

# Manual of MySQL Database

**Step 1. Download the MySQL installer from <https://dev.mysql.com/downloads/mysql/5.7.html>.**

1.MSI for Microsoft Windows.

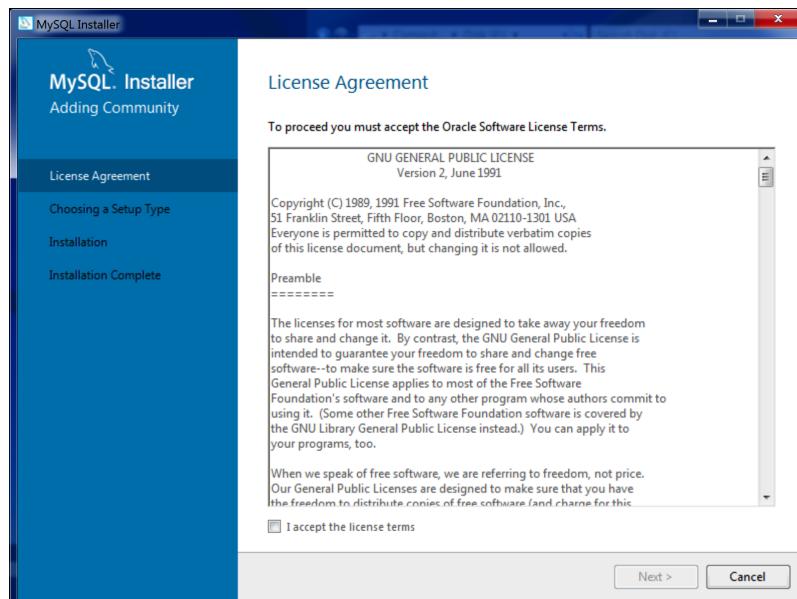
2.DMG for macOS.

**Step 2. Install on the computer.**

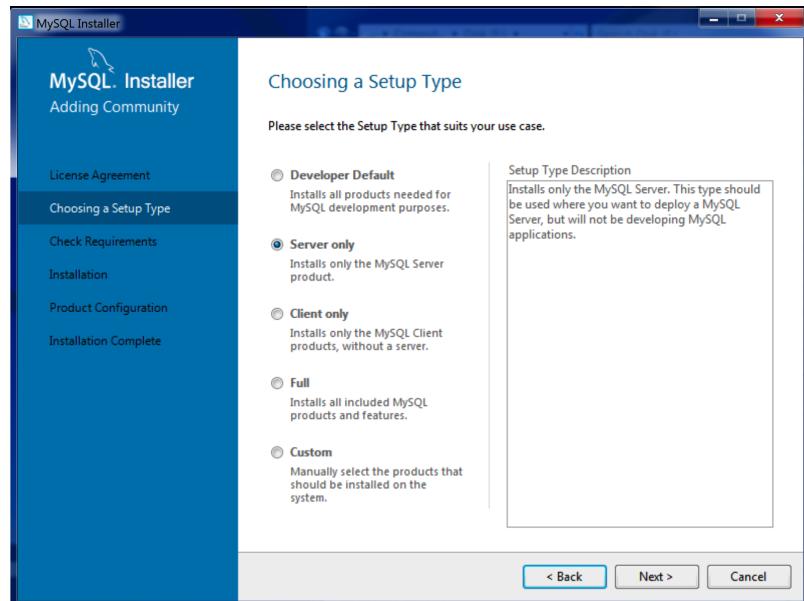
**1. For windows.**

1. Install necessary dependency such like .Net Framework.

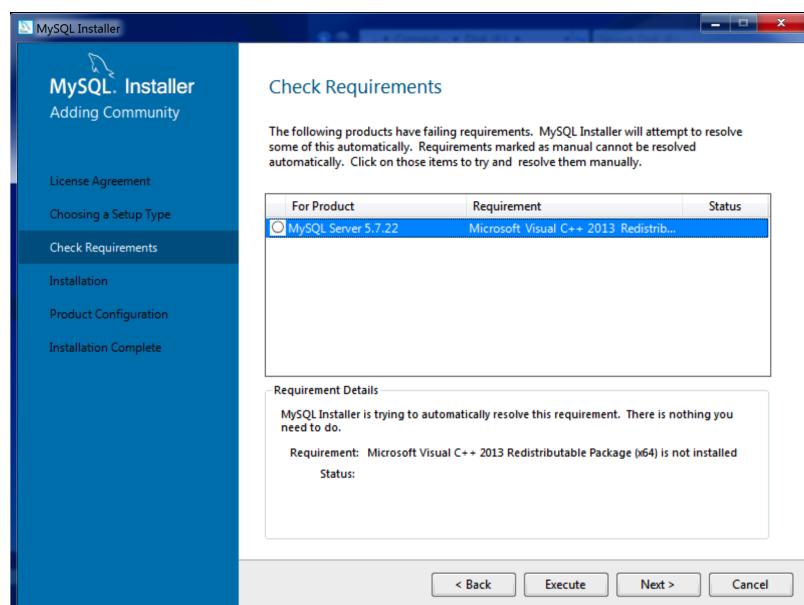
2. Run the MySQL Installer.msi directly.



