Installer Guide
for
School Management System

Submitted by –

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SCHOOL OF COMPUTER AND INFORMATION SCIENCE

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A. INSTALLATION SOFTWARE

I. For Window Server

Install MySQL

Summary: this tutorial shows you step by step how to install MySQL on Windows platform using MySQL Installer. After the tutorial, you will have a MySQL database server and its tools up and running in your system for learning and practicing MySQL.

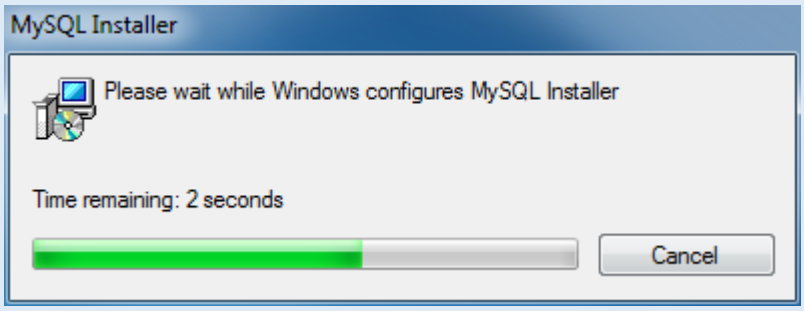
Download MySQL Installer

If you want to install MySQL on Windows environment, using MySQL installer is the easiest way. MySQL installer provides you with an easy-to-use wizard that helps you to install MySQL with the following components:

- MySQL Server
- All Available Connectors
- MySQL Workbench with Sample Data Models
- MySQL Notifier
- Tools for Excel and Microsoft Visual Studio
- MySQL Sample Databases
- MySQL Documentation
-

To download MySQL installer, go to the following link http://dev.mysql.com/downloads/installer/. There are two files are available. If you are connecting to the internet while installing MySQL, you can choose the online installation version `mysql-installer-web-community.exe` . If you want to install MySQL offline, you can download the `mysql-installer-community.exe` file.

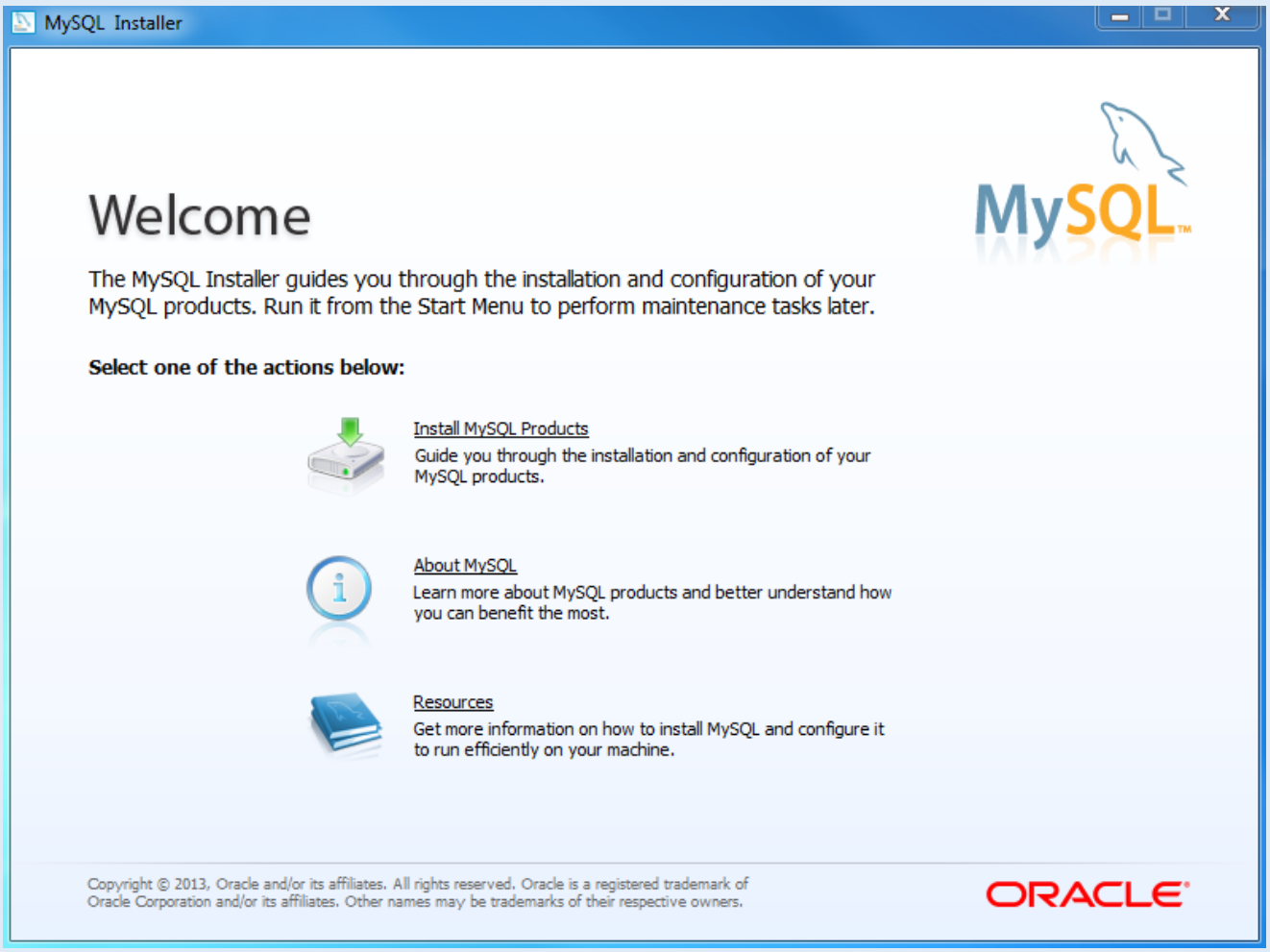
Install MySQL via MySQL Installer

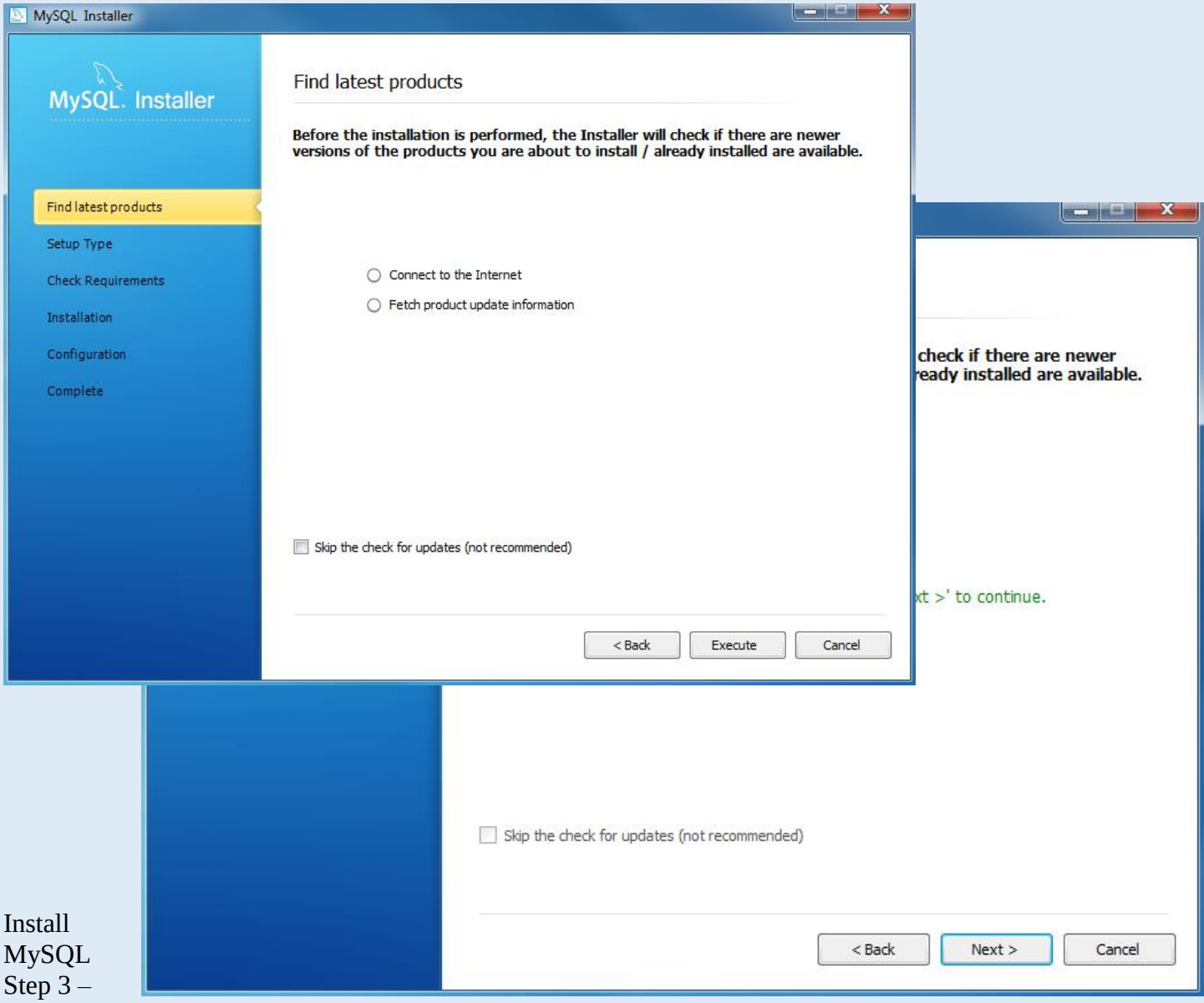


To install MySQL using the MySQL installer, double-click on the MySQL installer file and follow the steps below:

Install MySQL Step 1: Windows configures MySQL Installer

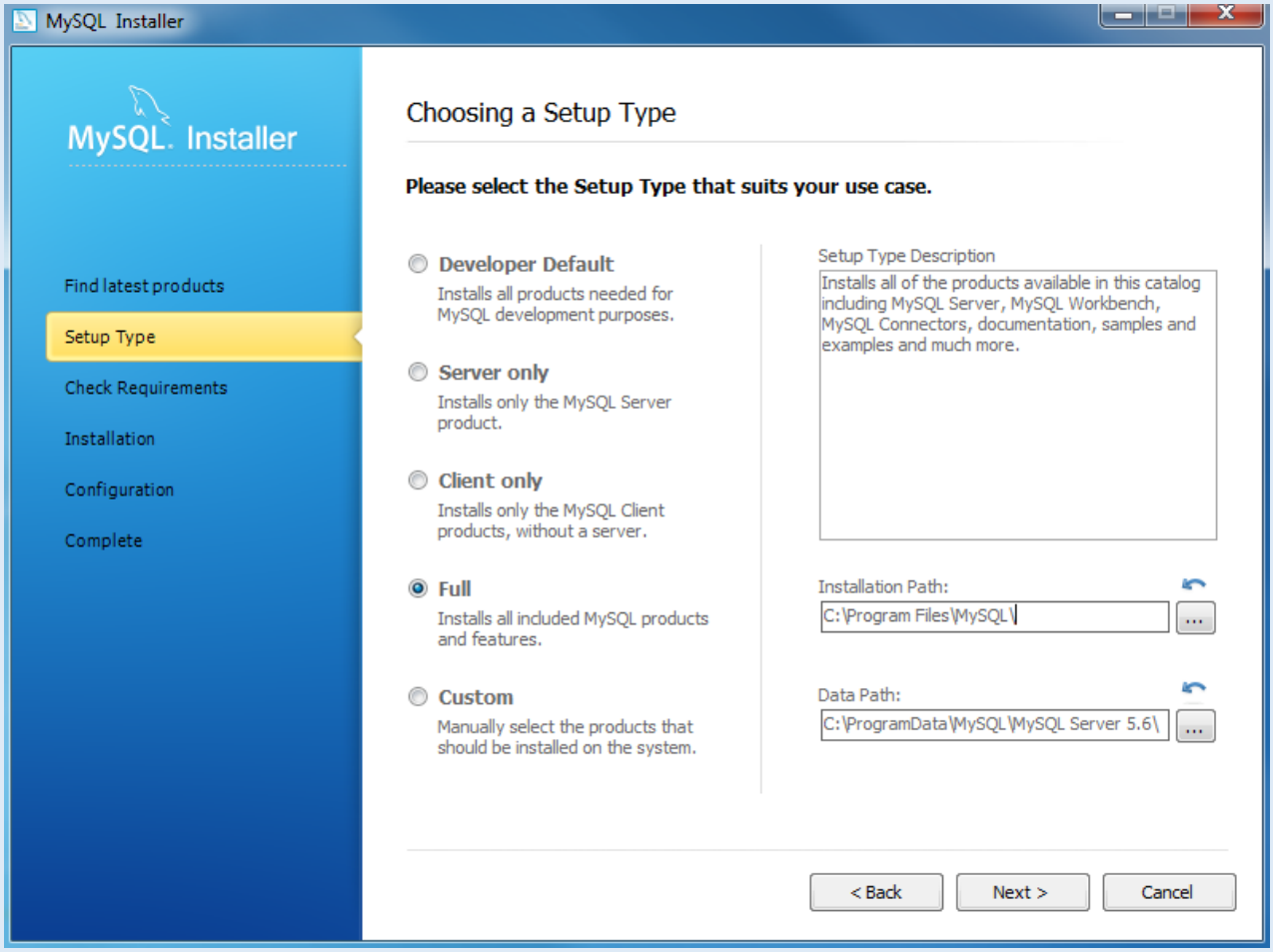
Install MySQL Step 2 – Welcome Screen: A welcome screen provides several options. Choose the first option: Install MySQL Products



