration.
- ☐ Running Scripts

< Back

Execute

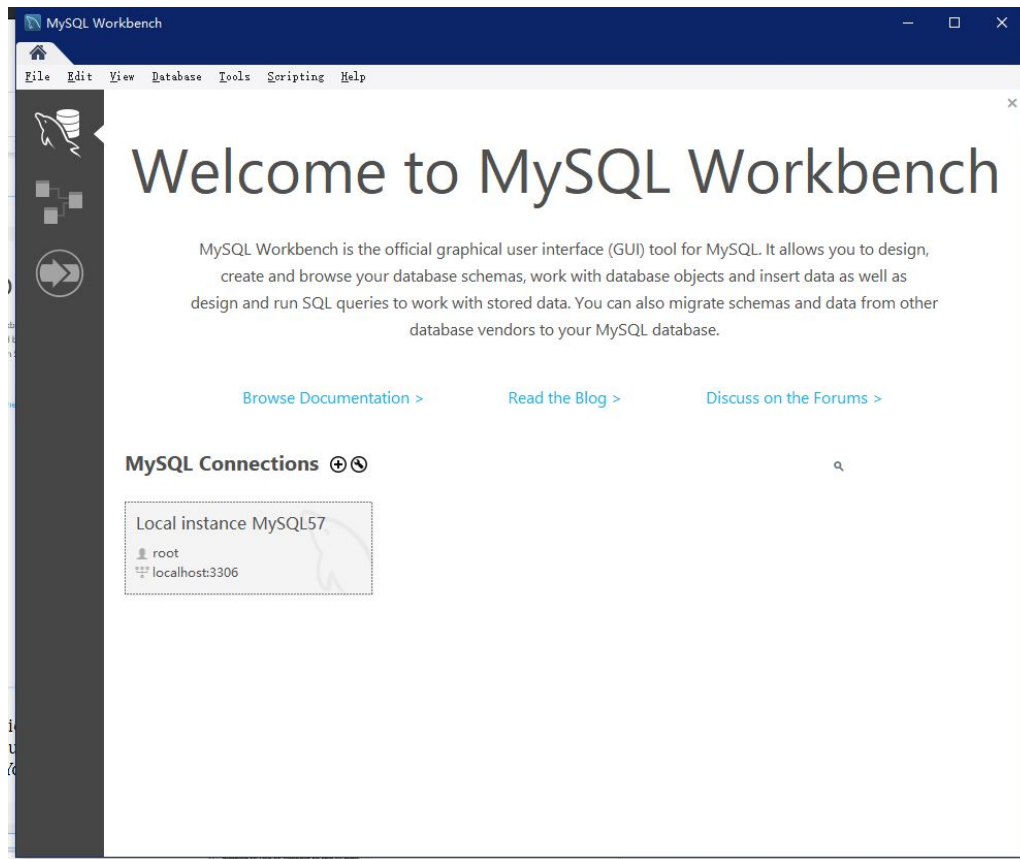
Cancel



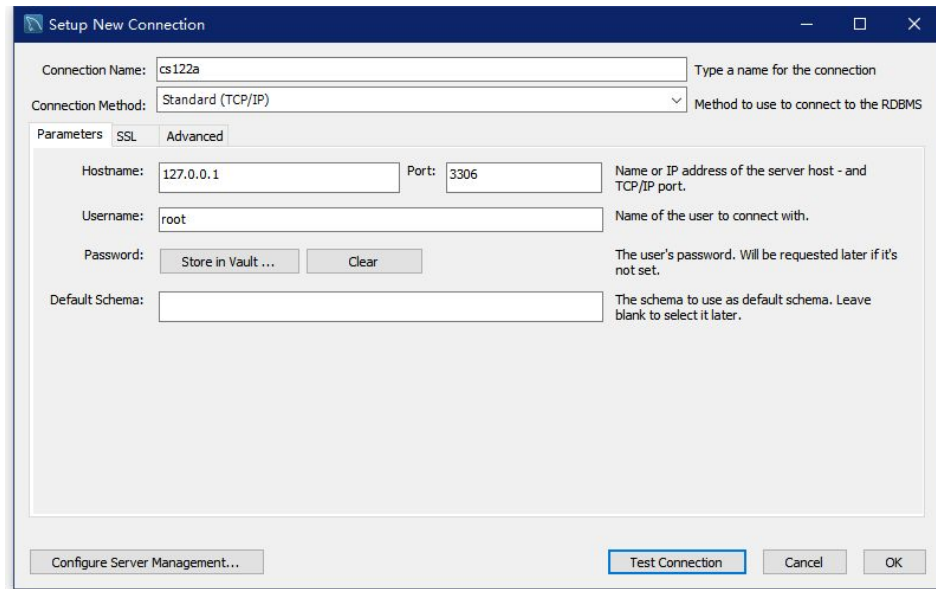
Click “Finish” to start MySQL Workbench.