3. Agree license and choose server only.

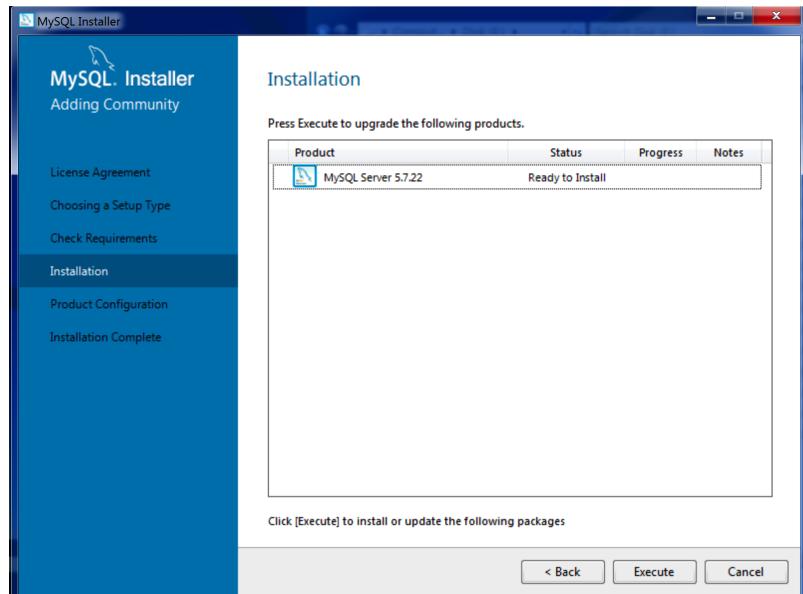


4. Then the installer will check the requirements of MySQL.



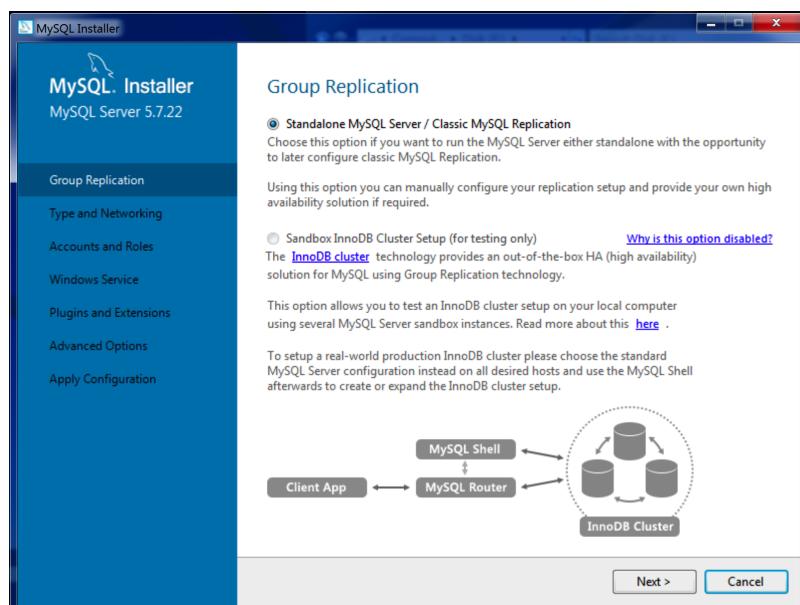
Click the Execute button to install all required dependency.

5. Then install the MySQL Server.



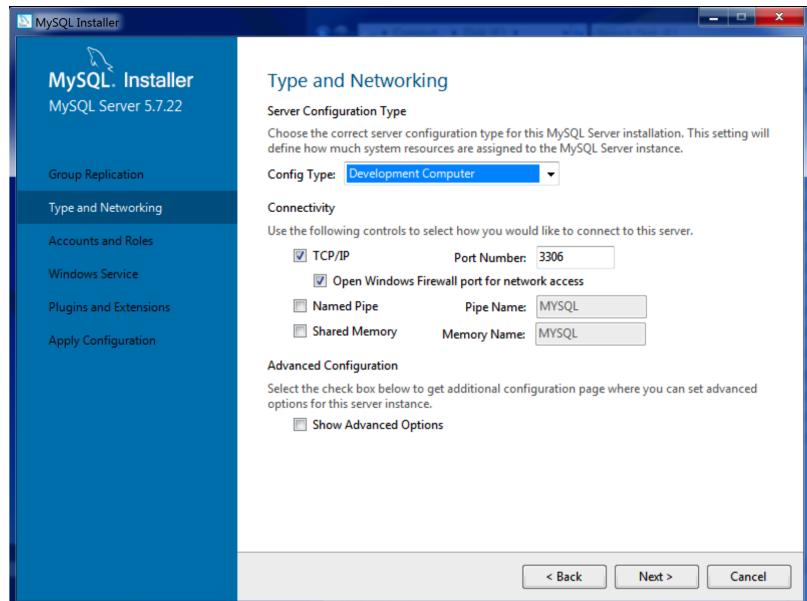
## 6. Do the product configuration.

