

MySQL Installation Guide (Windows)

Step1- Install MySQL

The following description is based on MySQL 5.7.17 for Windows.

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

MySQL Community Server 5.7.17

Select Platform:

Recommended Download:

MySQL Installer 5.7
for Windows

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

Starting with MySQL 5.6 the MySQL Installer package replaces the server-only MSI packages.



Windows (x86, 32-bit), MySQL Installer MSI [Download](#)

You will see the following window. Download the Installer whose size is 386.6M.

[Generally Available \(GA\) Releases](#) [Development Releases](#)

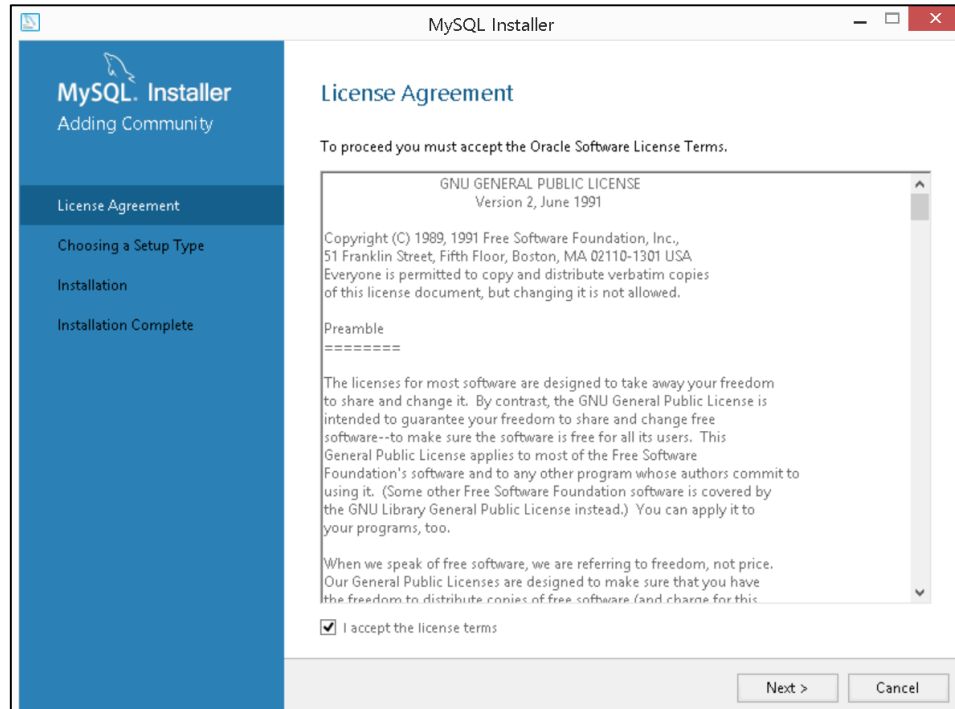
MySQL Installer 5.7.17

Select Platform:

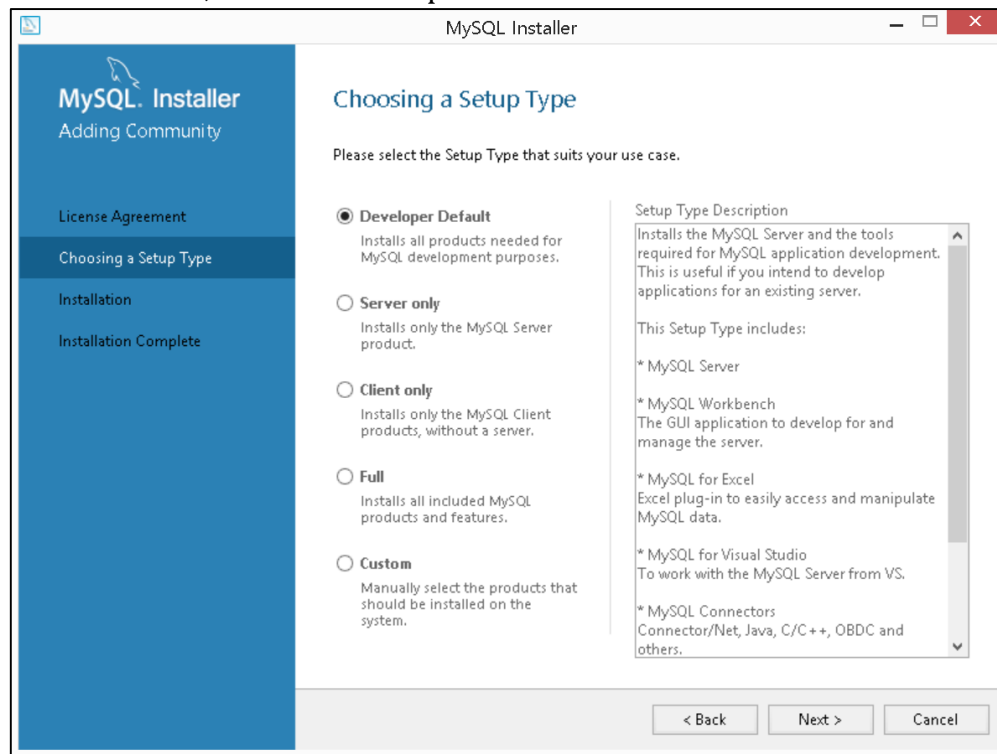
[Looking for previous GA versions?](#)