Step2- Execute MySQL WorkBench

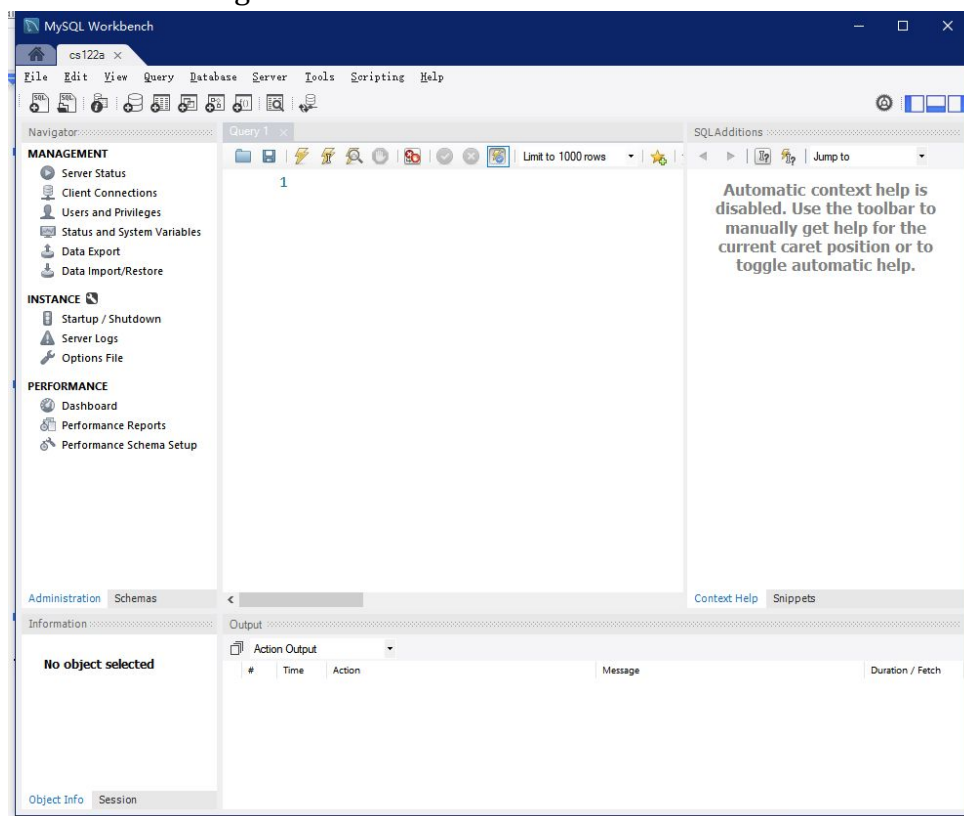
1. In the MySQL program group, execute “MySQL Workbench”. Click “Local instance MySQL57” to connect to the instance.



If you don't see a connection, you can create it by clicking the “+” button and referencing the following window. You need to provide the connection name and the password by clicking “Store in Vault”. You can click “Test connection” to see whether it works fine or not.



2. You will see the following window.



Example of How to Create a Database and Tables, and Insert tuples

Given below is the schema for the example data. There are three tables.

- Boats (bid, bname, color)

- Reserves (sid, bid, date)
- Sailors (sid, sname, rating, age)

The field types are as follows:

bid: INTEGER, bname: VARCHAR, color: VARCHAR,

sid: INTEGER, bid: INTEGER, date: date ,

sname: VARCHAR, rating: INTEGER, age: DECIMAL

Also, there are Boats2, Reserves2, and Sailors2 tables. These will contain slightly different data on the same schema to help you to practice SQL statements.

