

Lab notebook Week 3

Submitted by: Vishrut Sharma (OdinID: vishrut)

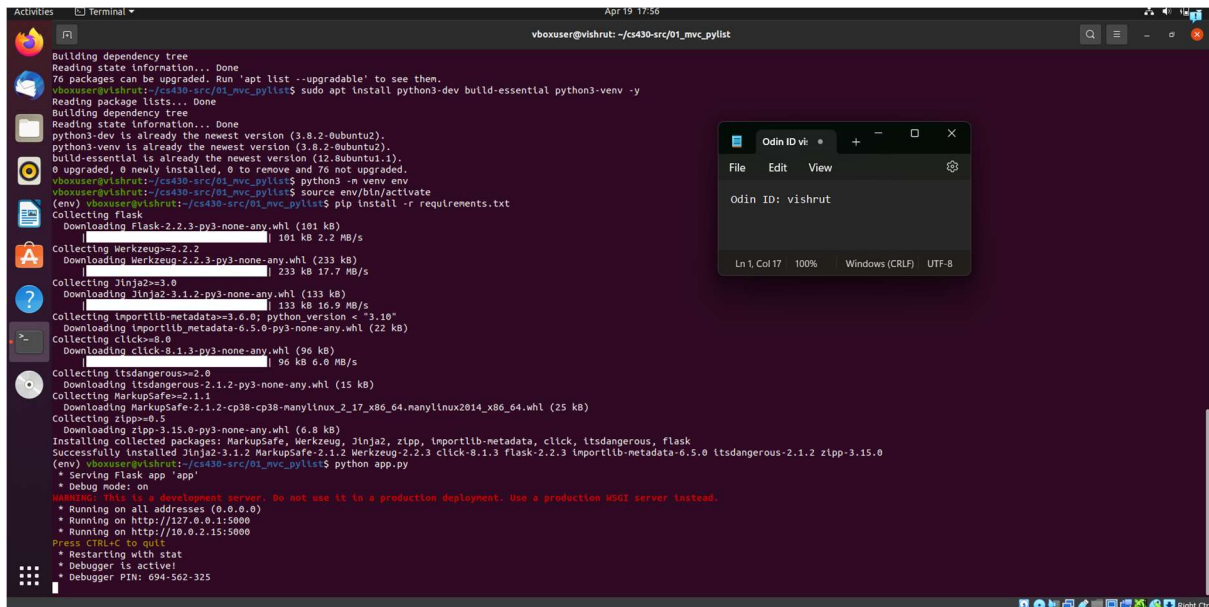
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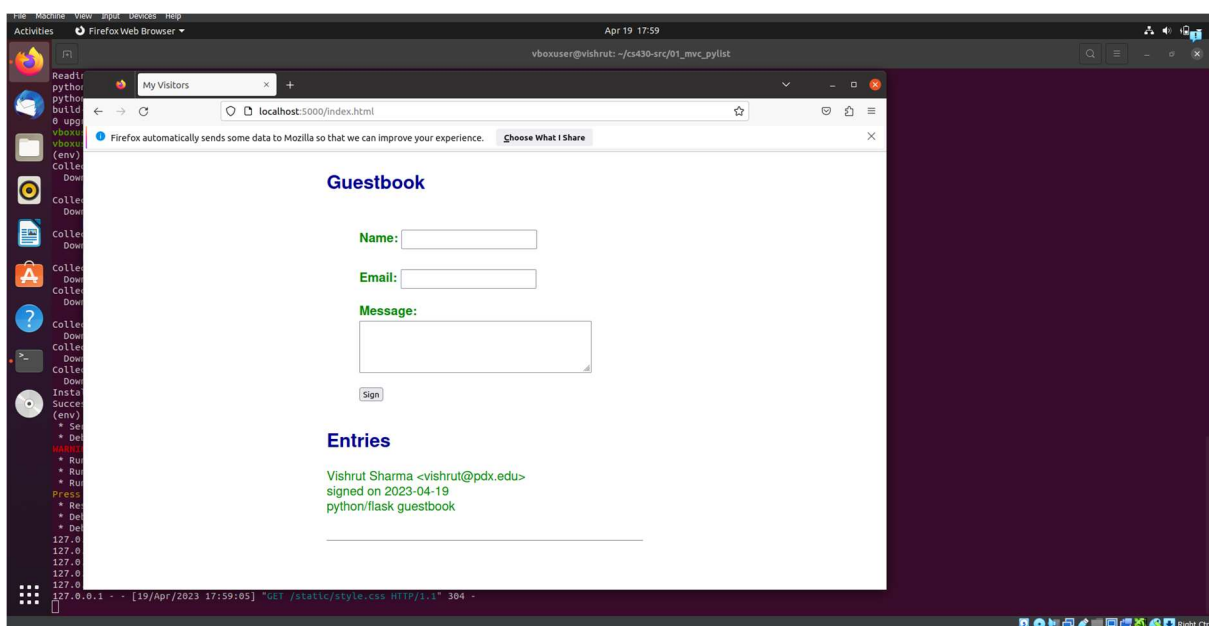
03.1: Python Flask Guestbook

