

## MySQL Server/MySQL Workbench/Python installation Guideline for Windows 10

Written by Sael Lee on March 2017

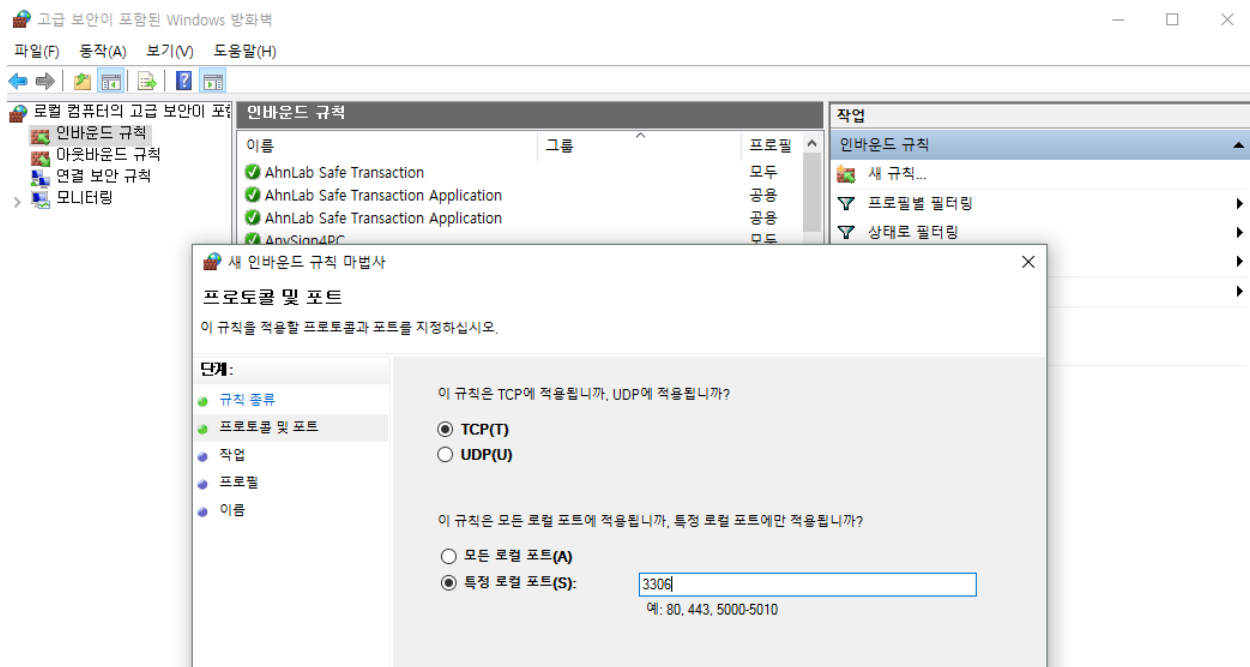
\* Source of app.py is modified from: <https://code.tutsplus.com/tutorials/creating-a-web-app-from-scratch-using-python-flask-and-mysql--cms-22972> written by Jay16 Jun 2015

\* Installation files that require admin privilege should not be in a share directory such as Google Drive

### Install MySQL Community Server 5.5

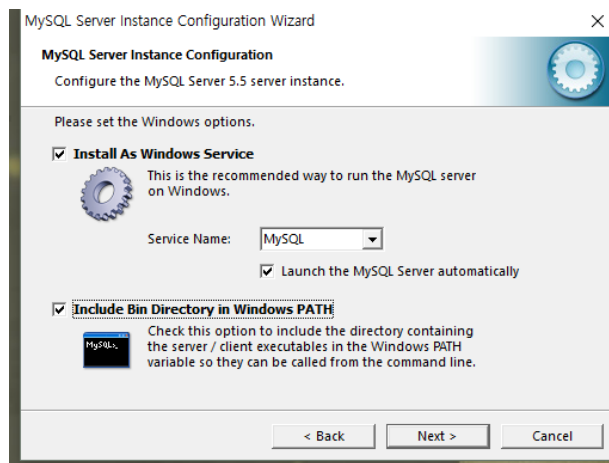
Set port for mysql

1. Navigate to Control Panel, System and Security and Windows Firewall.
2. Select Advanced settings and highlight Inbound Rules in the left pane.
3. Right click Inbound Rules and select New Rule.
4. Add the port you need to open and click Next.
5. Add the protocol (TCP) and the port number(3306) into the next window and click Next.
6. Select Allow the connection in the next window and hit Next.
7. Select the network type as you see fit and click Next.
8. Name the rule something meaningful and click Finish.