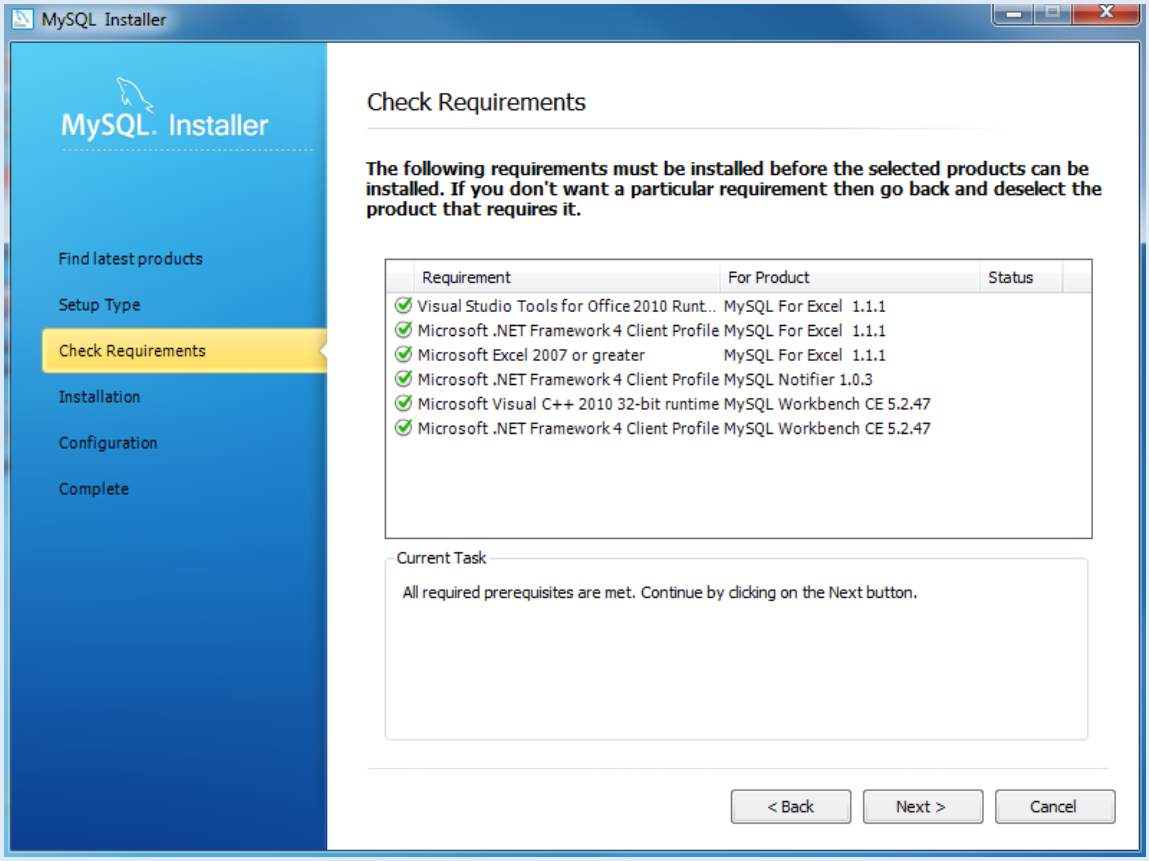


Install MySQL Step 3 – Download the latest MySQL products: MySQL installer checks and downloads the latest MySQL products including MySQL server, MySQL Workbench, etc.

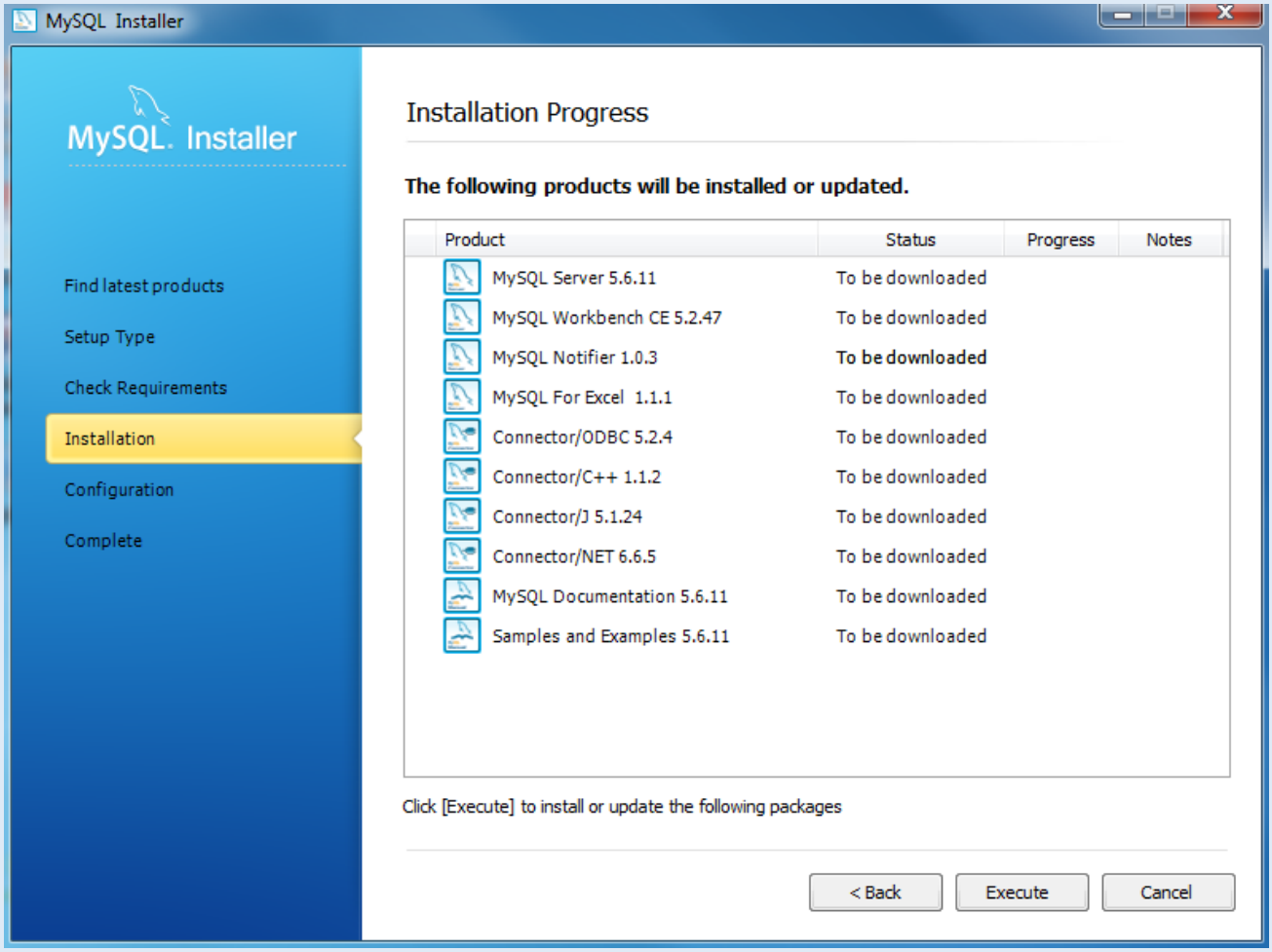
Install MySQL Step 4: Click Next button to continue



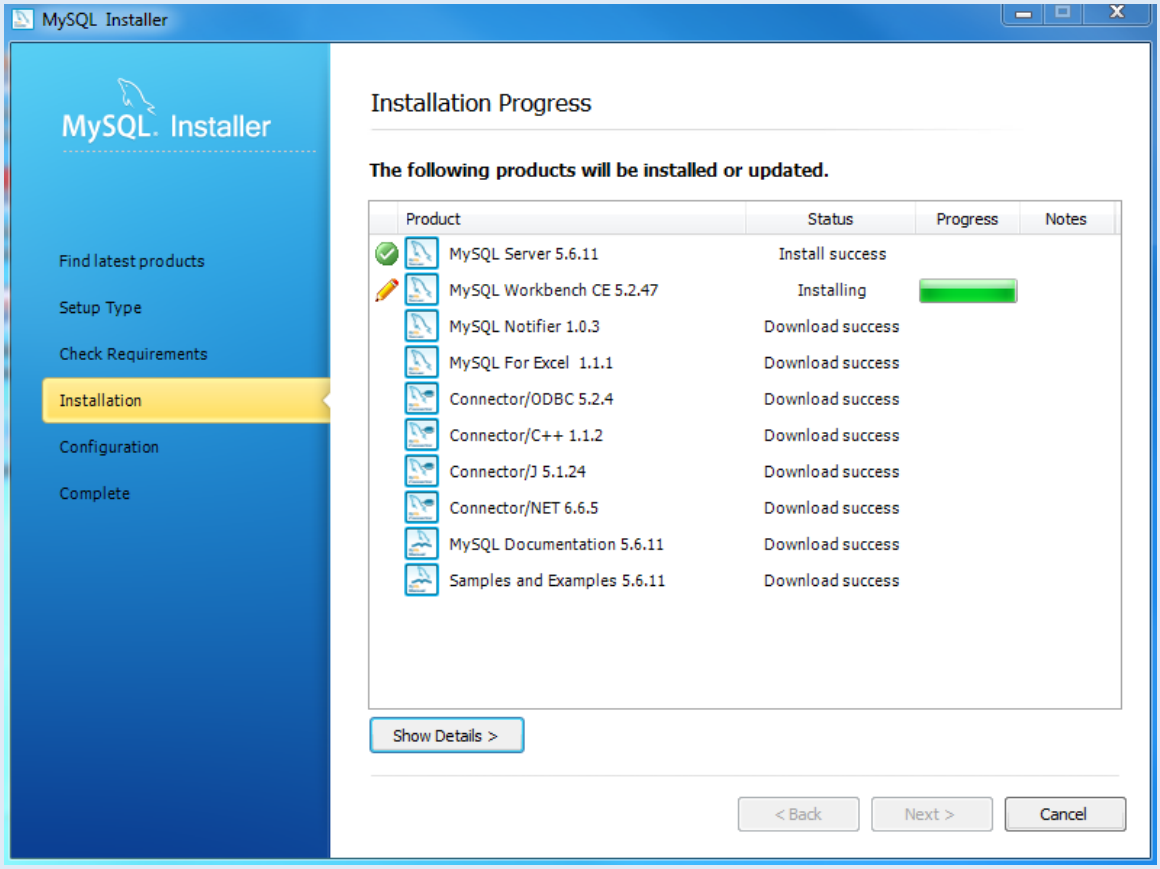
Install MySQL Step 5 – Choosing a Setup Type: there are several setup types available. Choose the Full option to install all MySQL products and features.