### 1. Group Replication.



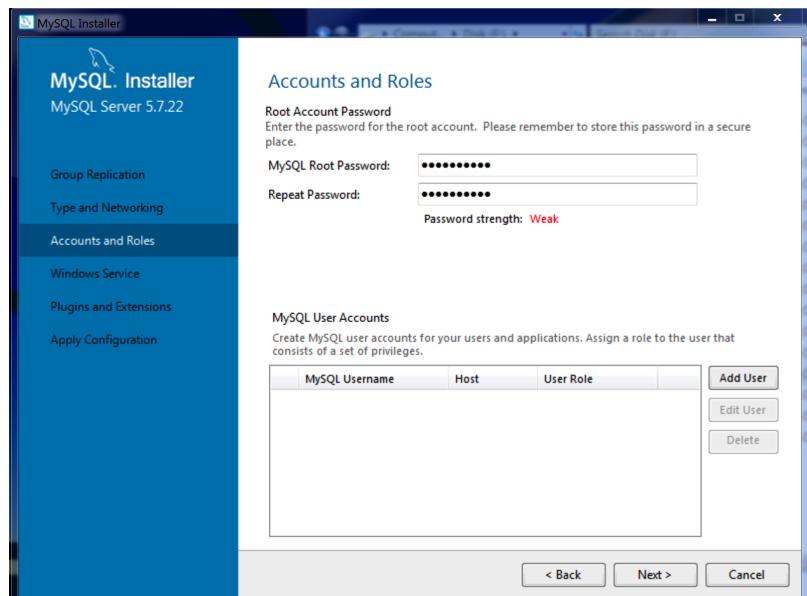
### 2. Type and Networking:

Type: Development (For developer) or Server (For web applications) Computer

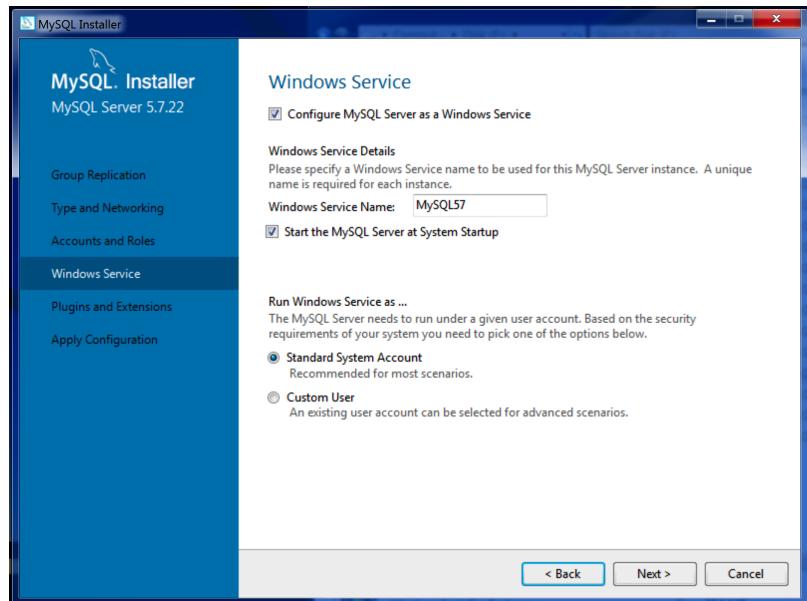


### 3. Accounts and Roles.

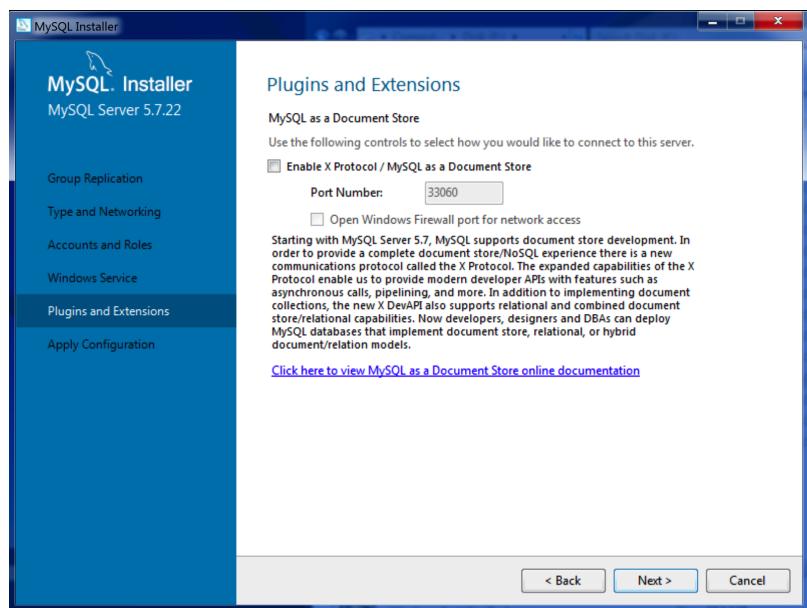
Set the password of root account, can also create some users for the server.