Install with administrator privilege.

Select default option except adding PATH variables:



Double click and install with “typical” option

Add user account before exiting installation.

Download program: <https://dev.mysql.com/downloads/mysql/5.5.html#downloads>

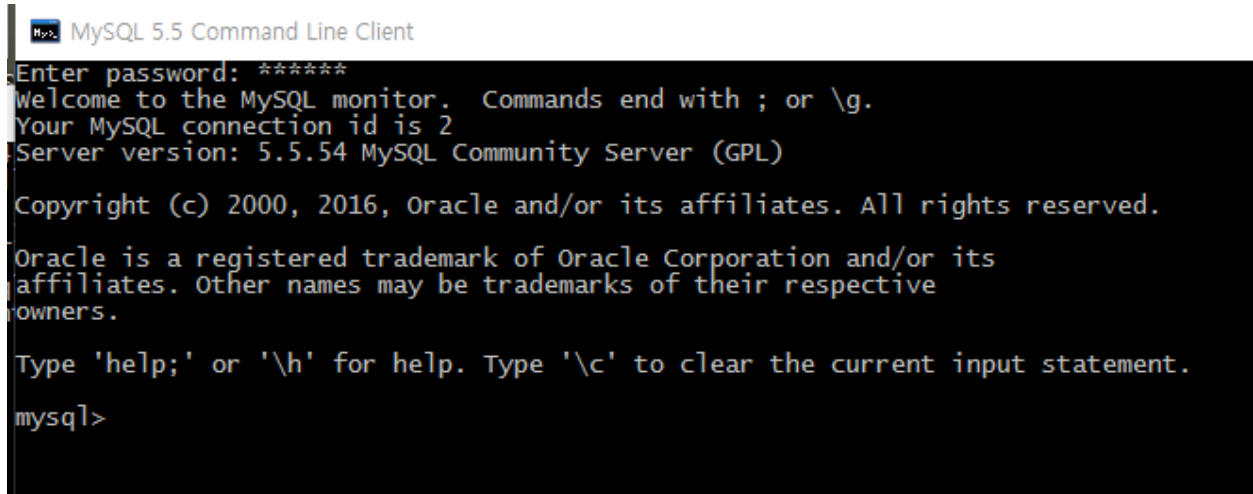
Read 5.5 of Installation guide: <https://downloads.mysql.com/docs/mysql-installation-excerpt-5.5-en.pdf>

MySQL 5.5 Reference Manual: <https://dev.mysql.com/doc/refman/5.5/en/introduction.html>

## Running MySQL:

1. To run mysql client in windows in command line:

Search for “MySQL 5.5 Command Line Client” in your Windows Search and open



```
MySQL 5.5 Command Line Client
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 2
Server version: 5.5.54 MySQL Community Server (GPL)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

As the root, create sample table by typing on the mysql command line prompt:

```
CREATE DATABASE `menu`;
USE menu;

DROP TABLE IF EXISTS `tblUser`;
CREATE TABLE `tblUser` (
  `UserId` INT NOT NULL AUTO_INCREMENT,
  `UserName` VARCHAR(45) NULL,
  `Password` VARCHAR(45) NULL,
  PRIMARY KEY (`UserId`));
```

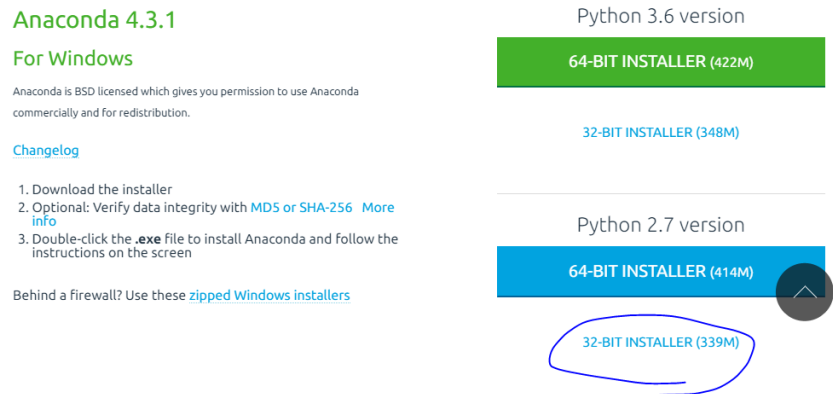
2. AND/OR Install mysql workbench

<https://dev.mysql.com/downloads/file/?id=468295>

### 3. Install Python Anaconda

<https://www.continuum.io/downloads#windows>

Choose 32-Bit Installer for Python 2.7 version



### Download and install

\* Note: if you have different version of anaconda installed already? Conflicts can arise. My suggested solution is installing both versions of anaconda and in the Environment variable setting for PATH, remove the one you're not using. That is, just keep the anaconda version that you will be using not both.

### 4. Create virtual environment for python with conda

Reference read: <https://uoa-ereseach.github.io/ereseach-cookbook/recipe/2014/11/20/conda/>

In you command line prompt: (type cmd in Windows search)

Create a new environment for 32bit Python 2.7