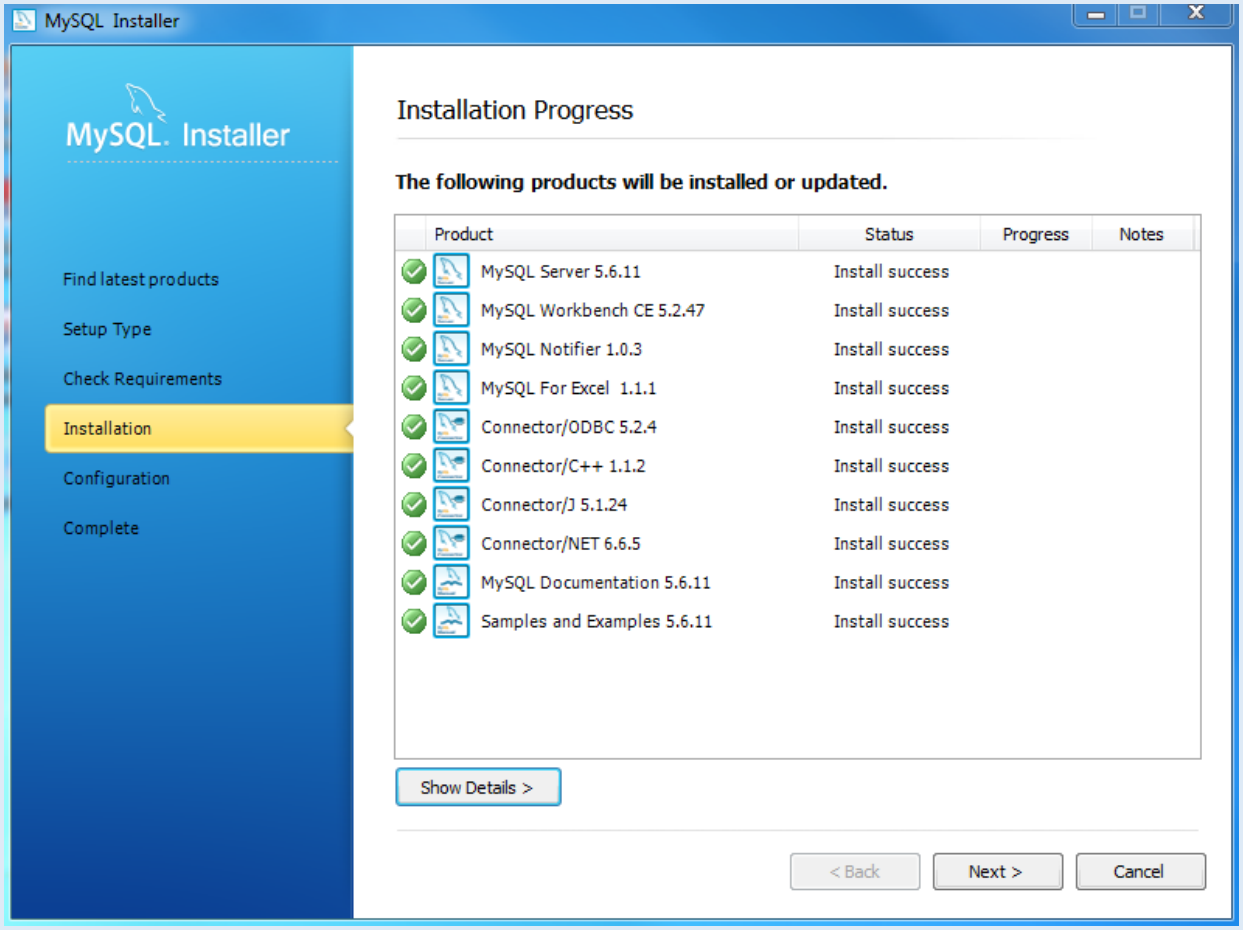
Install MYSQL Step 6 – Checking Requirements



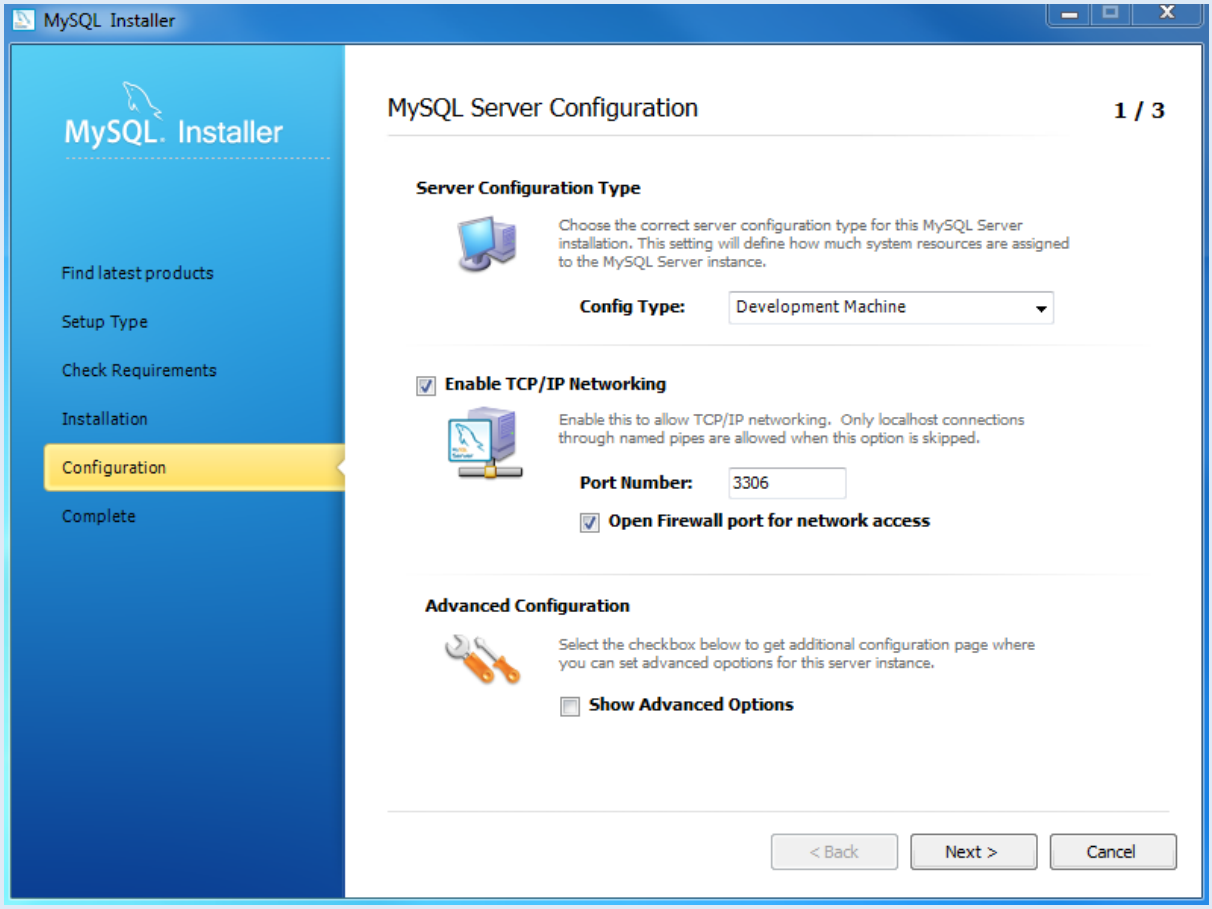
Install MySQL Step 7 – Installation Progress: MySQL Installer downloads all selected products. It will take a while, depending on which products that you selected and the speed of your internet connection.

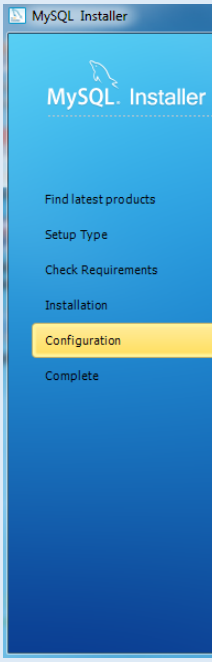


Install MySQL Step 7 – Installation Progress: downloading Products in progress.



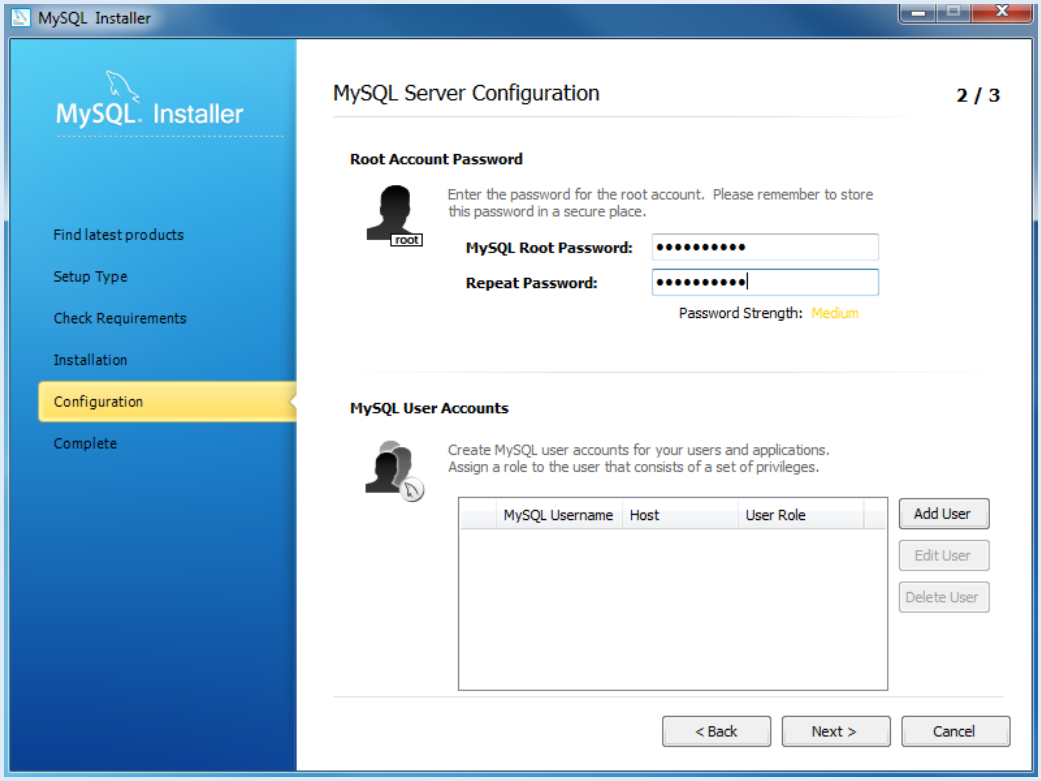
Install MySQL Step 7 – Installation Progress: Complete Downloading. Click Next button to continue…