Windows (x86, 32-bit), MSI Installer (mysql-installer-web-community-5.7.17.0.msi)	5.7.17	1.7M	Download
MD5: df80081cd386da03240c4fb4bae37758 Signature			
Windows (x86, 32-bit), MSI Installer (mysql-installer-community-5.7.17.0.msi)	5.7.17	386.6M	Download
MD5: e03723eb6c6bac271a848bd9031ea859 Signature			

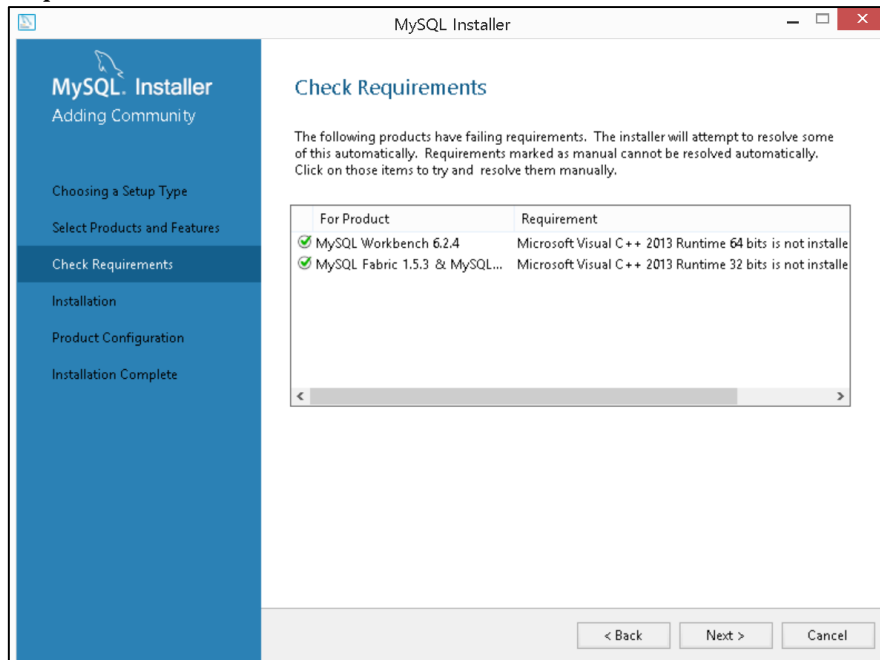
1. Execute the installer. Check “I accept the license terms.” And click “Next”.



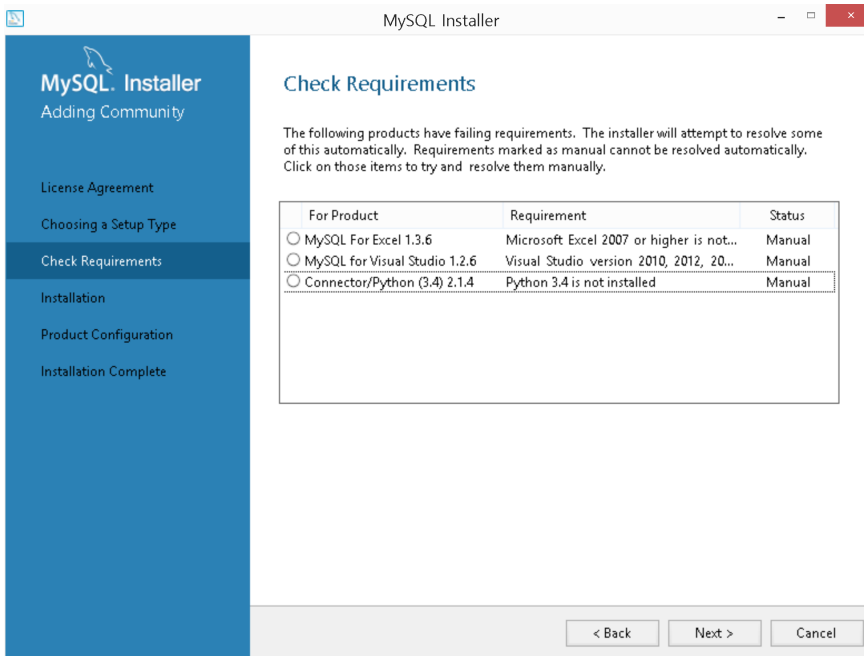
2. When asked, choose “Developer Default” and click “Next”.