```
set CONDA_FORCE_32BIT=1
conda create -n py27_32 python=2.7
```

```

C:\Users\Sael Lee>conda create -n py27_32 python=2.7
Fetching package metadata .....
Solving package specifications: .

Package plan for installation in environment C:\Users\Sael Lee\Anaconda3\envs\py27_32:

The following NEW packages will be INSTALLED:

  pip: 9.0.1-py27_1
  python: 2.7.13-0
  setuptools: 27.2.0-py27_1
  vs2008_runtime: 9.00.30729.5054-0
  wheel: 0.29.0-py27_0

Proceed ([y]/n)? y
vs2008_runtime 100% |#####| Time: 0:00:00 7.11 MB/s
python-2.7.13- 100% |#####| Time: 0:00:02 9.65 MB/s
setuptools-27. 100% |#####| Time: 0:00:00 8.67 MB/s
wheel-0.29.0-p 100% |#####| Time: 0:00:00 11.24 MB/s
pip-9.0.1-py27 100% |#####| Time: 0:00:00 5.38 MB/s
#
# To activate this environment, use:
# > activate py27_32
#
# To deactivate this environment, use:
# > deactivate py27_32
#
# * for power-users using bash, you must source
#
C:\Users\Sael Lee>

```

Activate the created virtual environment:

```

set CONDA_FORCE_32BIT=1
activate py27_32

```

## 5. Get MySQL for Python

```
conda install mysql-python
```

```

(py27_32) C:\Users\Sael Lee>conda install mysql-python
Fetching package metadata .....
Solving package specifications: .

Package plan for installation in environment C:\Users\Sael Lee\Anaconda3\envs\py27_32:

The following NEW packages will be INSTALLED:

  mysql-python: 1.2.5-py27_0

Proceed ([y]/n)? y
mysql-python-1 100% |#####| Time: 0:00:01 729.16 kB/s

```

\* Additional Information about MySQL-Python can be found in the following URL:

<https://pypi.python.org/pypi/MySQL-python/1.2.5>

## 6. Install Flask and Flask-mysql, Python framework for creating web applications

```

> conda install flask
> pip install flask-mysql

```

Flask-MySQLdb's documentation: <http://flask-mysqldb.readthedocs.io/en/latest/>

7. Create your working directory or navigate to one

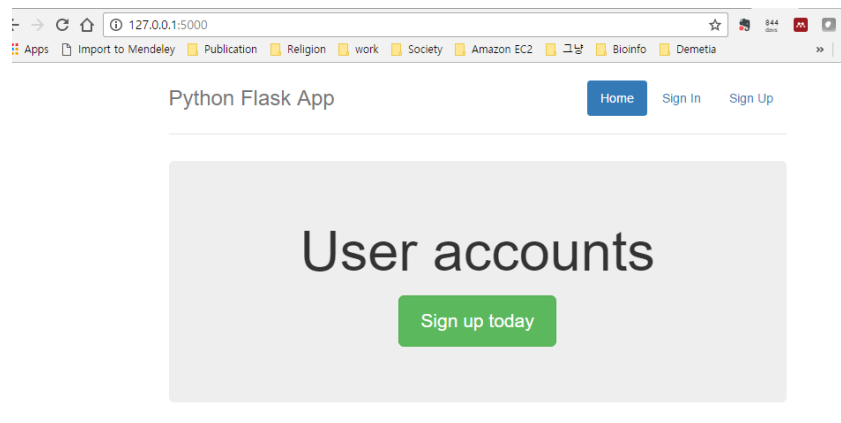
8. Run sample code;

Assuming that the menu DB is running in your computer type the following