The following scripts will be used to create the schema named “cs122a”, three tables, and populate some data. The script is also available on the class Web page.

```
-- The Begin of the script
CREATE DATABASE IF NOT EXISTS `cs122a` DEFAULT CHARACTER SET latin1;
USE `cs122a`;

-- Table structure for table `Boats`
DROP TABLE IF EXISTS `Boats`;
CREATE TABLE `Boats` (
  `bid` int(11) NOT NULL,
  `bname` varchar(45) DEFAULT NULL,
  `color` varchar(15) DEFAULT NULL,
  PRIMARY KEY (`bid`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

-- Dumping data for table `Boats`
ALTER TABLE `Boats` DISABLE KEYS;
INSERT INTO `Boats` VALUES
(101,'Interlake','blue'),(102,'Interlake','red'),(103,'Clipper','green'),(104,'Marine','red');
ALTER TABLE `Boats` ENABLE KEYS;

-- Table structure for table `Boats2`
DROP TABLE IF EXISTS `Boats2`;
CREATE TABLE `Boats2` (
  `bid` int(11) NOT NULL,
  `bname` varchar(45) DEFAULT NULL,
  `color` varchar(15) DEFAULT NULL,
  PRIMARY KEY (`bid`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

-- Dumping data for table `Boats2`
ALTER TABLE `Boats2` DISABLE KEYS;
INSERT INTO `Boats2` VALUES
```

```
(103,'Clipper','green'),(104,'Marine','red'),(105,'InterClipper','blue'),(106,'InterMarine','red');
ALTER TABLE `Boats2` ENABLE KEYS;
```

```
-- Table structure for table `Reserves`
DROP TABLE IF EXISTS `Reserves`;
CREATE TABLE `Reserves` (
  `sid` int(11) DEFAULT NULL,
  `bid` int(11) DEFAULT NULL,
  `date` date DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

```
-- Dumping data for table `Reserves`
ALTER TABLE `Reserves` DISABLE KEYS;
INSERT INTO `Reserves` VALUES
(22,101,'1998-10-10'),(22,102,'1998-10-10'),(22,103,'1998-10-08'),(22,104,'1998-10-07'),(31,102,'1998-10-10'),(31,103,'1998-11-06'),(31,104,'1998-11-12'),(64,101,'1998-09-05'),(64,102,'1998-09-08'),(74,103,'1998-09-08'),(NULL,103,'1998-09-09'),(1,NULL,'2001-01-11'),(1,NULL,'2002-02-02');
ALTER TABLE `Reserves` ENABLE KEYS;
```

```
-- Table structure for table `Reserves2`
DROP TABLE IF EXISTS `Reserves2`;
CREATE TABLE `Reserves2` (
  `sid` int(11) DEFAULT NULL,
  `bid` int(11) DEFAULT NULL,
  `date` date DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

```
-- Dumping data for table `Reserves2`
ALTER TABLE `Reserves2` DISABLE KEYS;
INSERT INTO `Reserves2` VALUES
(22,103,'1998-10-10'),(22,104,'1998-10-10'),(22,105,'1998-10-08'),(22,106,'1998-10-07'),(31,103,'1998-10-10'),(31,104,'1998-11-06'),(31,105,'1998-11-12'),(64,104,'1998-09-05'),(64,105,'1998-09-08'),(74,105,'1998-09-08'),(NULL,104,'1998-09-09'),(108,NULL,'2001-01-11'),(108,NULL,'2002-02-02');
ALTER TABLE `Reserves2` ENABLE KEYS;
```

```
-- Table structure for table `Sailors`
DROP TABLE IF EXISTS `Sailors`;
CREATE TABLE `Sailors` (
  `sid` int(11) NOT NULL,
  `sname` varchar(45) NOT NULL,
  `rating` int(11) DEFAULT NULL,
  `age` decimal(5,1) DEFAULT NULL,
  PRIMARY KEY (`sid`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

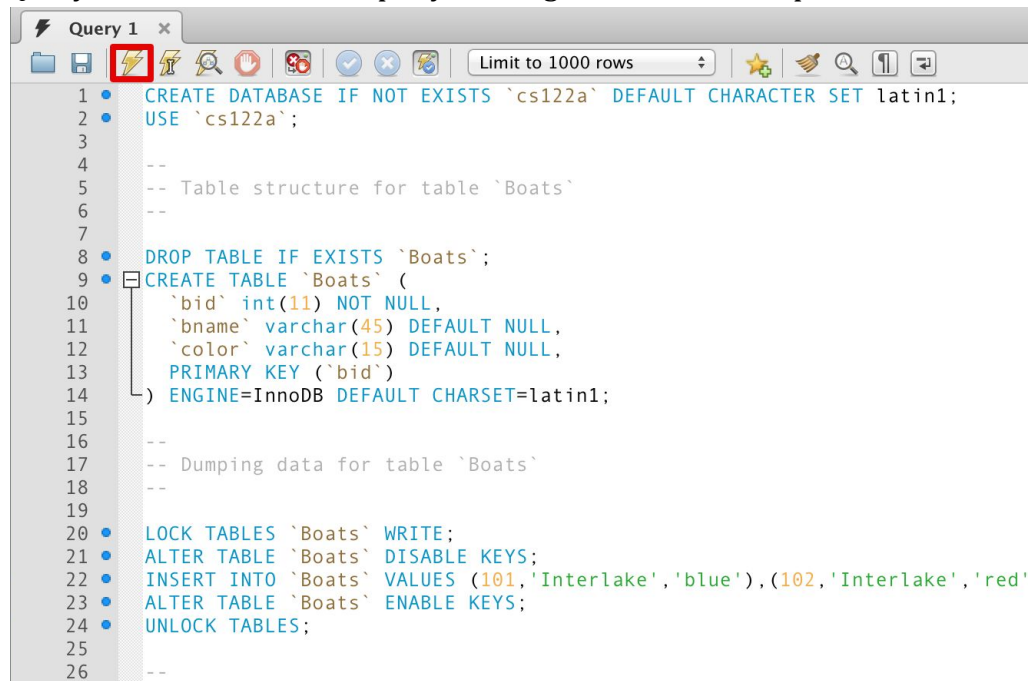
```
-- Dumping data for table `Sailors`
ALTER TABLE `Sailors` DISABLE KEYS;
INSERT INTO `Sailors` VALUES
```