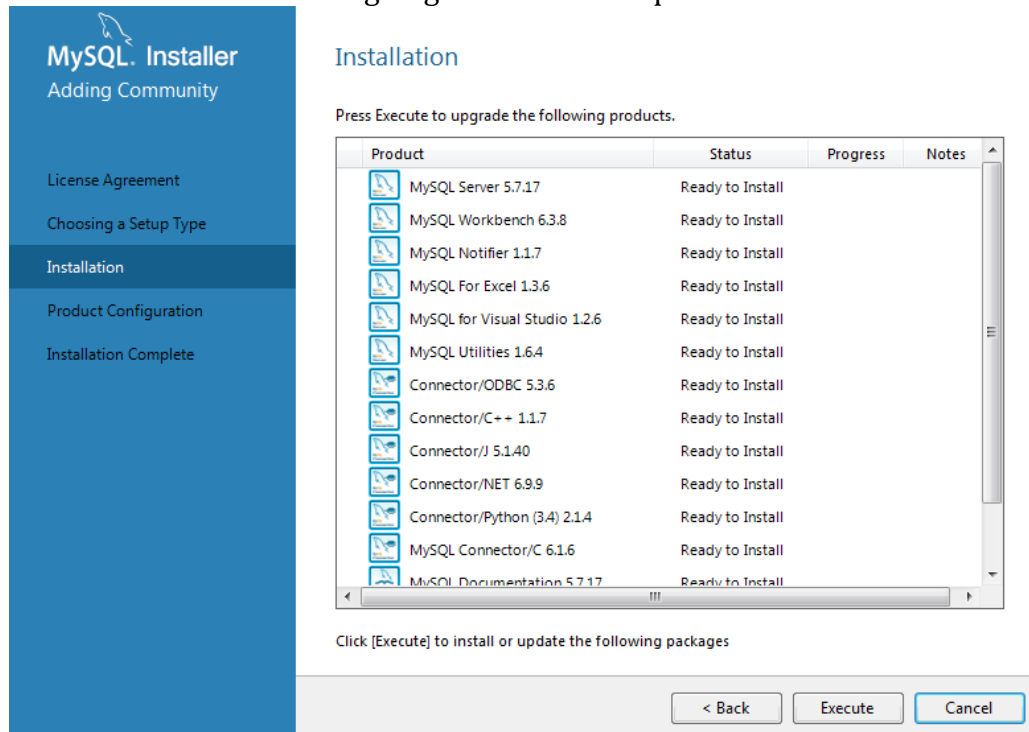
3. It may ask to resolve the certain requirements. Click “Execute” to resolve these requirements. After finished, click “Next” to continue.



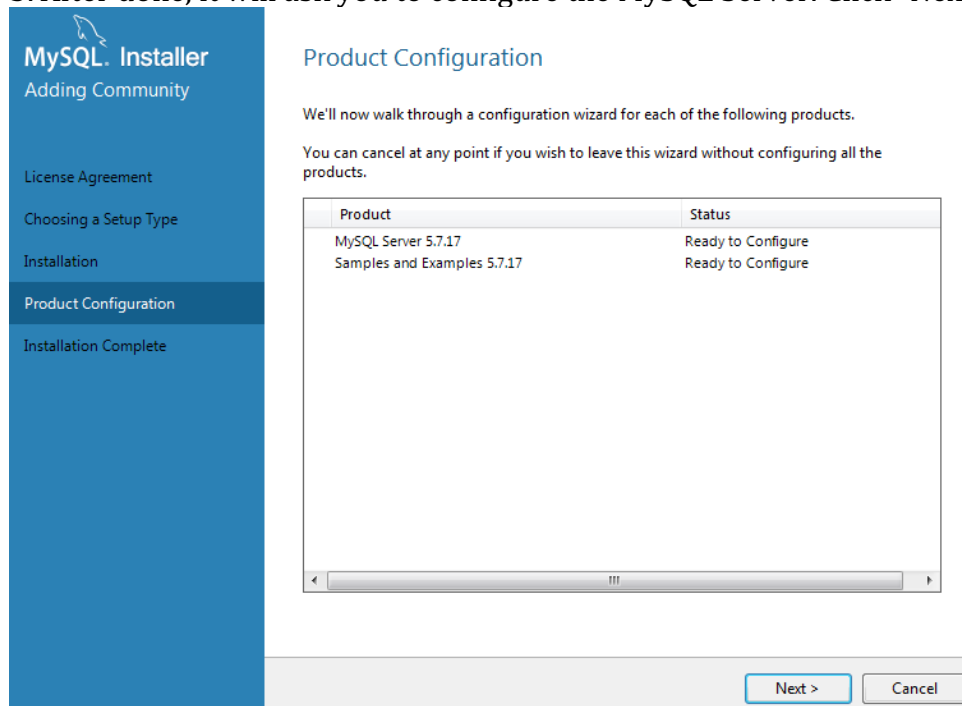
If you see the following dialog, you can just click “Next” and continue. If a confirmation dialog appears, click “Yes”. Basically, if the status of each requirement is “Manual”, you don’t need to resolve it. Especially, **Python 3.4** doesn’t need to be installed.