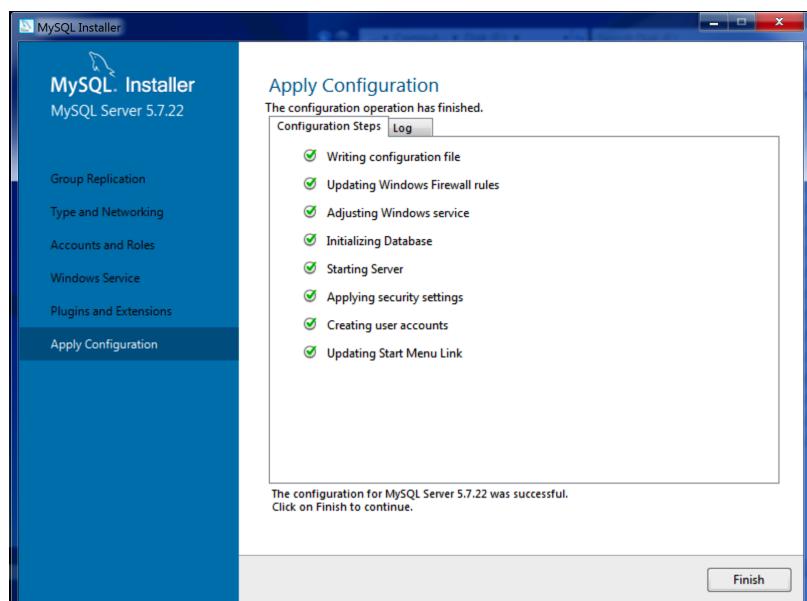
Windows Service. (Set as default)



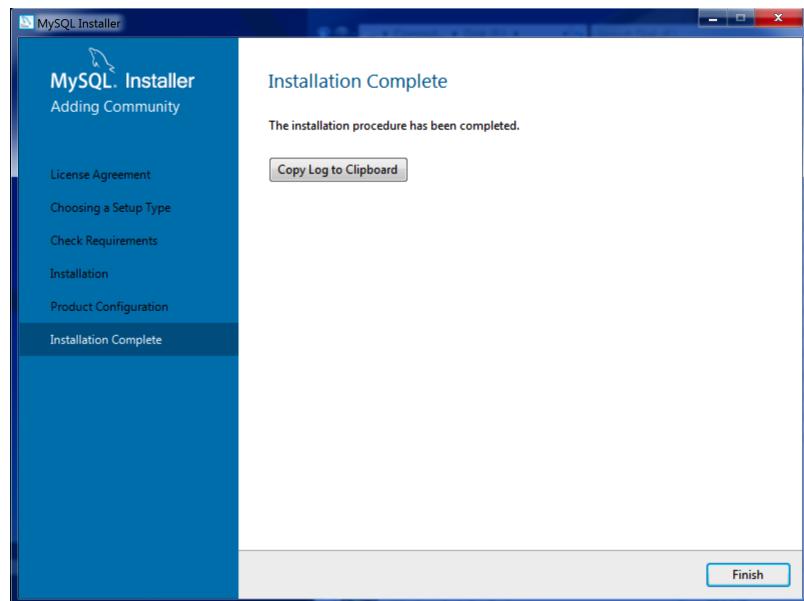
#### 4. Plugins and Extensions. (Set as default)



#### 5. Apply Configuration.



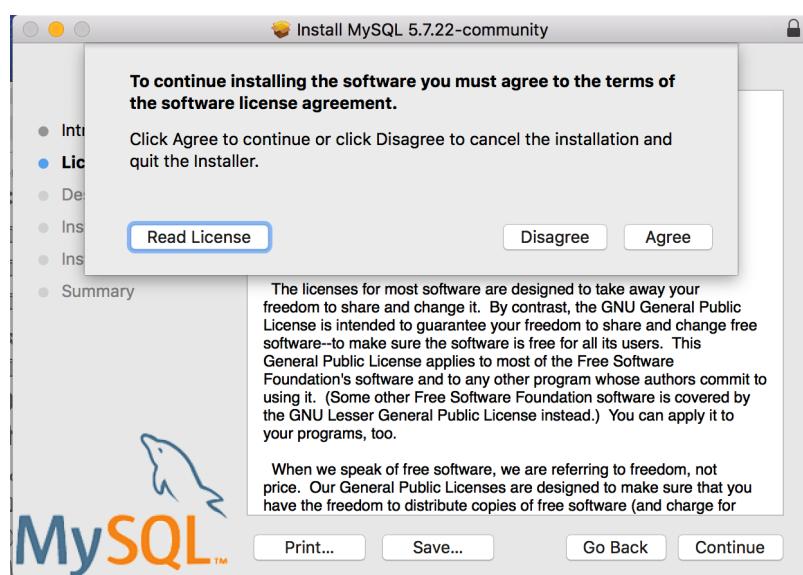
6. The installation is completed.