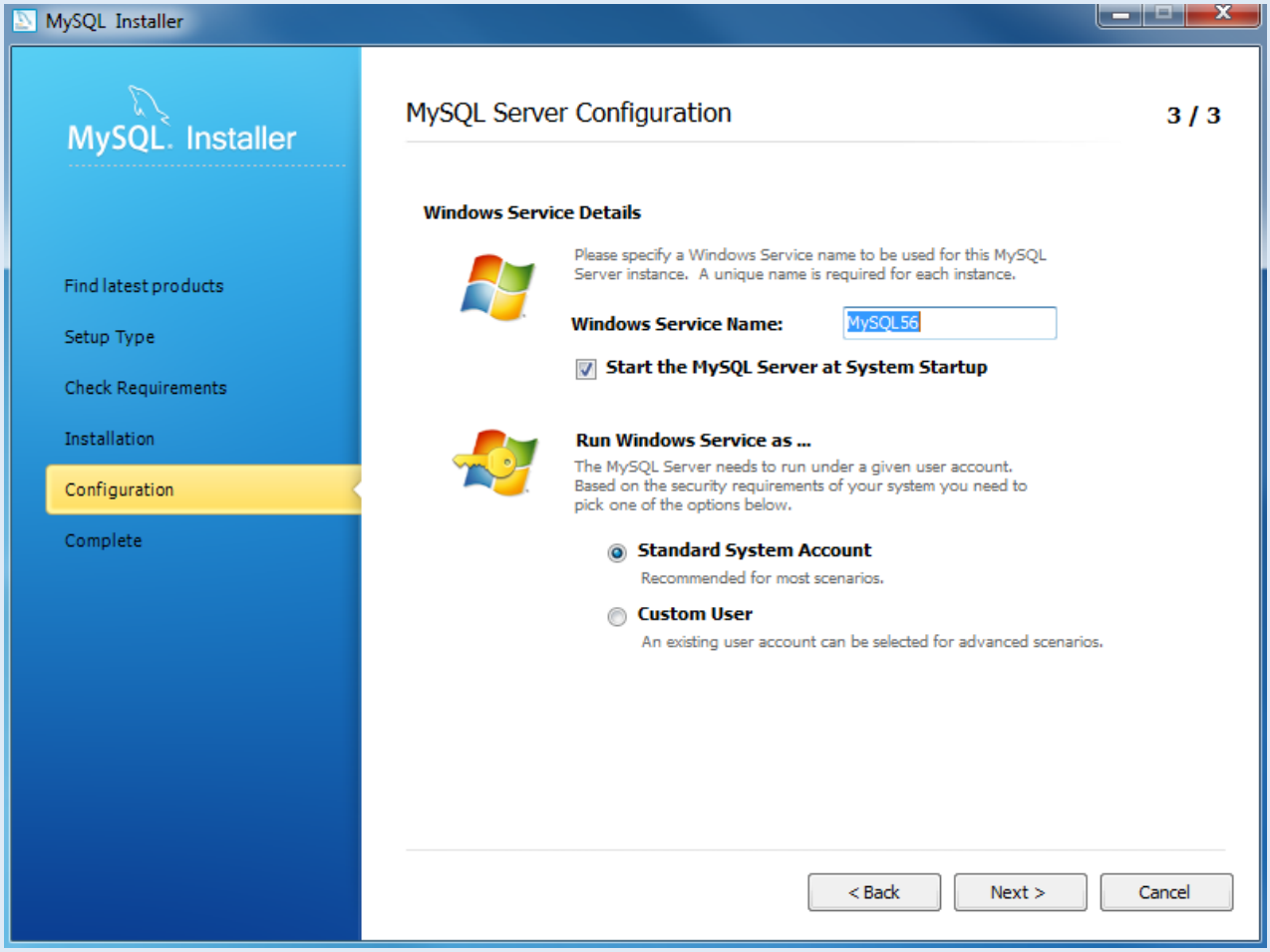


Install MySQL Step 8 – Configuration Overview. Click Next button to configure MySQL Database Server

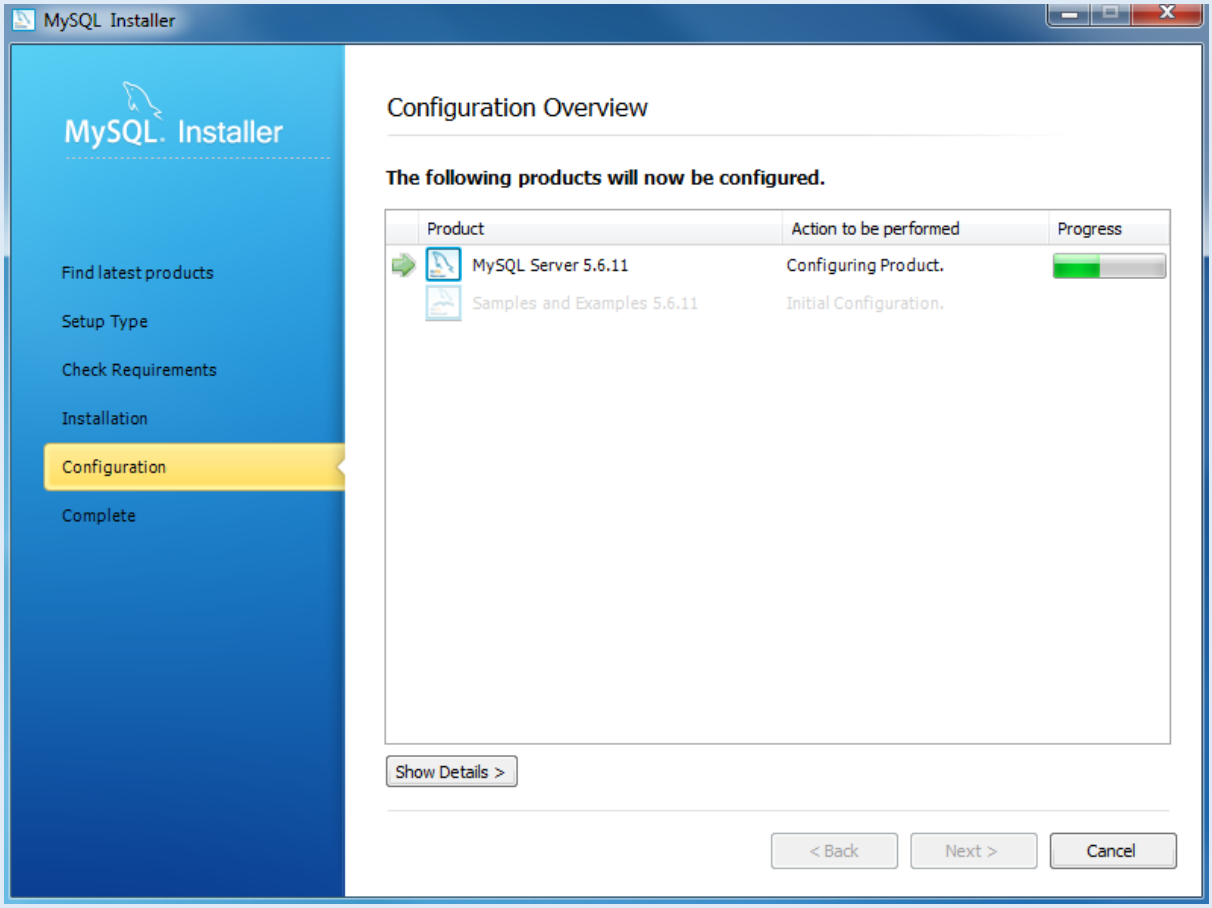
Install MySQL Step 8.1 – MySQL Server Configuration: choose Config Type and MySQL port (3006 by default) and click Next button to continue.



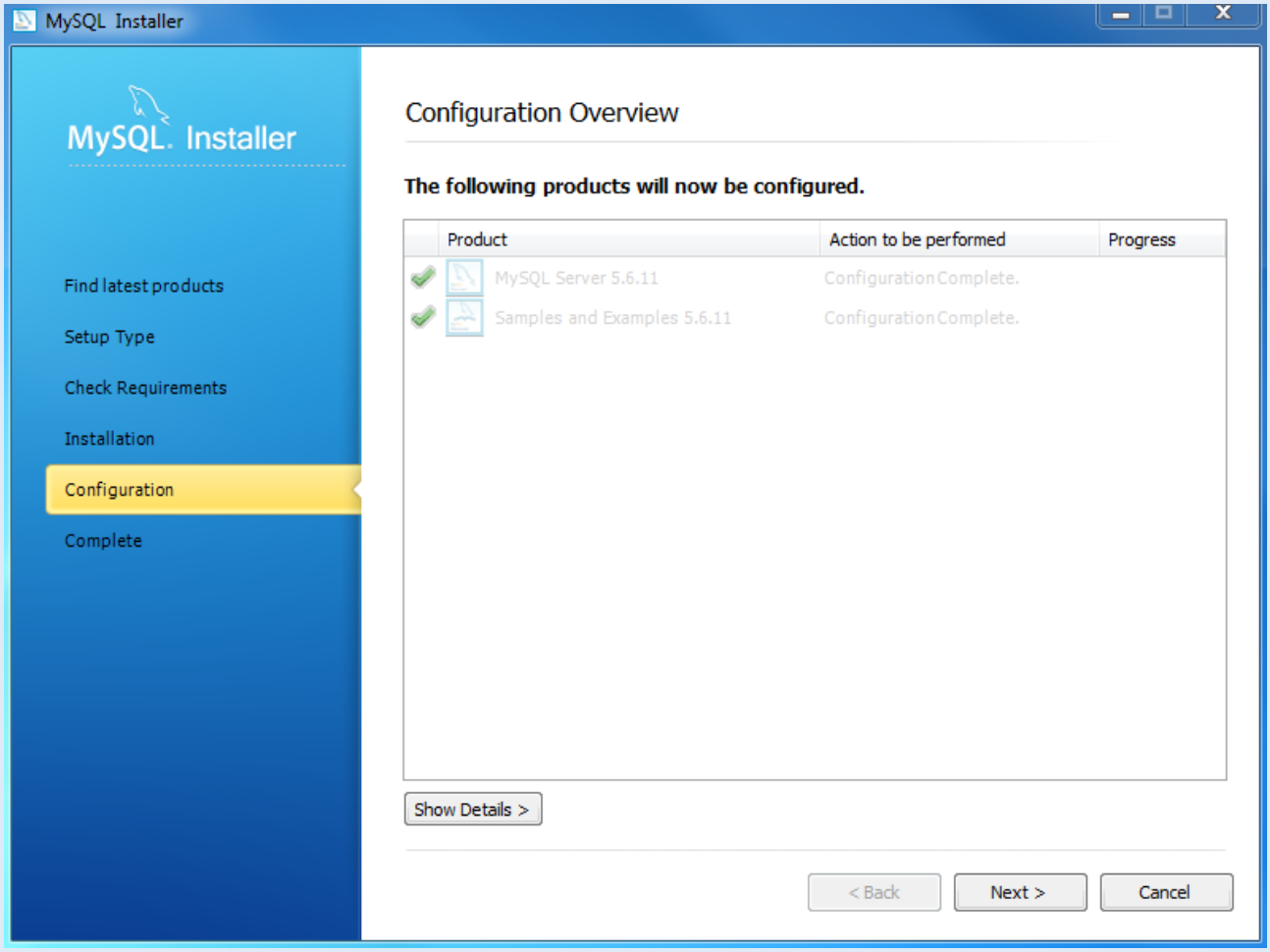
Install MySQL Step 8.1 – MySQL Server Configuration: choose a password for the root account. Please note the password download and keep it securely if you are installing MySQL database server on a production server. If you want to add a more MySQL user, you can do it in this step.