```
python app.py
```

and in the web browser type the URL that appears (<http://127.0.0.1>).

You should get this:

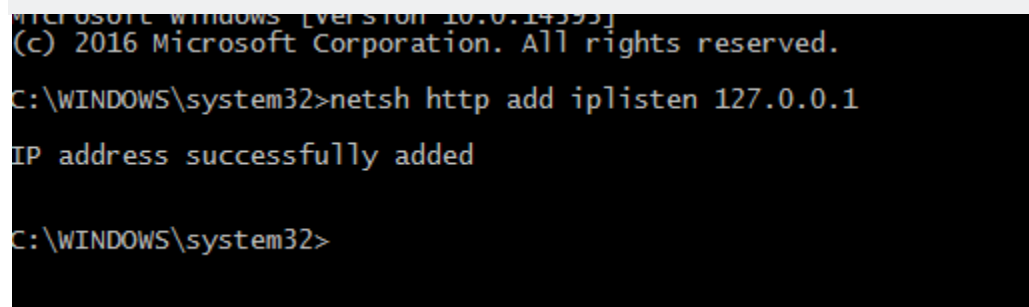


If you're not able to access <http://127.0.0.1>

Run cmd with administrator (search for cmd and right click for admin open option)

Run cmd and type

```
netsh http add iplisten 127.0.0.1
```

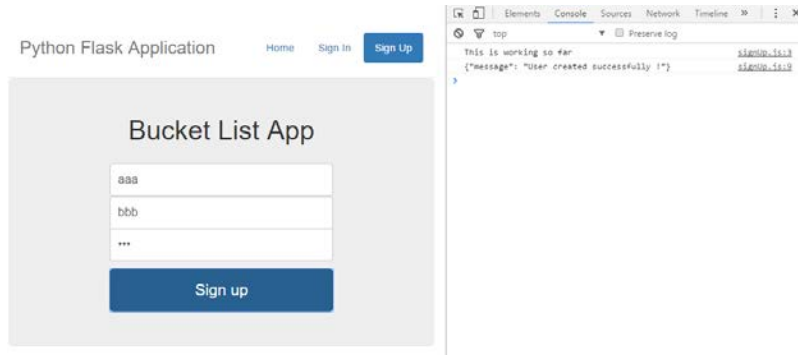


Try sign in with new information and check in mysql if the

Try login

When you code make sure to work in console mode of the web browser:

- Console mode in chrome: ctrl+shift+j



9. Close your virtual environment and comeback next time:

\* when you want to close the project Deactivate the virtual environment:

```
deactivate py27_32
```

## Useful Resources

- Managing multiple Python environments using Anaconda  
<http://www.wilsonsayreslab.org/blog/2015/10/26/managing-multiple-python-environments-using-anaconda>
- Creating a Web App From Scratch Using Python Flask and MySQL  
<https://code.tutsplus.com/tutorials/creating-a-web-app-from-scratch-using-python-flask-and-mysql--cms-22972>
- To Run as Administrator using Keyboard Shortcut
  - 1. Select an app to highlight it.
  - 2. Press and hold the CTRL + Shift keys.
  - 3. Press Enter or click/tap on the app.
  - 4. Release the CTRL + Shift keys.
  - OR read <https://www.howtogeek.com/178826/how-to-force-an-msi-package-to-install-using-administrator-mode/>
- Useful MySQL Command line cheat sheet:  
<https://gist.github.com/hofmannsven/9164408>  
<https://dev.mysql.com/doc/refman/5.5/en/mysql-commands.html>
- working with flask:  
[https://www.youtube.com/watch?v=nWO\\_VpI5wn8](https://www.youtube.com/watch?v=nWO_VpI5wn8)  
<http://flask.pocoo.org/docs/0.12/quickstart/>  
<http://flask-mysqldb.readthedocs.io/en/latest/>
- Console mode in chrome: ctrl+shift+j