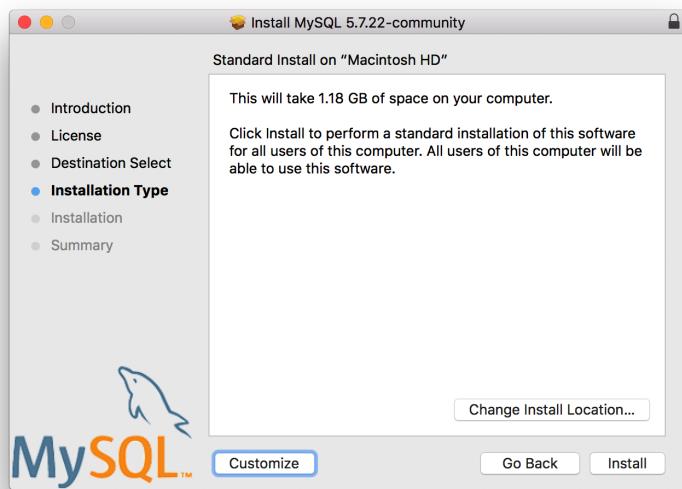
## 2. For macOS

1. Run the installer.dmg.

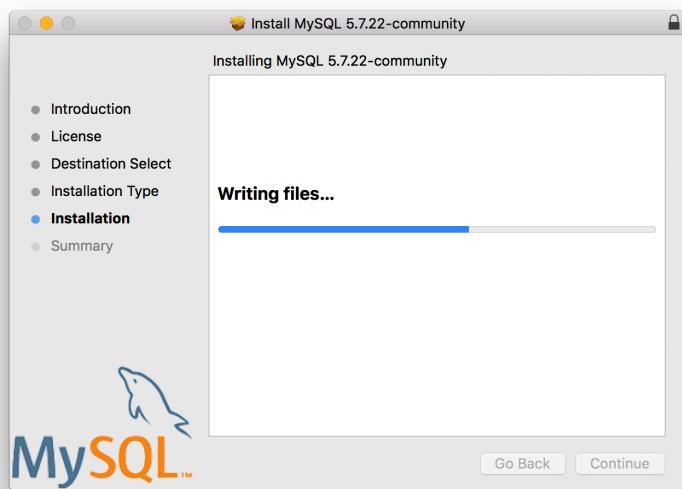
2. Agree the license.



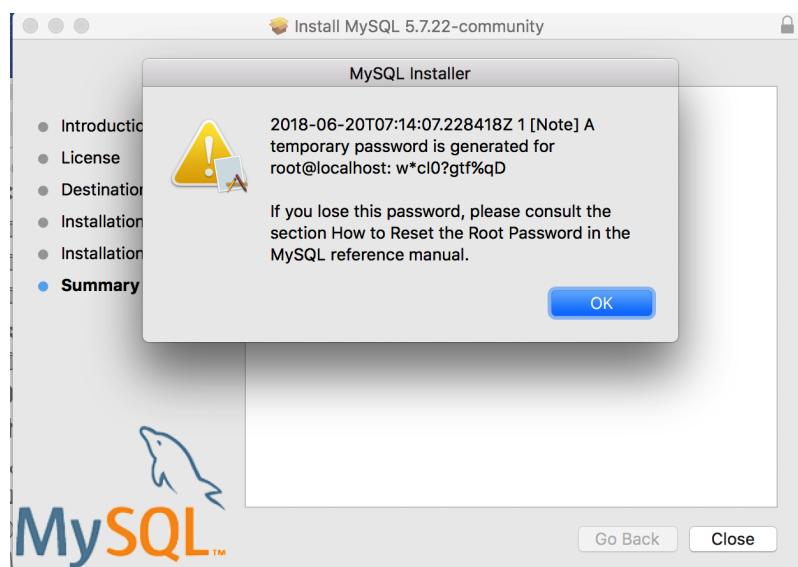
3. Choose the install location.