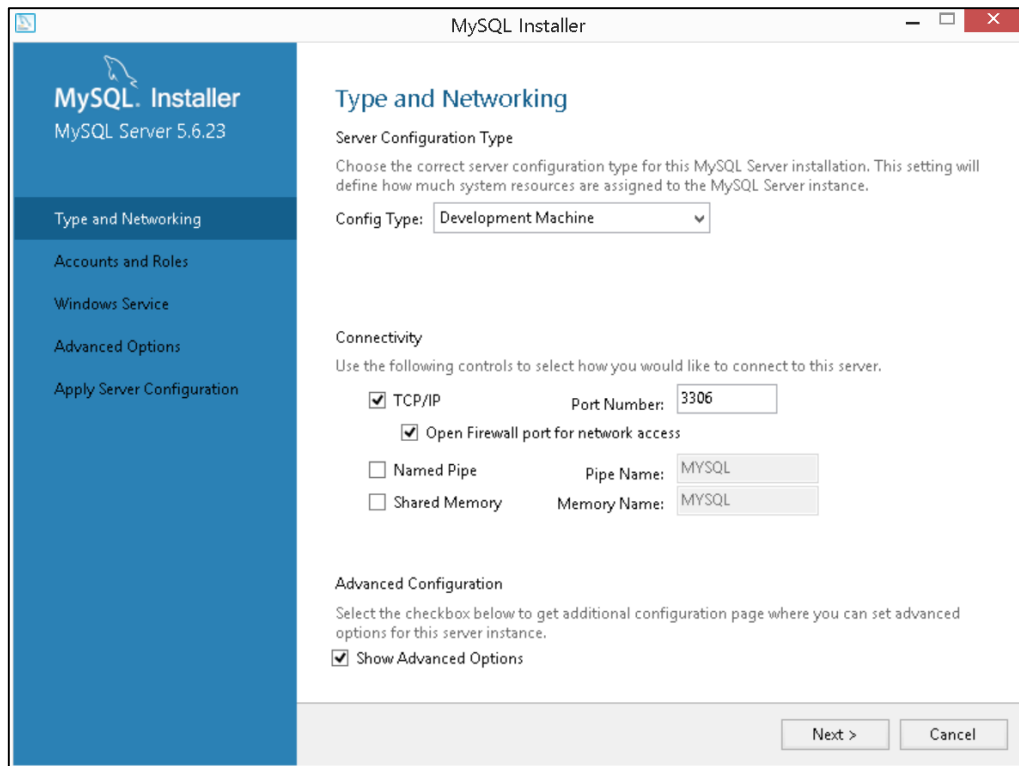
4. A list that contains the products that are going to be installed will appear. Click “Execute”. The installer is going to install these products.



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



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

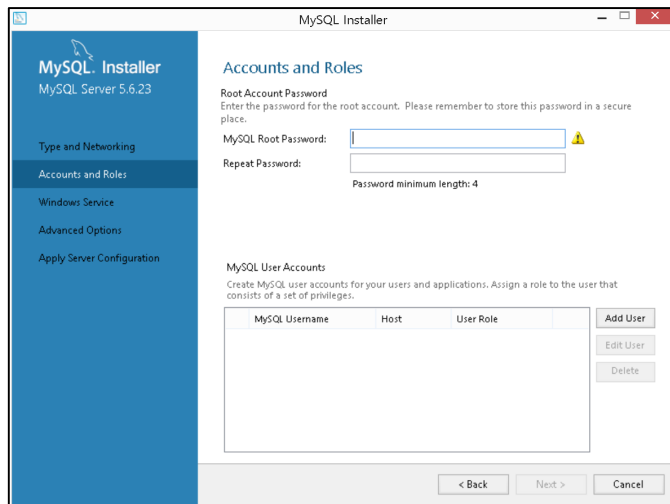


The screenshot shows the 'MySQL Installer' window for 'MySQL Server 5.6.23'. The left sidebar has 'Type and Networking' selected. The main area is titled 'Type and Networking' and contains the following sections:

- Server Configuration Type**: A dropdown menu for 'Config Type' is set to 'Development Machine'.
- Connectivity**: A section with the instruction 'Use the following controls to select how you would like to connect to this server.' It includes:
 - ☒ TCP/IP: The 'Port Number' is set to '3306'.
 - ☒ Open Firewall port for network access
 - ☐ Named Pipe: The 'Pipe Name' is 'MYSQL'.
 - ☐ Shared Memory: The 'Memory Name' is 'MYSQL'.
- Advanced Configuration**: A section with the instruction 'Select the checkbox below to get additional configuration page where you can set advanced options for this server instance.' It includes:
 - ☒ Show Advanced Options

At the bottom right, there are 'Next >' and 'Cancel' buttons.

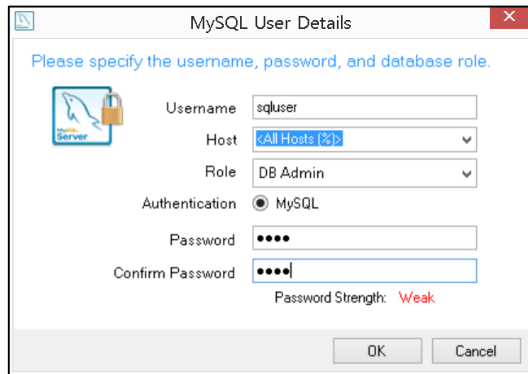
7. Set the root password. The length should be at least 4. Also, you can create a user account.



The screenshot shows the 'MySQL Installer' window for 'MySQL Server 5.6.23'. The left sidebar has 'Accounts and Roles' selected. The main area is titled 'Accounts and Roles' and contains the following sections:

- Root Account Password**: A section with the instruction 'Enter the password for the root account. Please remember to store this password in a secure place.' It includes:
 - 'MySQL Root Password': A text input field with a warning icon.
 - 'Repeat Password': A text input field.
 - A note: 'Password minimum length: 4'.
- MySQL User Accounts**: A section with the instruction 'Create MySQL user accounts for your users and applications. Assign a role to the user that consists of a set of privileges.' It includes:
 - A table with columns: 'MySQL Username', 'Host', and 'User Role'.
 - Buttons: 'Add User', 'Edit User', and 'Delete'.

At the bottom, there are '< Back', 'Next >', and 'Cancel' buttons.



MySQL User Details

Please specify the username, password, and database role.