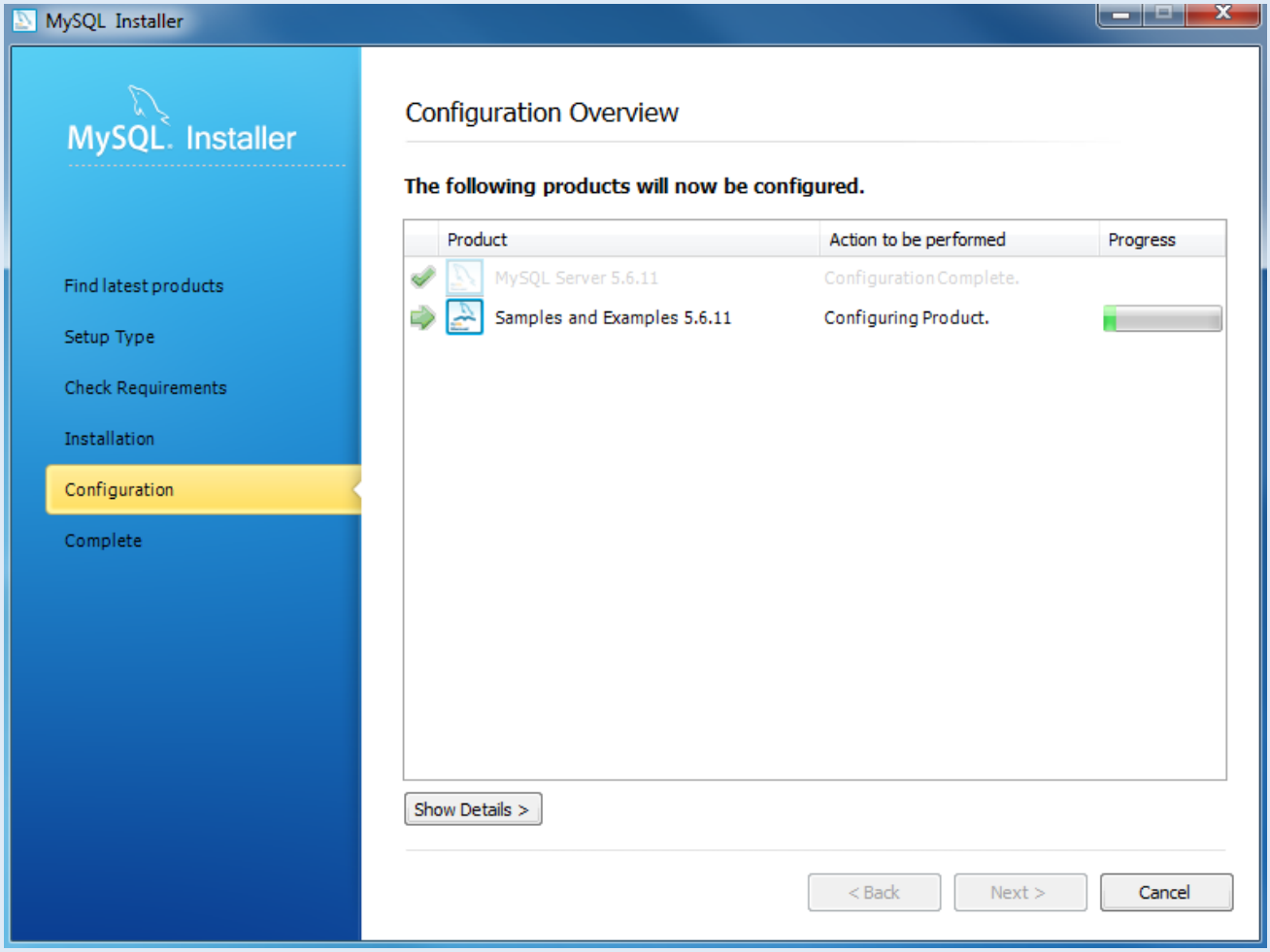
Install MySQL Step 8.1 – MySQL Server Configuration: choose Windows service details including Windows Service Name and account type, then click Next button to continue.



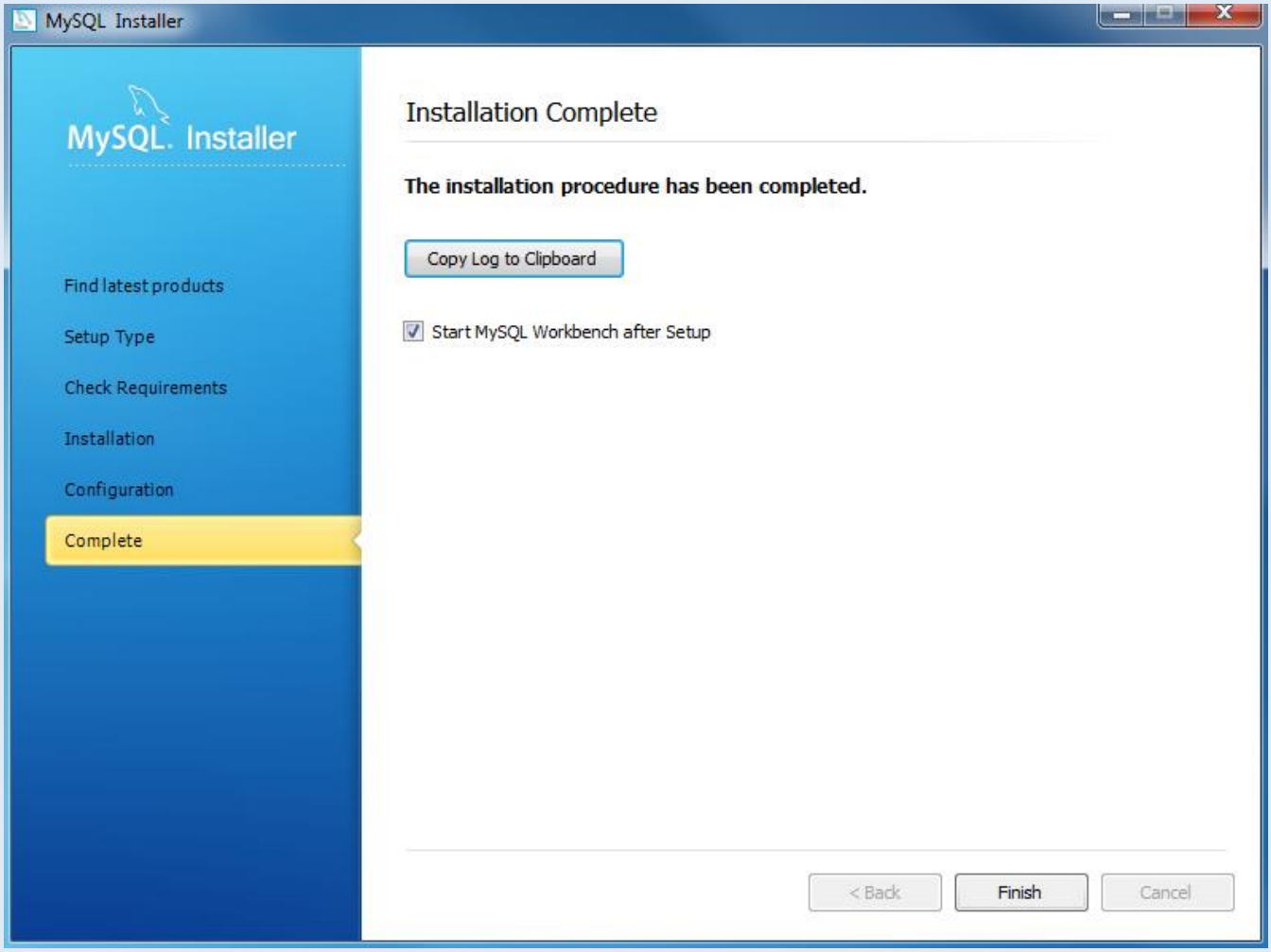
Install MySQL Step 8.1 – MySQL Server Configuration – In Progress: MySQL Installer is configuring MySQL database server. Wait until it is done and click Next button to continue.



Install MySQL Step 8.1 – MySQL Server Configuration – Done. Click the Next button to continue.



Install MySQL Step 8.2 – Configuration Overview: MySQL Installer installs sample databases and sample models.



Install MySQL Step 9 – Installation Completes: the installation completes. Click finish button to close the installation wizard and launch the MySQL Workbench.

Install Java

The procedure to install Java broadly consists of:
Download and Install
Test Installation
» Windows System Requirements

Note: Installing Java requires that you can gain administrator access to Windows on your computer.

Download and Install
This process requires you to download an executable file that includes all the files needed for the complete installation. You do not need to remain connected to the Internet during the installation. The file can also be copied to a computer that is not connected to the Internet.
Go to the Manual download page
Click on Windows Offline.
The File Download dialog box appears prompting you to run or save the download file
Click Save to download the file to your local system.
Tip: Save the file to a known location on your computer, for example, to your desktop.
Close all applications including the browser.
Double-click on the saved file to start the installation process.
The installation process starts. Click the Install button to accept the license terms and to continue with the installation.

Oracle has partnered with companies that offer various products. The installer may present you with option to install these programs when you install Java. After ensuring that the desired programs are selected, click the Next button to continue the installation.
A few brief dialogs confirm the last steps of the installation process; click Close on the last dialog. This will complete Java installation process.

Detect older versions (8u20 and later versions). Starting with Java 8 Update 20 (8u20), on Windows systems, the Java Uninstall Tool is integrated with the installer to provide an option to remove older versions of Java from the system. The change is applicable to 32 bit and 64 bit Windows platforms.

Notifications about disabled Java and restoring prompts
The installer notifies you if Java content is disabled in web browsers, and provides instructions for enabling it. If you previously chose to hide some of the security prompts for applets and Java Web Start applications, the installer provides an option for restoring the prompts. The installer may ask you to reboot your computer if you chose not to restart an internet browser when it prompted you to do so

II. For Linux

Introduction
MySQL is an open-source database management system, commonly installed as part of the popular LAMP(Linux, Apache, MySQL, PHP/Python/Perl) stack. It uses a relational database and SQL (Structured Query Language) to manage its data.
The short version of the installation is simple: update your package index, install the mysql-serverpackage, and then run the included security script.
sudo apt-get update

sudo apt-get install mysql-server

mysql_secure_installation

This tutorial will explain how to install MySQL version 5.7 on a Ubuntu 16.04 server. However, if you're looking to update an existing MySQL installation to version 5.7, you can read this MySQL 5.7 update guideinstead.
Prerequisites
To follow this tutorial, you will need:
One Ubuntu 16.04 server set up by following this initial server setup guide, including a sudo non-

root user and a firewall.
Step 1 — Installing MySQL
On Ubuntu 16.04, only the latest version of MySQL is included in the APT package repository by default. At the time of writing, that's MySQL 5.7
To install it, simply update the package index on your server and install the default package with apt-get.
sudo apt-get update

sudo apt-get install mysql-server

You'll be prompted to create a root password during the installation. Choose a secure one and make sure you remember it, because you'll need it later. Next, we'll finish configuring MySQL.
Step 2 — Configuring MySQL
For fresh installations, you'll want to run the included security script. This changes some of the less secure default options for things like remote root logins and sample users. On older versions of MySQL, you needed to initialize the data directory manually as well, but this is done automatically now.
Run the security script.
mysql_secure_installation

This will prompt you for the root password you created in Step 1. You can press Y and then ENTER to accept the defaults for all the subsequent questions, with the exception of the one that asks if you'd like to change the root password. You just set it in Step 1, so you don't have to change it now. For a more detailed walkthrough of these options, you can see this step of the LAMP installation tutorial.
To initialize the MySQL data directory, you would use mysql_install_db for versions before 5.7.6, and mysqld --initialize for 5.7.6 and later. However, if you installed MySQL from the Debian distribution, like in Step 1, the data directory was initialized automatically; you don't have to do anything. If you try running the command anyway, you'll see the following error:
Output
2016-03-07T20:11:15.998193Z 0 [ERROR] --initialize specified but the data directory has files in it. Aborting.
Finally, let's test the MySQL installation.
Step 3 — Testing MySQL
Regardless of how you installed it, MySQL should have started running automatically. To test this, check its status.
systemctl status mysql.service

You'll see output similar to the following:
Output
● mysql.service - MySQL Community Server
  Loaded: loaded (/lib/systemd/system/mysql.service; enabled; vendor preset: en
  Active: active (running) since Wed 2016-11-23 21:21:25 UTC; 30min ago
 Main PID: 3754 (mysqld)
   Tasks: 28
  Memory: 142.3M
     CPU: 1.994s
  CGroup: /system.slice/mysql.service
          └─3754 /usr/sbin/mysqld
If MySQL isn't running, you can start it with sudo systemctl start mysql.

For an additional check, you can try connecting to the database using the mysqladmin tool, which is a client that lets you run administrative commands. For example, this command says to connect to MySQL as root (-u root), prompt for a password (-p), and return the version.
mysqladmin -p -u root version

You should see output similar to this:
Output
mysqladmin Ver 8.42 Distrib 5.7.16, for Linux on x86_64
Copyright (c) 2000, 2016, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Server version 5.7.16-0ubuntu0.16.04.1
Protocol version 10
Connection Localhost via UNIX socket
UNIX socket /var/run/mysqld/mysqld.sock
Uptime: 30 min 54 sec

Threads: 1 Questions: 12 Slow queries: 0 Opens: 115 Flush tables: 1 Open tables: 34 Queries per second avg: 0.006
This means MySQL is up and running.

Install Java on Linux

The instructions below are for installing version Java 8 Update 73 (8u73). If you are installing another version, make sure you change the version number appropriately when you type the commands at the terminal. Example: For Java 8u79 replace 8u73 with 8u79. Note that, as in the preceding example, the version number is sometimes preceded with the letter u, and sometimes it is preceded with an underbar, for example, jre1.8.0_73.