#### 4. Installation

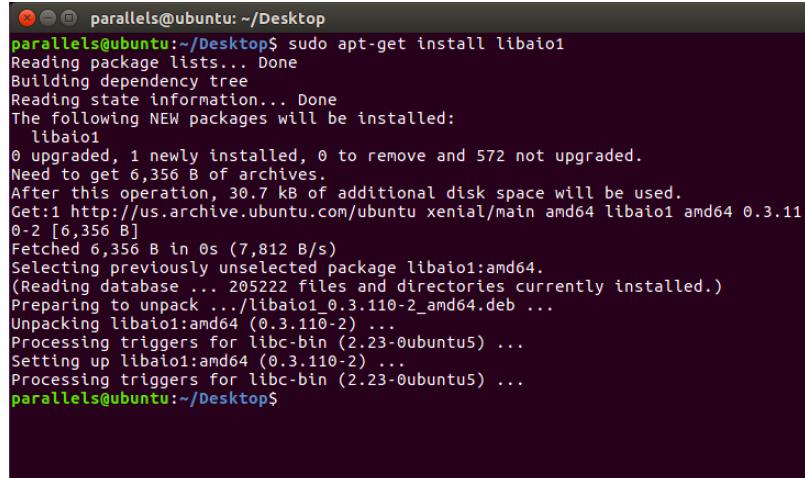


#### 5. Installation complete and Temporary password generated.



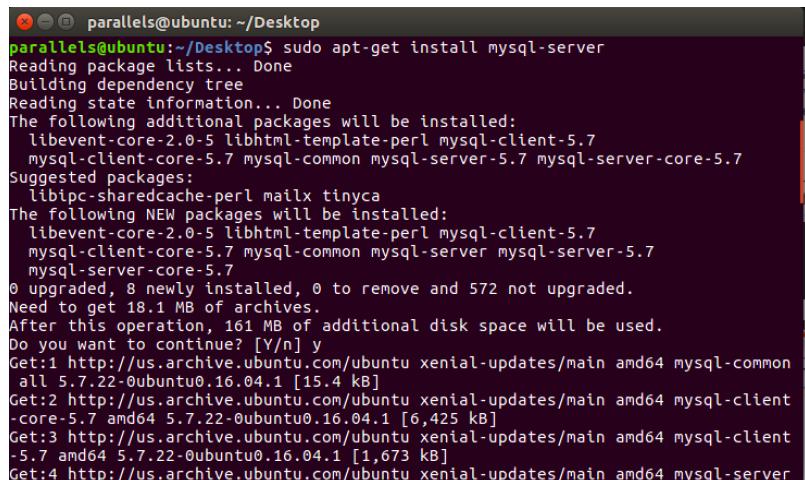
### 3. For Ubuntu

1. Install the dependent package.



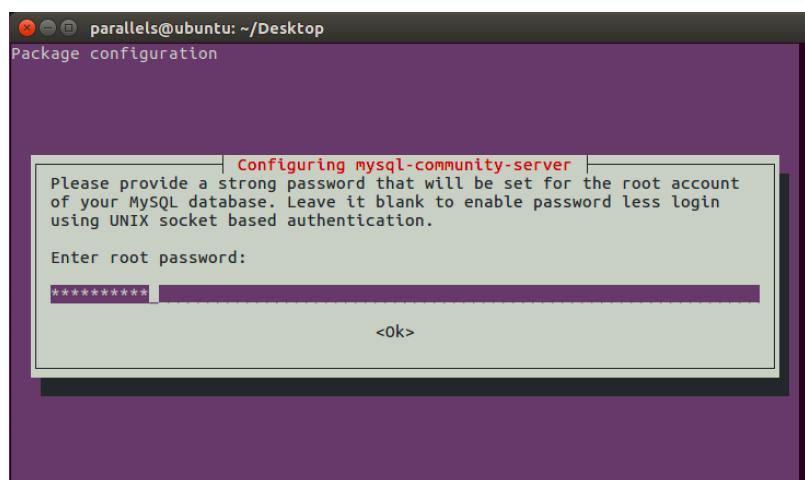
```
parallels@ubuntu:~/Desktop$ sudo apt-get install libaio1
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
  libaio1
0 upgraded, 1 newly installed, 0 to remove and 572 not upgraded.
Need to get 6,356 B of archives.
After this operation, 30.7 kB of additional disk space will be used.
Get:1 http://us.archive.ubuntu.com/ubuntu xenial/main amd64 libaio1 amd64 0.3.11
0-2 [6,356 B]
Fetched 6,356 B in 0s (7,812 B/s)
Selecting previously unselected package libaio1:amd64.
(Reading database ... 205222 files and directories currently installed.)
Preparing to unpack .../libaio1_0.3.110-2_amd64.deb ...
Unpacking libaio1:amd64 (0.3.110-2) ...
Processing triggers for libc-bin (2.23-0ubuntu5) ...
Setting up libaio1:amd64 (0.3.110-2) ...
Processing triggers for libc-bin (2.23-0ubuntu5) ...
parallels@ubuntu:~/Desktop$
```

2. Install the mysql server.



```
parallels@ubuntu:~/Desktop$ sudo apt-get install mysql-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libevent-core-2.0-5 libhtml-template-perl mysql-client-5.7
  mysql-client-core-5.7 mysql-common mysql-server-5.7 mysql-server-core-5.7
Suggested packages:
  libipc-sharedcache-perl mailx tinyca
The following NEW packages will be installed:
  libevent-core-2.0-5 libhtml-template-perl mysql-client-5.7
  mysql-client-core-5.7 mysql-common mysql-server mysql-server-5.7
  mysql-server-core-5.7
0 upgraded, 8 newly installed, 0 to remove and 572 not upgraded.
Need to get 18.1 MB of archives.
After this operation, 161 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us.archive.ubuntu.com/ubuntu xenial-updates/main amd64 mysql-common
  all 5.7.22-0ubuntu0.16.04.1 [15.4 kB]
Get:2 http://us.archive.ubuntu.com/ubuntu xenial-updates/main amd64 mysql-client
  -core-5.7 amd64 5.7.22-0ubuntu0.16.04.1 [6,425 kB]
Get:3 http://us.archive.ubuntu.com/ubuntu xenial-updates/main amd64 mysql-client
  -5.7 amd64 5.7.22-0ubuntu0.16.04.1 [1,673 kB]
Get:4 http://us.archive.ubuntu.com/ubuntu xenial-updates/main amd64 mysql-server
```

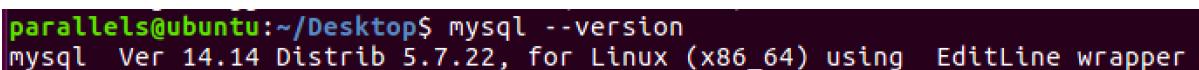
3. In the previous step, it will ask the user to set the password for root.



```
Configuring mysql-community-server
Please provide a strong password that will be set for the root account
of your MySQL database. Leave it blank to enable password less login
using UNIX socket based authentication.

Enter root password:
***** <Ok>
```