Username: sqluser

Host: All Hosts (*)

Role: DB Admin

Authentication: ☒ MySQL

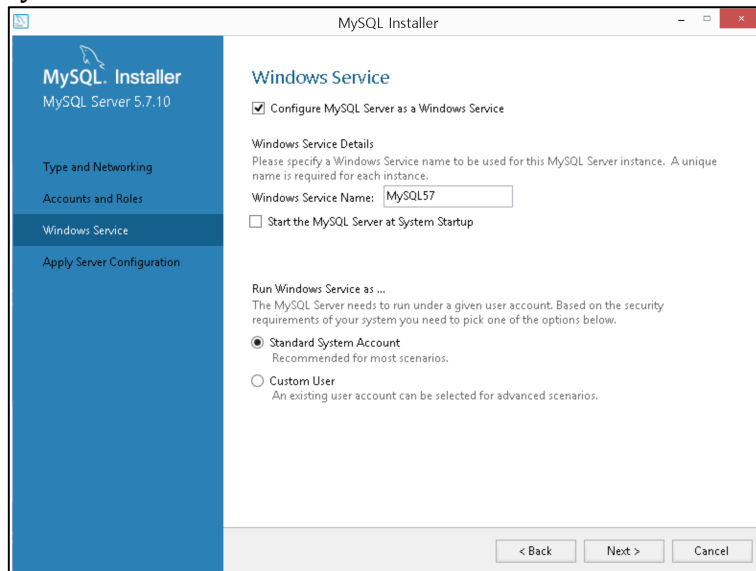
Password: ****

Confirm Password: ****

Password Strength: Weak

OK Cancel

8. Select “Configure MySQL Server as a Windows Service” and select “Standard System Account”.



MySQL Installer

MySQL Server 5.7.10

Type and Networking

Accounts and Roles

Windows Service

Apply Server Configuration

Windows Service

☒ Configure MySQL Server as a Windows Service

Windows Service Details

Please specify a Windows Service name to be used for this MySQL Server instance. A unique name is required for each instance.

Windows Service Name: MySQL57

☐ Start the MySQL Server at System Startup

Run Windows Service as ...

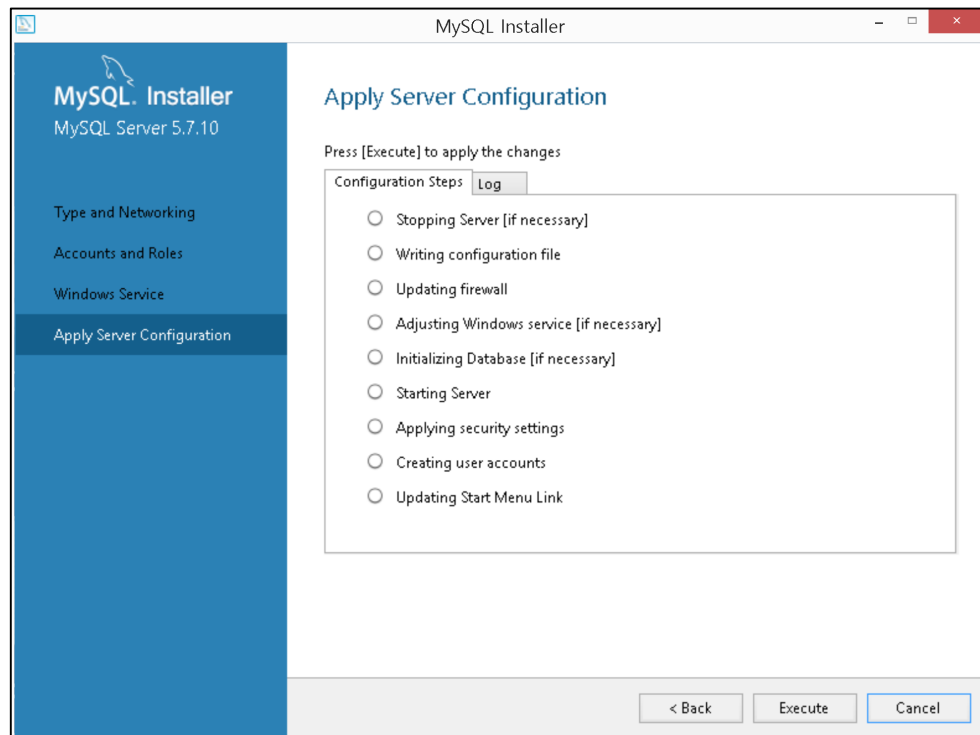
The MySQL Server needs to run under a given user account. Based on the security requirements of your system you need to pick one of the options below.

☒ Standard System Account
Recommended for most scenarios.