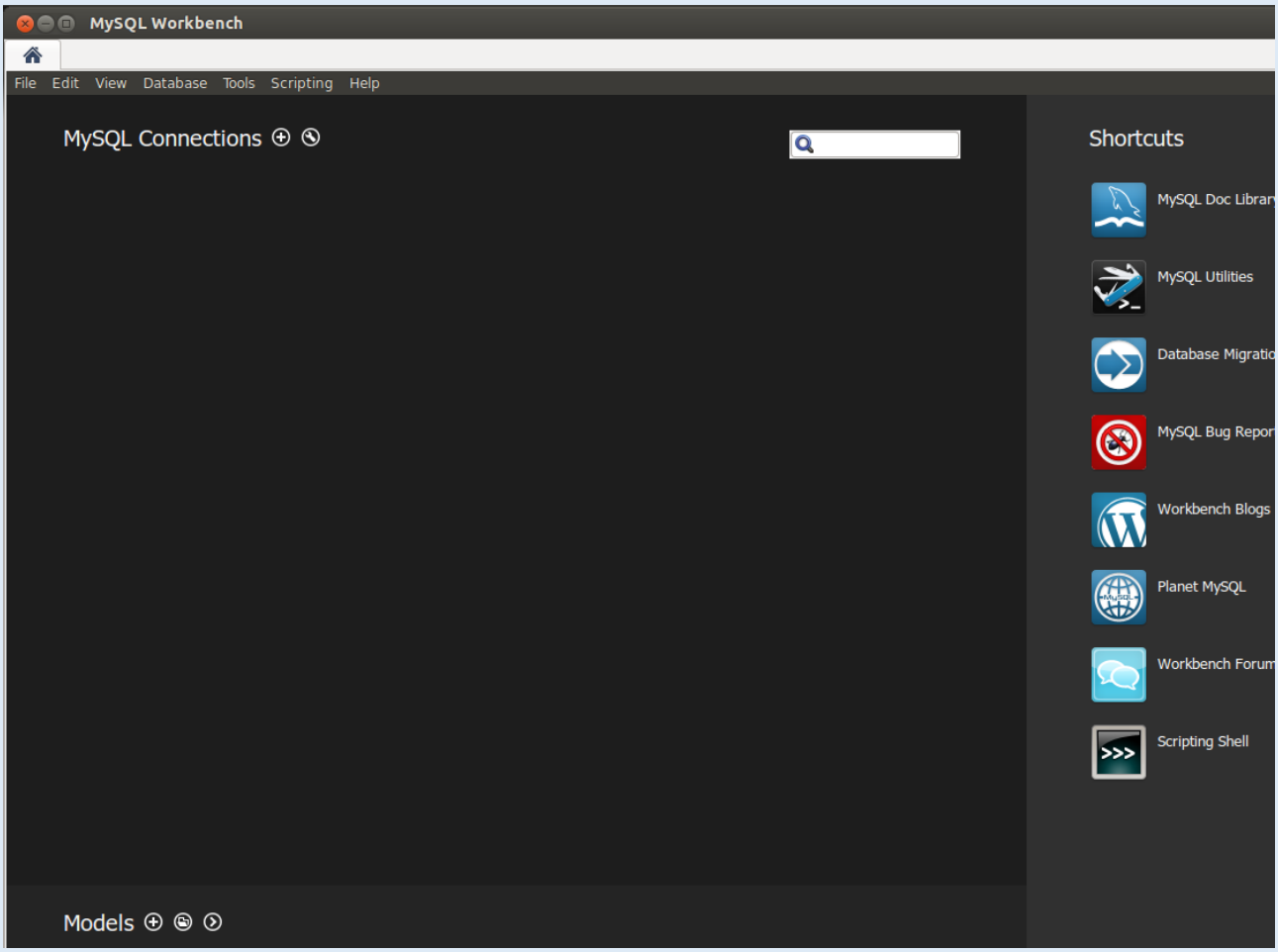
Note about root access: To install Java in a system-wide location such as /usr/local, you must login as the root user to gain the necessary permissions. If you do not have root access, install Java in your home directory or a subdirectory for which you have write permissions.
Change to the directory in which you want to install. Type:
cd directory_path_name
For example, to install the software in the /usr/java/ directory, Type:
cd /usr/java/
Move the .tar.gz archive binary to the current directory.
Unpack the tarball and install Java
tar zxvf jre-8u73-linux-x64.tar.gz

The Java files are installed in a directory called jre1.8.0_73 in the current directory. In this example, it is installed in the /usr/java/jre1.8.0_73 directory. When the installation has completed, you will see the word Done.
Delete the .tar.gz file if you want to save disk space.

