

## Instructions

The instructions can also be found in the readme.txt.

-> Create a new database (ideally with the name 'social\_media')

-> run 'createTable.sql'

-> run 'importData.sql' (populates the tables using the provided csv files)

-> edit 'config.py' and specify the host, port, database name, user, and password of the mysql database created in the previous step.

**Note: you might want to create a new user in your mysql and provide it all privileges if you don't want to use your root user.**

-> open a terminal/command prompt in the 'v9malhot\_s6bhatna/python' folder

-> run the command to install pip packages dependencies: pip install -r req.txt

-> run the following command to start using the application: python cli.py

## Demo

Please refer to demo.mp4 in the video folder. The application is fully functioning. The demo videos goes through the following functionalities of the application:

1. Sign up
2. Login (includes validation)
3. Create a post
4. View posts from topics you are following
5. View posts from users you are following
6. Create a new topic
7. Follow a new topic
8. View comments on a post
9. View likes on a post
10. Add a comment on a post
11. Add a like on a post

## SQL

The data is retrieved and updated by the python application in real-time using SQL queries. These queries can be found in connector.py as well as queries1.sql and queries2.sql.

## Python Code

There are 6 main components of the application: cli, config, connector, middle, objects, and state.

### **cli.py**

Contains all the front end code which runs the interactive CLI application using a state machine to render the views

### **state.py**

Contains the classes for each state and the behaviour according to each state

<b>middle.py</b>	Contains the middleware and provides a session provider to cli.py which is used to communicate to the backend which retrieves the data.
<b>connector.py</b>	Contains the backend code which communicates with the MySQL database and retrieves the data by sending the appropriate queries to the database.
<b>objects.py</b>	Contains data model classes which mimic structure of the entities returned from the database
<b>config.py</b>	Contains the configuration information about the database which is required to make a connection