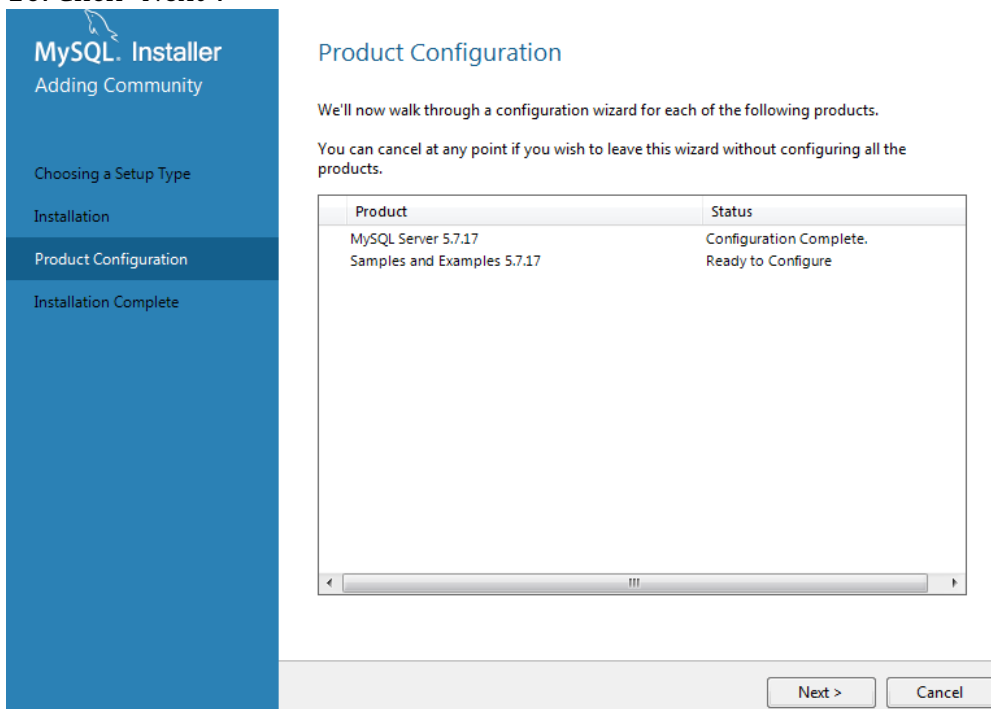
☐ Custom User
An existing user account can be selected for advanced scenarios.

< Back Next > Cancel

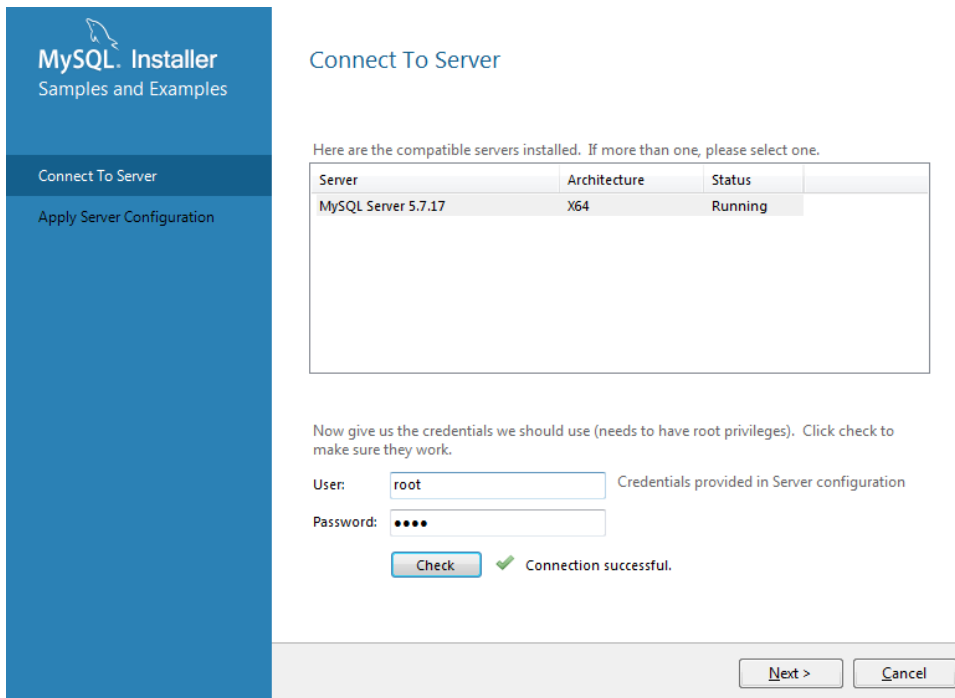
9. Click “Execute” to continue. After this step is done, click “Finish”.



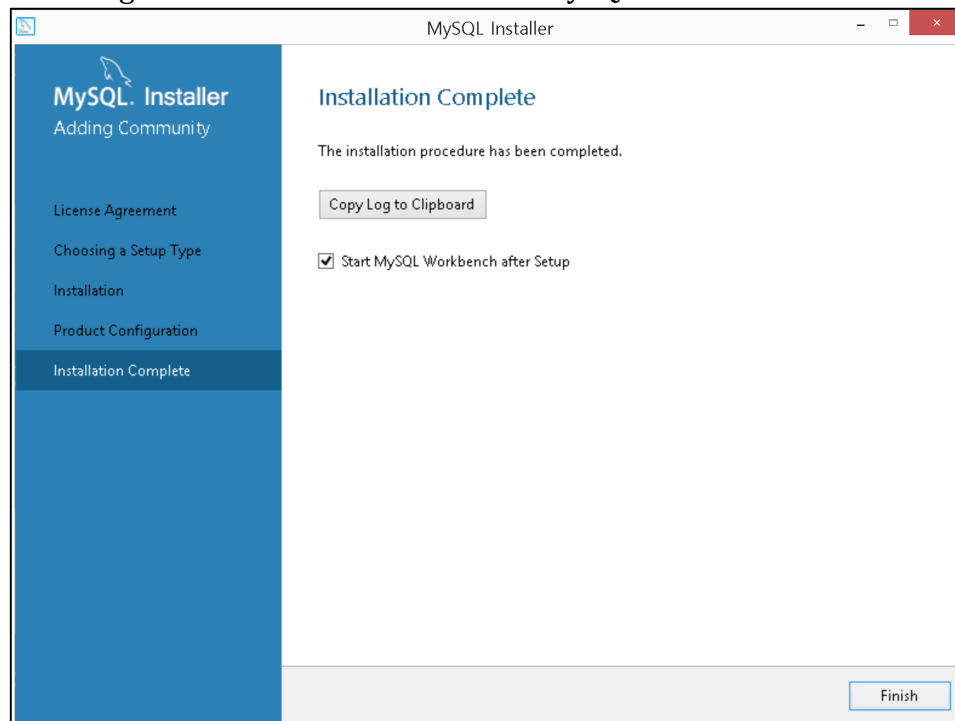
10. Click “Next”.