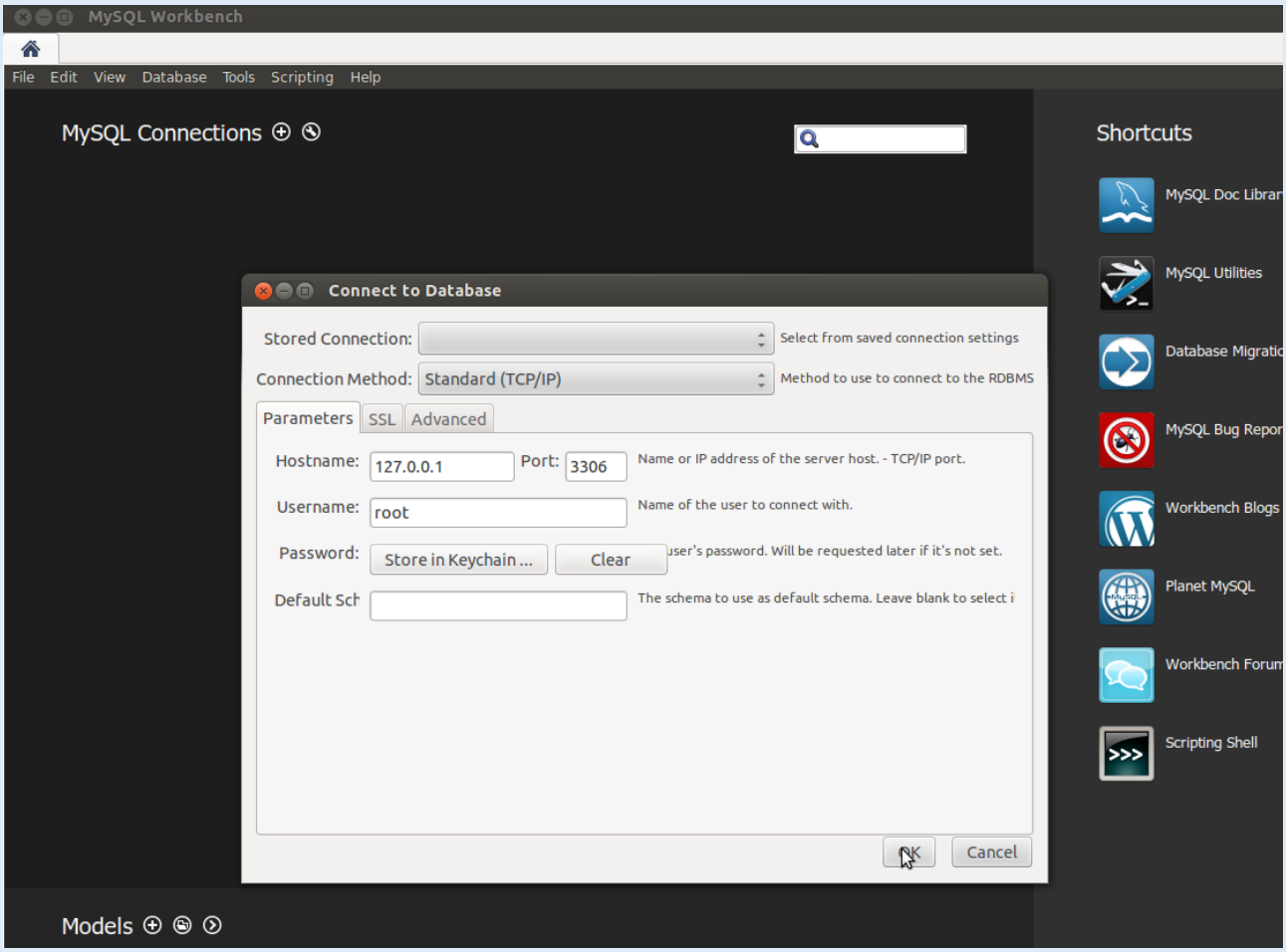
B . ATTACH DATABASE AND DEPLOY WEBSITE

I. Attach Database

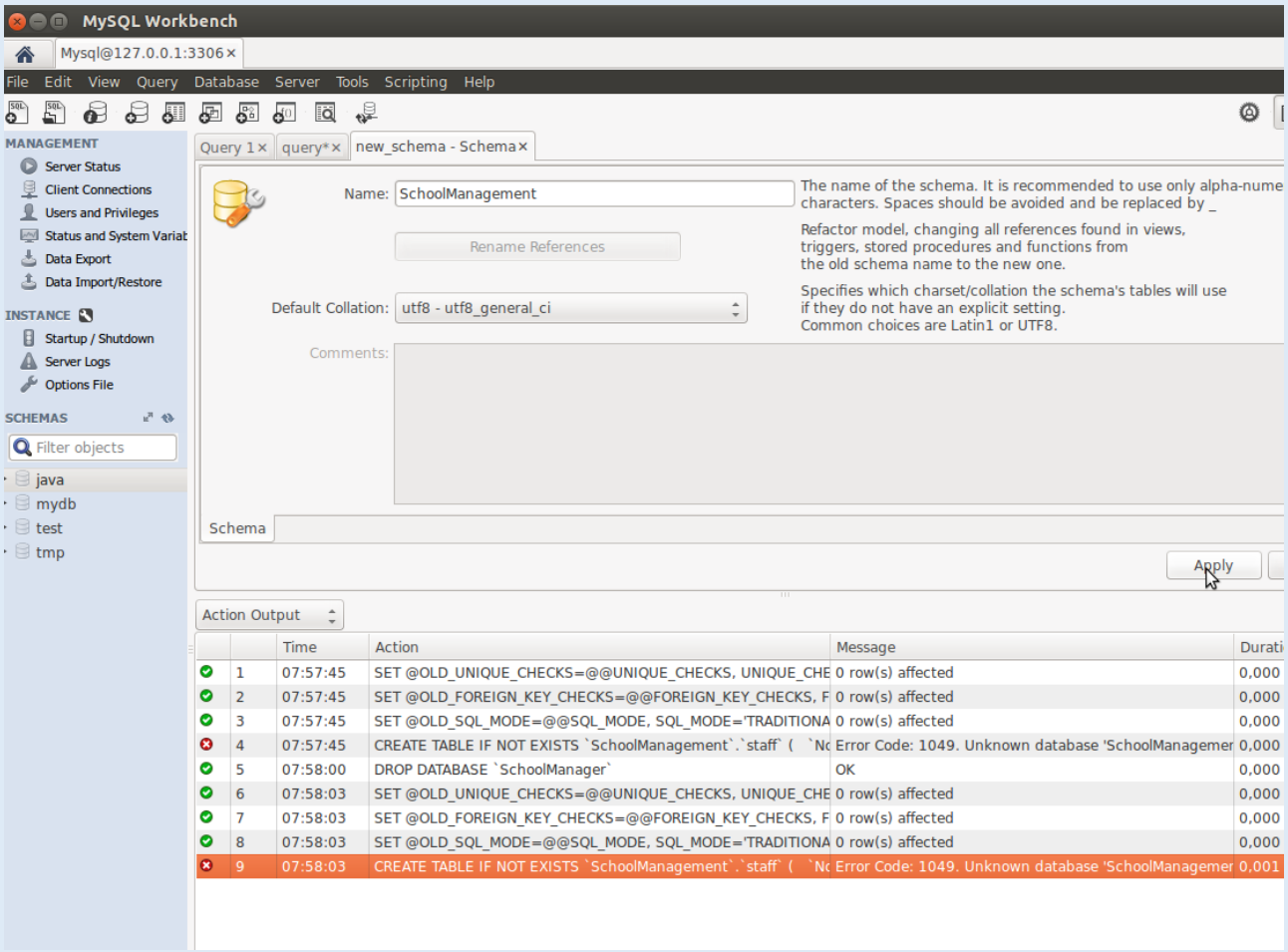
Open MySQL WorkBench

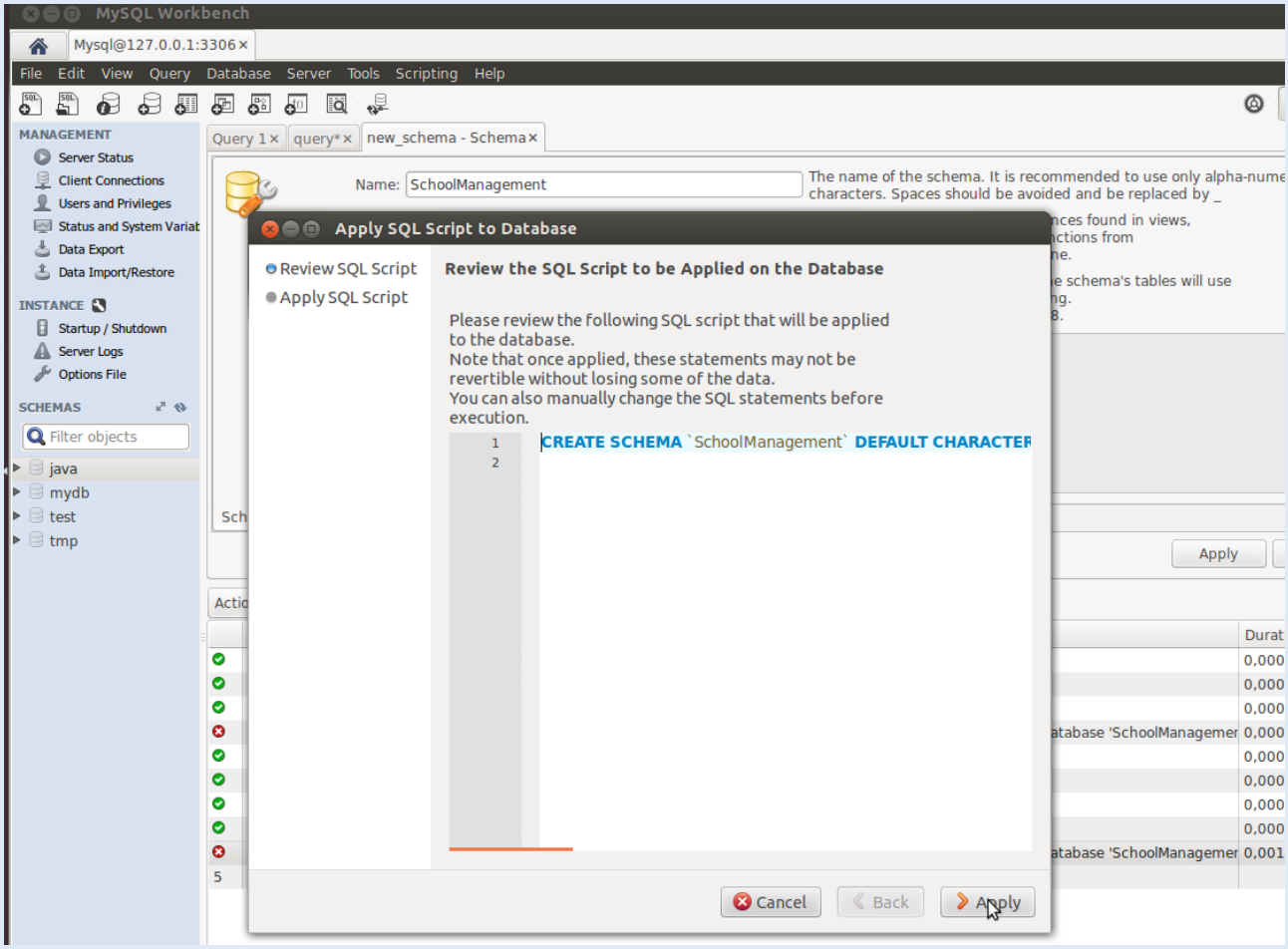


Connect database

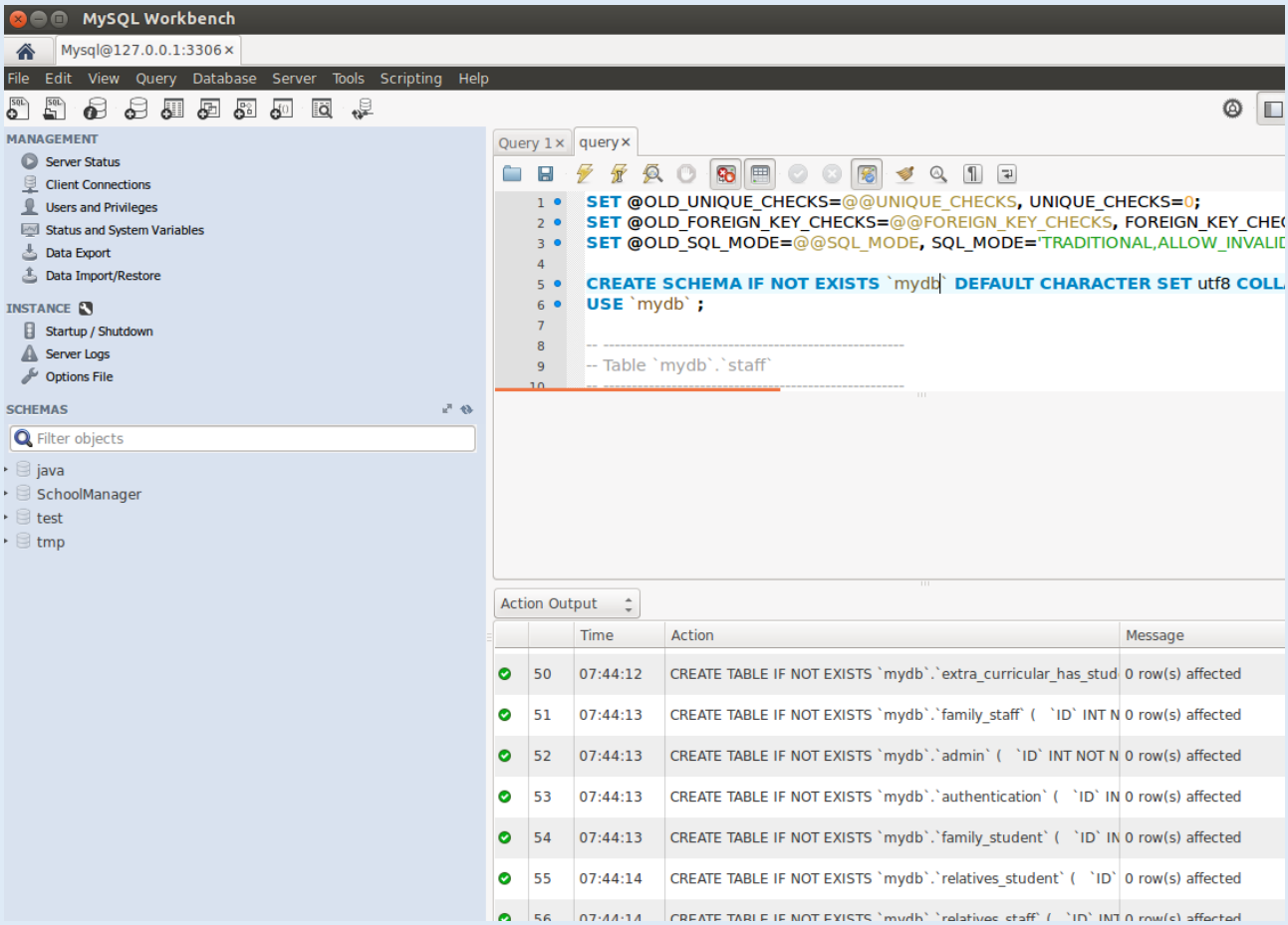


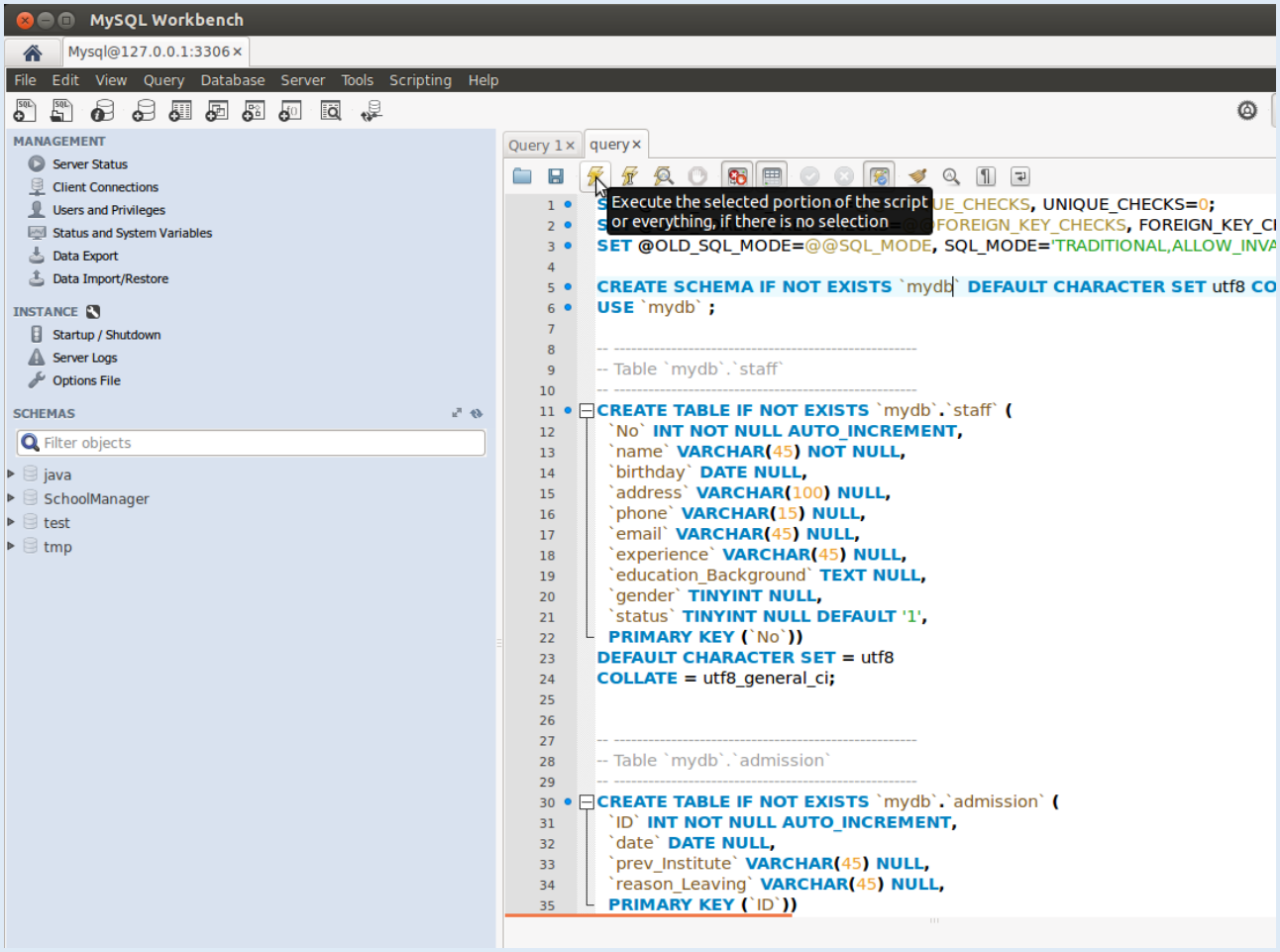
Create new schema (database)