4. Check the mysql server is installed correctly or not

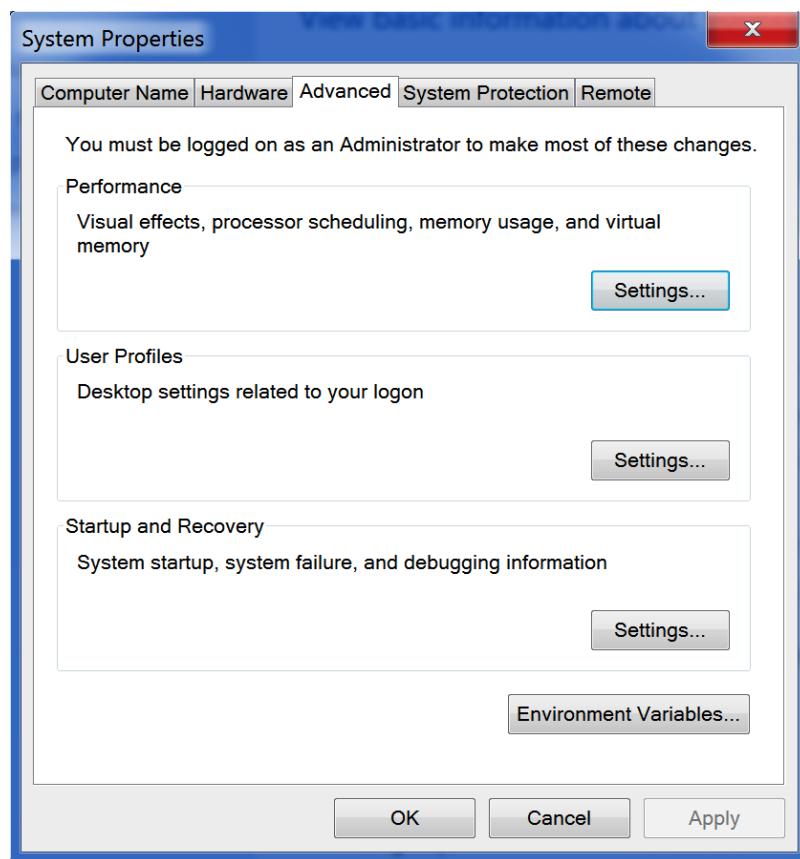


```
parallels@ubuntu:~/Desktop$ mysql --version
mysql Ver 14.14 Distrib 5.7.22, for Linux (x86_64) using EditLine wrapper
```

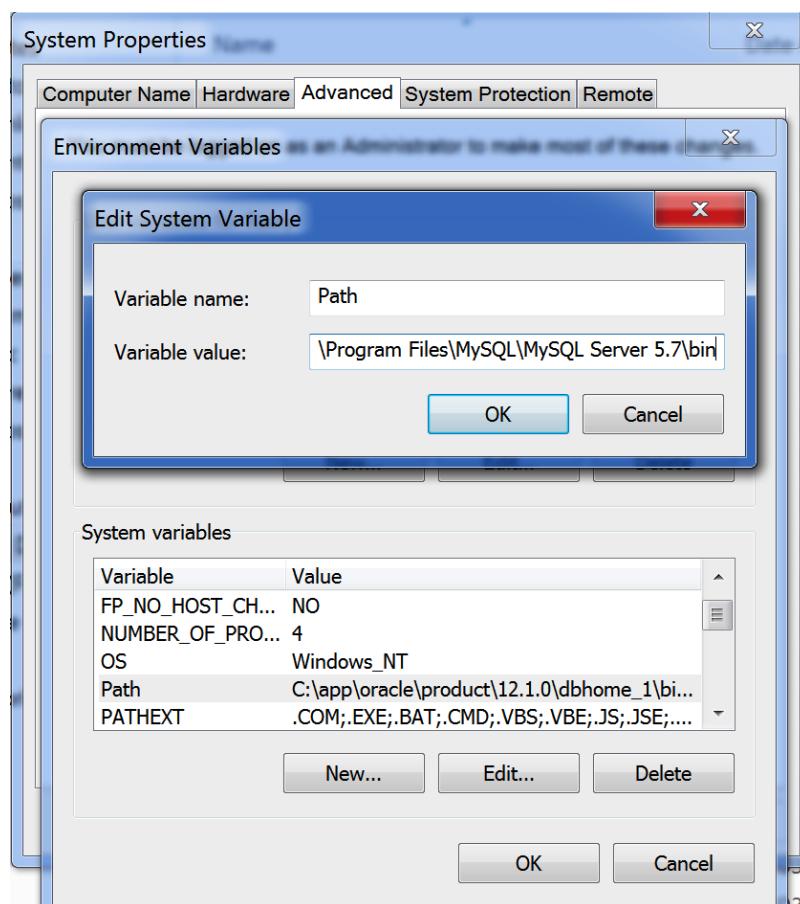
## Step 3. Environment Variable Configuration

## 1. For windows

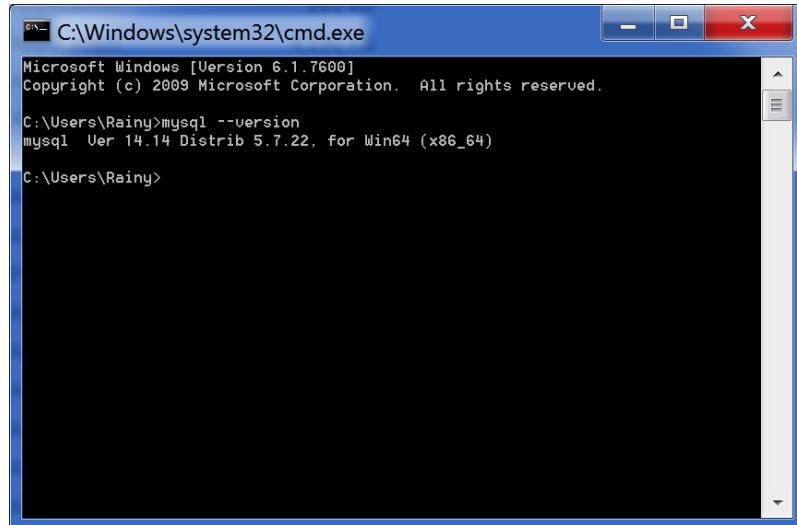
1. Open the system properties of the computer and click the environment variables.