11. Click “Check” to check the connection. If it works well, click “Next” and then click “Execute” in the next screen.

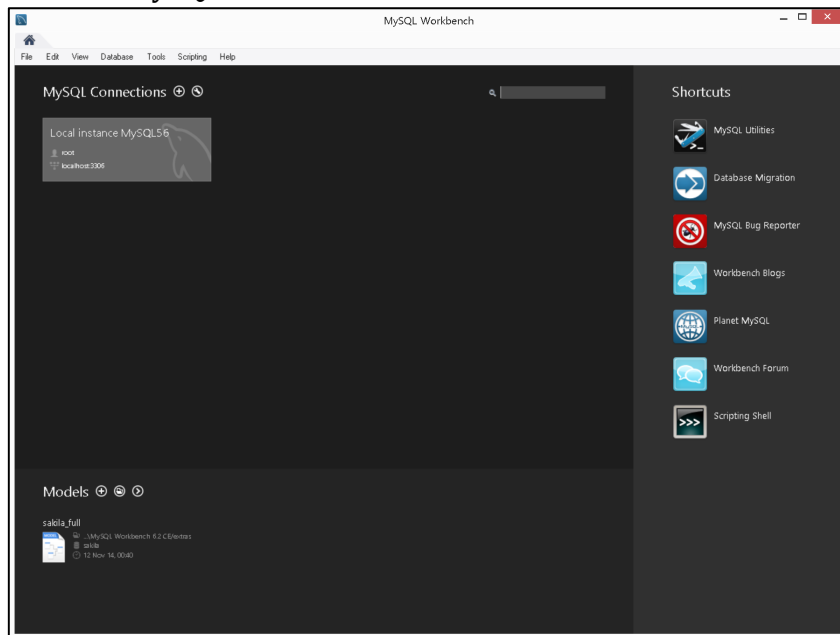


12. Once this configuration is completed, click “Finish”. Finally, you will see the following screen. Click “Finish” to start MySQL Workbench.