```
(22,'Dustin',7,45.0),(29,'Brutus',1,33.0),(31,'Lubber',8,55.5),(32,'Andy',8,25.5),(58,'Rusty',10,35.0),(64,'Horatio',7,35.0),(71,'Zorba',10,16.0),(74,'Horatio',9,35.0),(85,'Art',4,25.5),(95,'Bob',3,63.5),(101,'Joan',3,NULL),(107,'Johannes',NULL,35.0);
ALTER TABLE `Sailors` ENABLE KEYS;
```

```
-- Table structure for table `Sailors2`
DROP TABLE IF EXISTS `Sailors2`;
CREATE TABLE `Sailors2` (
  `sid` int(11) NOT NULL,
  `sname` varchar(45) NOT NULL,
  `rating` int(11) DEFAULT NULL,
  `age` decimal(5,1) DEFAULT NULL,
  PRIMARY KEY (`sid`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

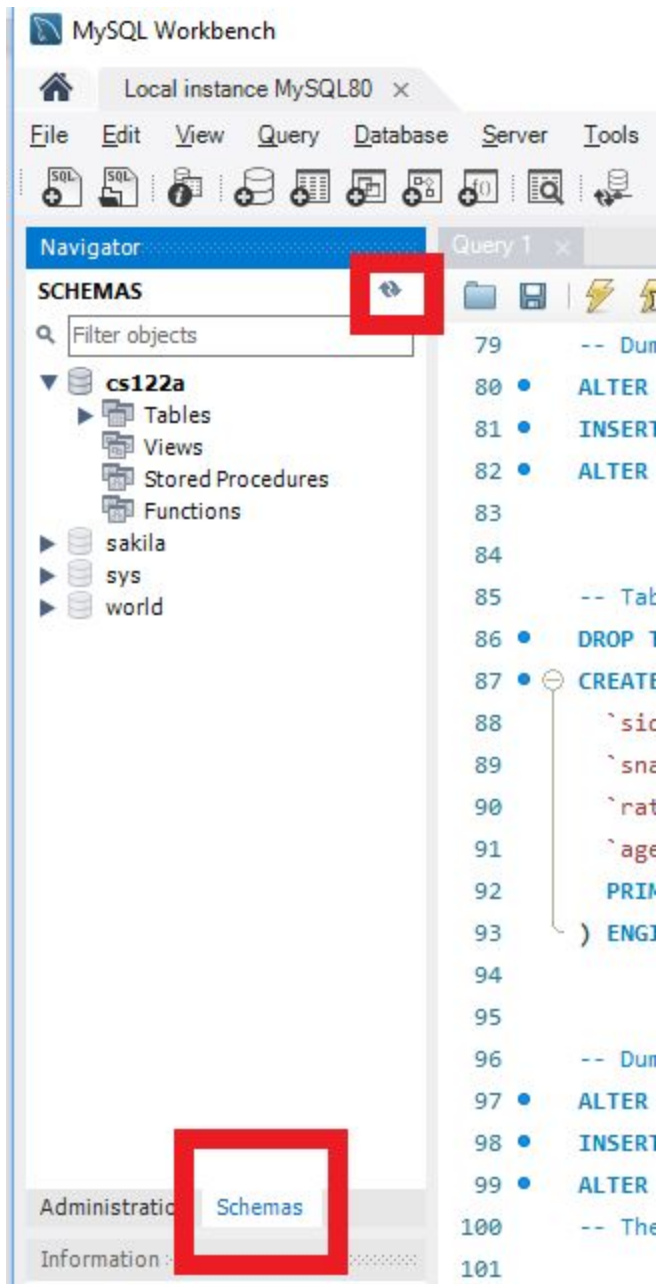
```
-- Dumping data for table `Sailors2`
ALTER TABLE `Sailors2` DISABLE KEYS;
INSERT INTO `Sailors2` VALUES
(22,'Dustin',7,45.0),(31,'Lubber',8,55.5),(64,'Horatio',7,35.0),(71,'Zorba',10,16.0),(74,'Horatio',9,35.0),(85,'Art',4,25.5),(95,'Bob',3,63.5),(101,'Joan',3,NULL),(107,'Johannes',NULL,35.0),(108,'Sandy',NULL,36.0),(109,'James',5,38.0);
ALTER TABLE `Sailors2` ENABLE KEYS;
-- The end of the script
```