2. Add the installed path into the system variable which is path.



3. Open command tool to check configuration is successful or not.

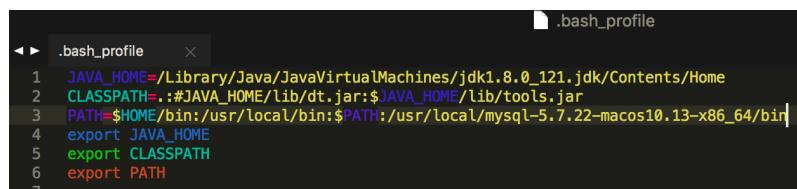


A screenshot of a Windows Command Prompt window titled "C:\Windows\system32\cmd.exe". The window shows the following text:  
Microsoft Windows [Version 6.1.7600]  
Copyright (c) 2009 Microsoft Corporation. All rights reserved.  
C:\Users\Rainy>mysql --version  
mysql Ver 14.14 Distrib 5.7.22, for Win64 (x86\_64)  
C:\Users\Rainy>

## 2. For macOS

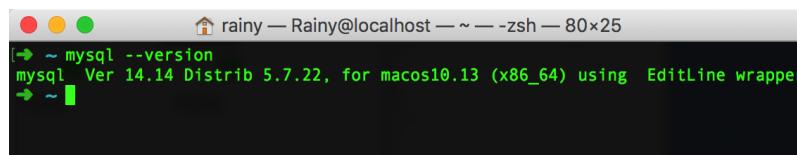
1. Use vim or sublime to open ~/.bash\_profile.

2. Add the path of mysql at the end of PATH.



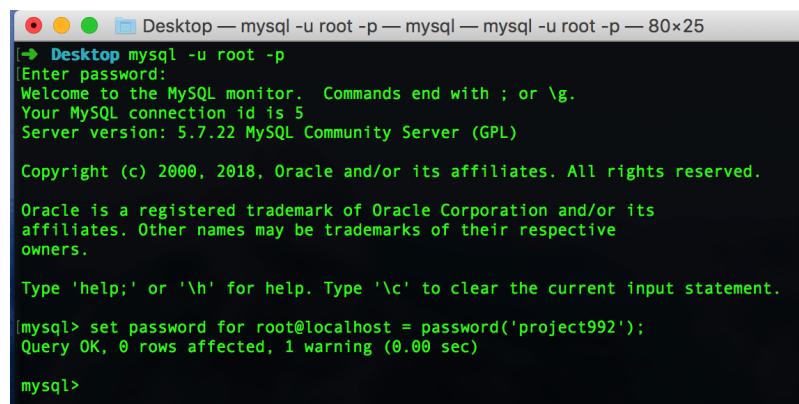
A screenshot of a macOS terminal window titled ".bash\_profile". The file contains the following code:  
1 JAVA\_HOME=/Library/Java/JavaVirtualMachines/jdk1.8.0\_121.jdk/Contents/Home  
2 CLASSPATH=.:\${JAVA\_HOME}/lib/dt.jar:\${JAVA\_HOME}/lib/tools.jar  
3 PATH=\$HOME/bin:/usr/local/bin:\$PATH:/usr/local/mysql-5.7.22-macos10.13-x86\_64/bin  
4 export JAVA\_HOME  
5 export CLASSPATH  
6 export PATH

3. source the profile in the terminal and check.



A screenshot of a macOS terminal window titled "rainy — Rainy@localhost — ~ — zsh — 80x25". The terminal shows the following output:  
[~] ➔ ~ mysql --version  
mysql Ver 14.14 Distrib 5.7.22, for macos10.13 (x86\_64) using EditLine wrapper  
[~]

4. Change the temporary password.



A screenshot of a macOS terminal window titled "Desktop — mysql -u root -p — mysql — mysql -u root -p — 80x25". The MySQL monitor shows the following session:  
[~] ➔ Desktop mysql -u root -p  
Enter password:  
Welcome to the MySQL monitor. Commands end with ; or \g.  
Your MySQL connection id is 5  
Server version: 5.7.22 MySQL Community Server (GPL)  
  
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affiliates. Other names may be trademarks of their respective  
owners.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
mysql> set password for root@localhost = password('project992');  
Query OK, 0 rows affected, 1 warning (0.00 sec)  
  
mysql>

## Step 3. initialization of the database.

1. Login the database as root account.

2. Source the "database create.sql" file to create the init-database.

```
[Desktop — mysql -u root -p — mysql — mysql -u root -p — 80x43]
[mysql> source database create.sql
Query OK, 1 row affected (0.00 sec)

Database changed
Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.01 sec)

[mysql> show tables
[   -> ;
+-----+
| Tables_in_serviceexchange |
+-----+
| Address
| CheckBoxMessage
| Comment
| Discount
| Favourites
| Purchased
| SearchRecord
| Service
| ShoppingCart
| User
+-----+
10 rows in set (0.00 sec)

mysql>
```

3. Finally, the database and all empty tables are created.