MySQL Workbench
Mysql@127.0.0.1:3306
File Edit View Query Database Server Tools Scripting Help
MANAGEMENT
Server Status
Client Connections
Users and Privileges
Status and System Variat
Data Export
Data Import/Restore
INSTANCE
Startup / Shutdown
Server Logs
Options File
SCHEMAS
Filter objects
java
mydb
test
tmp
Query 1
query*
new_schema - Schema
Name: SchoolManagement
The name of the schema. It is recommended to use only alpha-nume
characters. Spaces should be avoided and be replaced by _
Apply SQL Script to Database
Review SQL Script
Apply SQL Script
Review the SQL Script to be Applied on the Database
Please review the following SQL script that will be applied
to the database.
Note that once applied, these statements may not be
revertible without losing some of the data.
You can also manually change the SQL statements before
execution.
1 CREATE SCHEMA `SchoolManagement` DEFAULT CHARACTER
2
Cancel
Back
Apply
Apply
Durat
0,000
0,000
0,000
atabase 'SchoolManagemer 0,000
0,000
0,000
0,000
0,000
atabase 'SchoolManagemer 0,001
5

Add query.sql




MySQL Workbench
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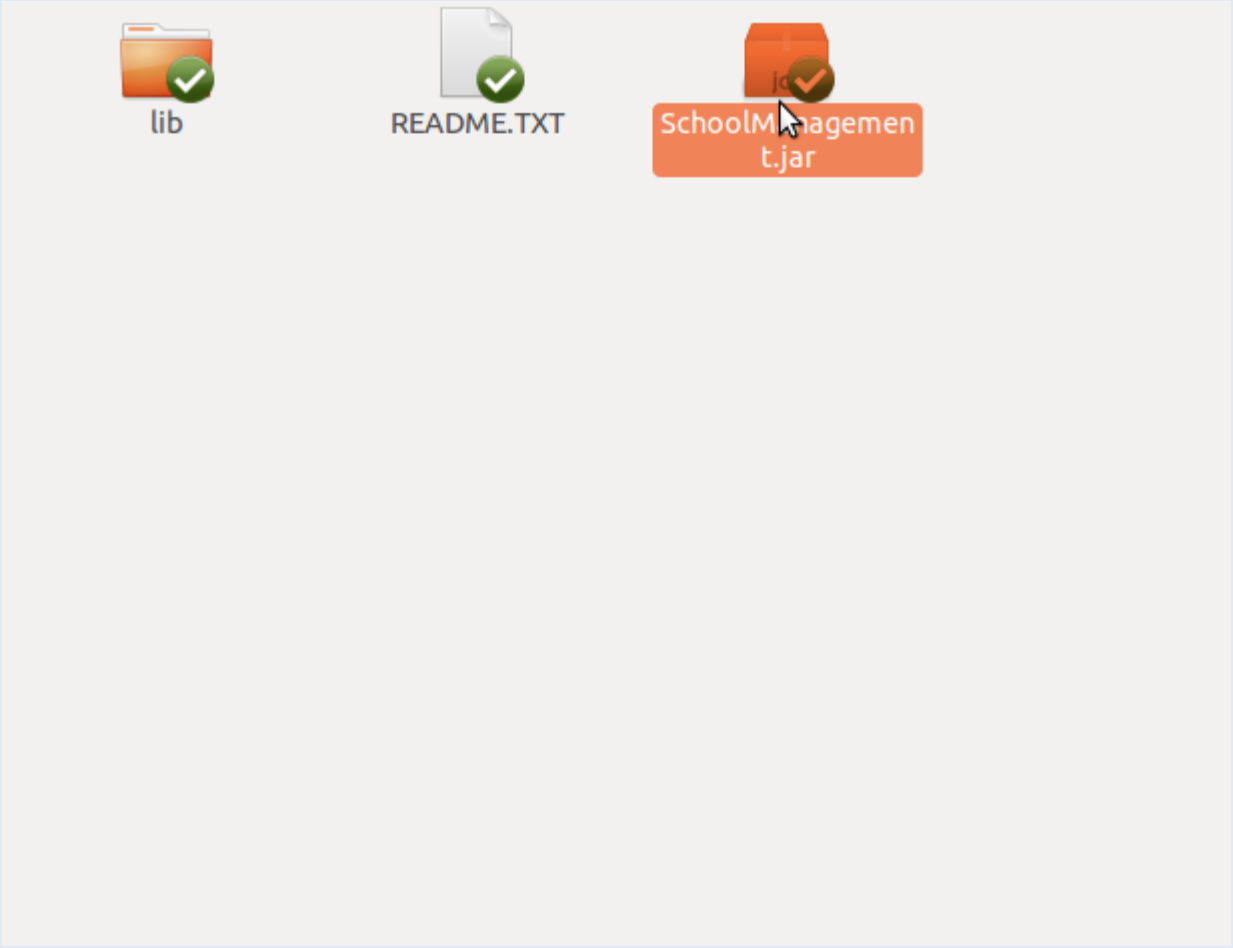
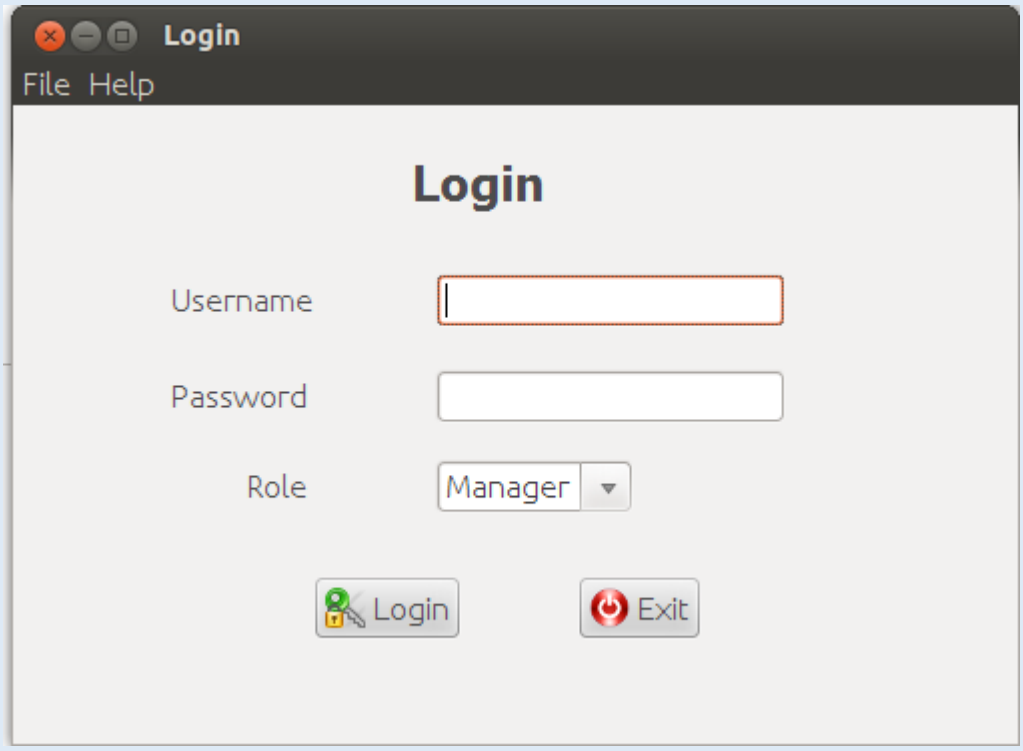
MANAGEMENT
Server Status
Client Connections
Users and Privileges
Status and System Variables
Data Export
Data Import/Restore
INSTANCE
Startup / Shutdown
Server Logs
Options File
SCHEMAS
Filter objects
java
SchoolManager
test
tmp
Query 1
query
Execute the selected portion of the script or everything, if there is no selection
SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='TRADITIONAL,ALLOW_INVA
CREATE SCHEMA IF NOT EXISTS `mydb` DEFAULT CHARACTER SET utf8 CO
USE `mydb` ;
-- Table `mydb`.`staff`
CREATE TABLE IF NOT EXISTS `mydb`.`staff` (
`No` INT NOT NULL AUTO_INCREMENT,
`name` VARCHAR(45) NOT NULL,
`birthday` DATE NULL,
`address` VARCHAR(100) NULL,
`phone` VARCHAR(15) NULL,
`email` VARCHAR(45) NULL,
`experience` VARCHAR(45) NULL,
`education_Background` TEXT NULL,
`gender` TINYINT NULL,
`status` TINYINT NULL DEFAULT '1',
PRIMARY KEY (`No`))
DEFAULT CHARACTER SET = utf8
COLLATE = utf8_general_ci;
-- Table `mydb`.`admission`
CREATE TABLE IF NOT EXISTS `mydb`.`admission` (
`ID` INT NOT NULL AUTO_INCREMENT,
`date` DATE NULL,
`prev_Institute` VARCHAR(45) NULL,
`reason_Leaving` VARCHAR(45) NULL,
PRIMARY KEY (`ID`))

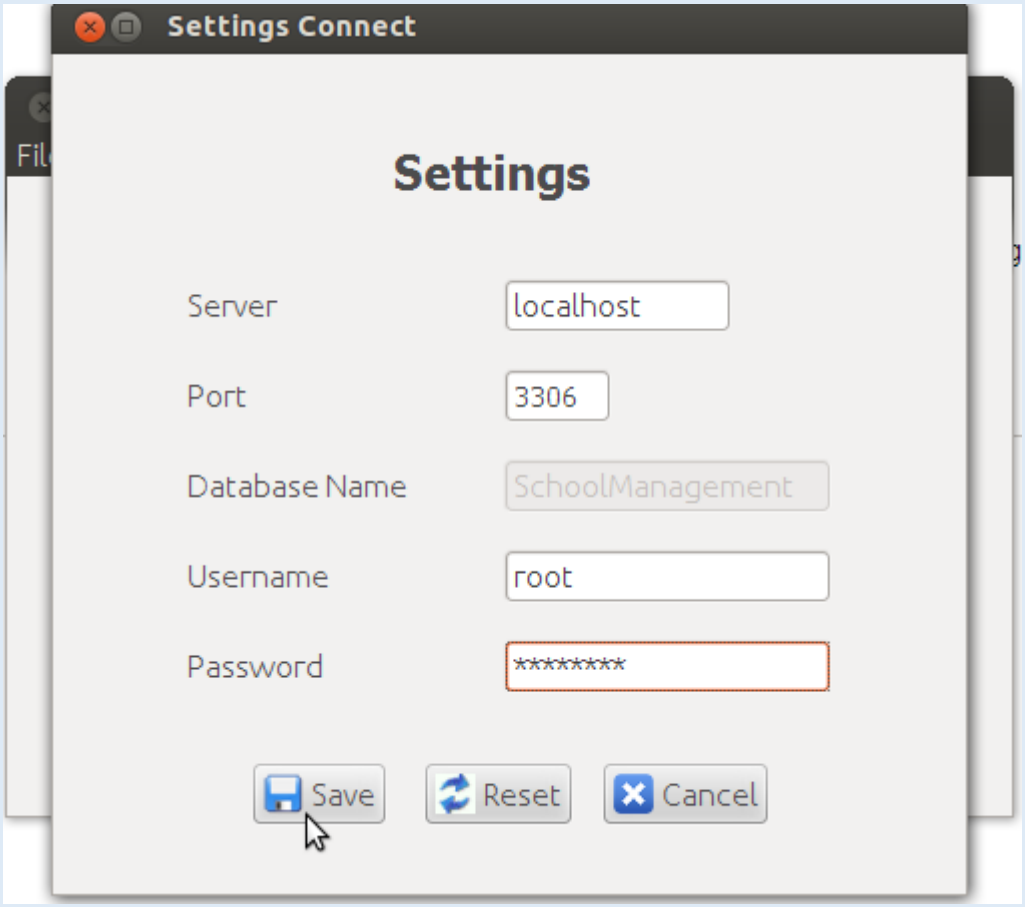
II. Config Application for first time

Run Application



Settings


Login
File Help
Login
Username
Password
Role
Manager
Login
Exit


Settings Connect
Settings
Server
localhost
Port
3306
Database Name
SchoolManagement
Username
root
Password
****
Save
Reset
Cancel

Login with

1. Administrator access

Username: admin

Password: 123

Role: Admin

2. Student Manager access

Username: ankitjha

Password: jha

Role: Manager

3. Employee Manager access

Username: Anakin

Password: ankit

Role: Manager

Done !