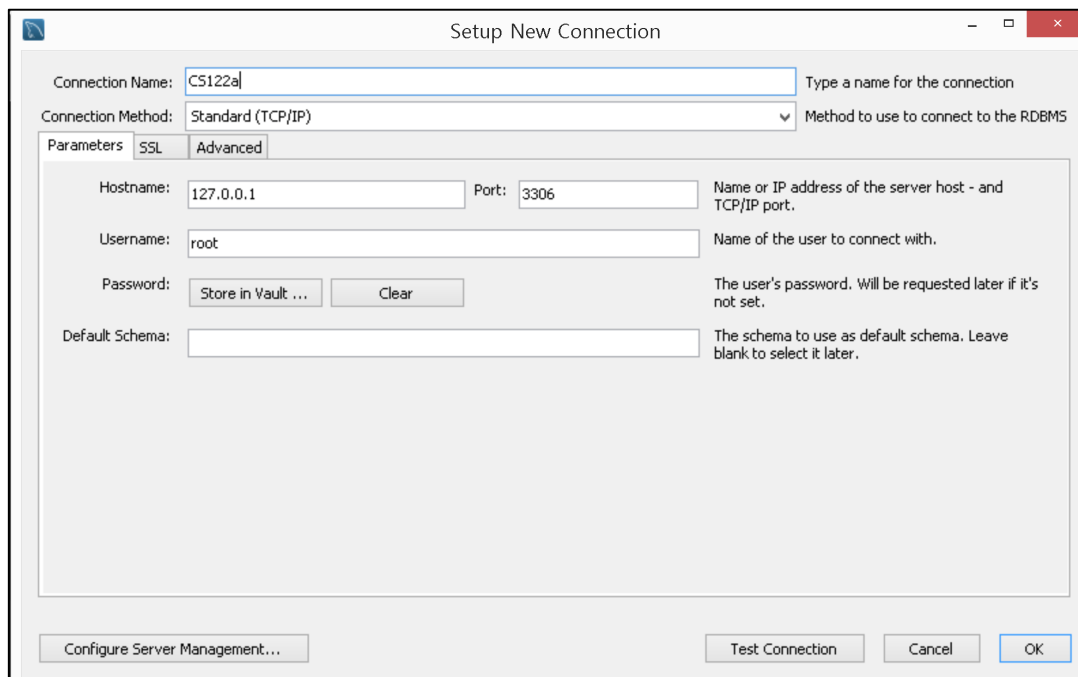


Step2- Execute MySQL WorkBench

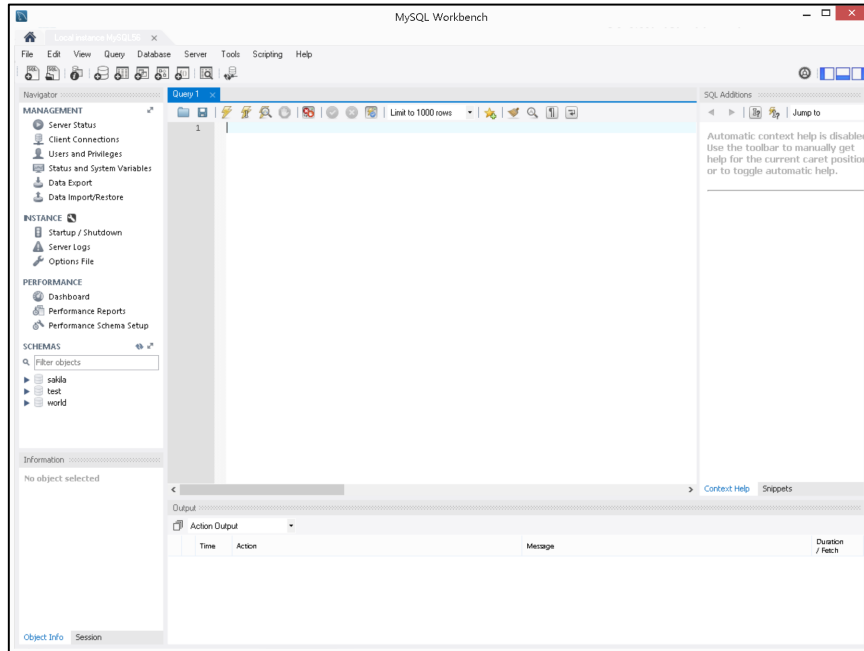
1. In MySQL program group, execute “MySQL Workbench”. Double click “Local instance MySQL5.6” to connect to the instance.



If you don't see a connection, you can create it by clicking “+” 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.



Step3- 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 table. 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,'1998-11-10'),(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,'1998-11-10'),(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;

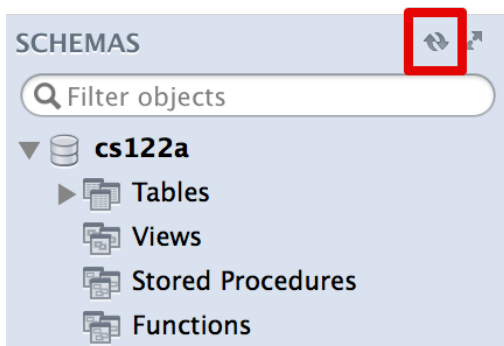
-- Table structure for table `Sailors2`
DROP TABLE IF EXISTS `Sailors2`;
CREATE TABLE `Sailors2` (
  `sid` int(11) NOT NULL,
  `sname` varchar(45) NOT NULL,
  `rating` int(11) DEFAULT NULL,
  `age` decimal(5,1) DEFAULT NULL,
  PRIMARY KEY (`sid`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

-- 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,'Sand
y',NULL,36.0),(109,'James',5,38.0);
ALTER TABLE `Sailors2` ENABLE KEYS;
-- The end of the script

```

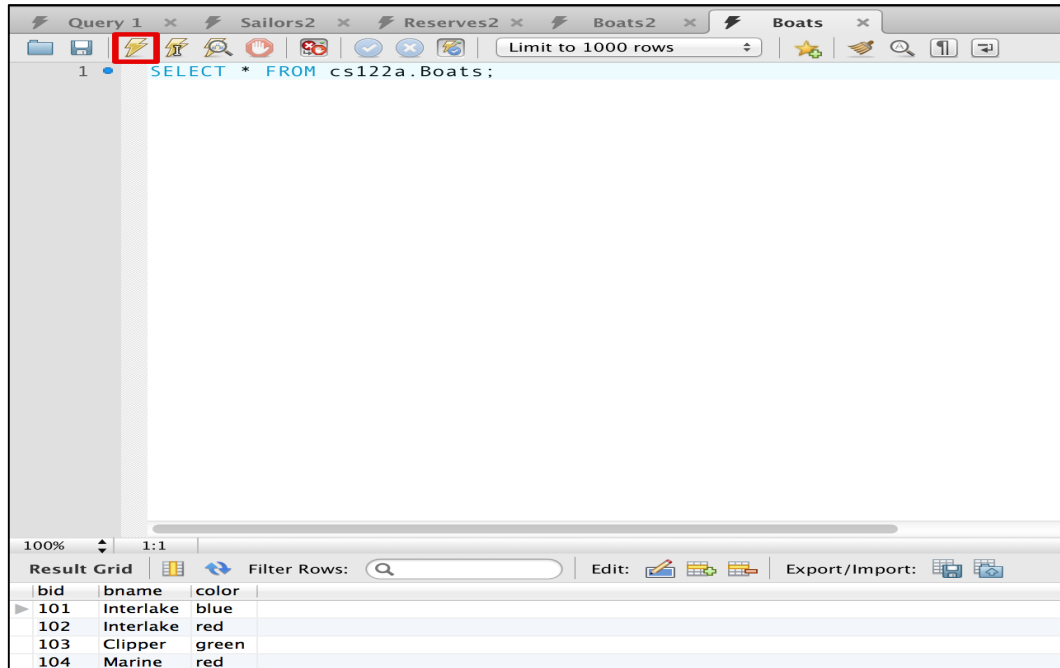
1. In Query 1, download the above script from the class website and copy and paste the content from the script. If you can't see "Query 1" tab, create one by clicking File -> New Query Tab. Execute the script by clicking "the thunder shaped icon".

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



Step4- 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.



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