1. In Query 1, download the above script from the class website and copy and paste the content from the script. If you can't see the "Query 1" tab, create one by clicking File -> New Query Tab. Execute the script by clicking "the thunder shaped icon".



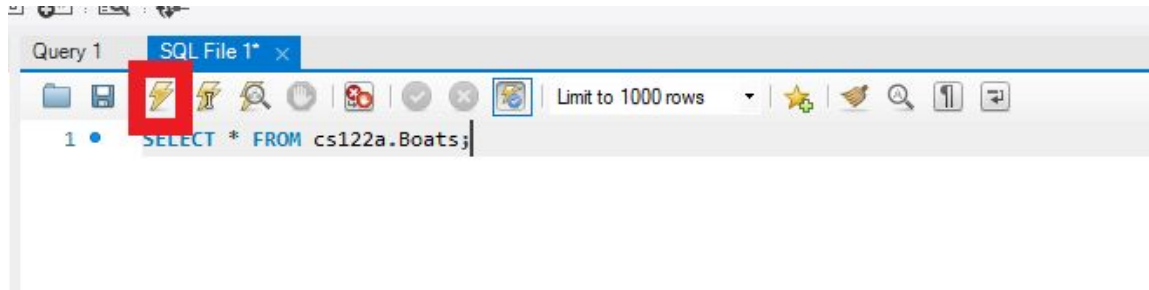
```
1 CREATE DATABASE IF NOT EXISTS `cs122a` DEFAULT CHARACTER SET latin1;
2 USE `cs122a`;
3
4 -- Table structure for table `Boats`
5 --
6
7
8 DROP TABLE IF EXISTS `Boats`;
9 CREATE TABLE `Boats` (
10   `bid` int(11) NOT NULL,
11   `bname` varchar(45) DEFAULT NULL,
12   `color` varchar(15) DEFAULT NULL,
13   PRIMARY KEY (`bid`)
14 ) ENGINE=InnoDB DEFAULT CHARSET=latin1;
15
16 --
17 -- Dumping data for table `Boats`
18 --
19
20 LOCK TABLES `Boats` WRITE;
21 ALTER TABLE `Boats` DISABLE KEYS;
22 INSERT INTO `Boats` VALUES (101,'Interlake','blue'),(102,'Interlake','red');
23 ALTER TABLE `Boats` ENABLE KEYS;
24 UNLOCK TABLES;
25
26 --
```

2. In the left “Schemas” pane, click the “Refresh” button and you will see the “cs122a” schema and its Tables.



Executing any SQL queries

1. To execute a query, type in the query in the 'Query' tab and click on the thunder shaped icon. You can execute the following query by choosing "File" -> "New Query Tab", type "SELECT * FROM cs122a.Boats;", and then click on the thunder shaped icon. You will see your results in the box below the pane.



2. (Optional) You can export the result into a CSV file by clicking the "Export" button.