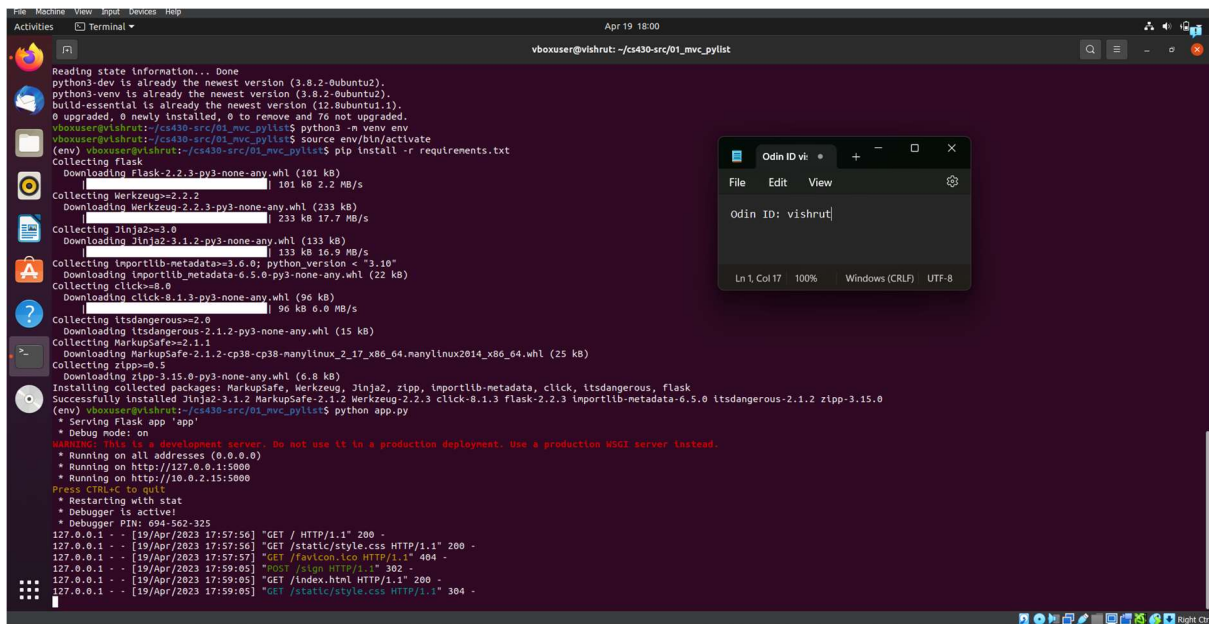
5. Running the code

The 3 screenshots below show the results of running app.py that was provided..



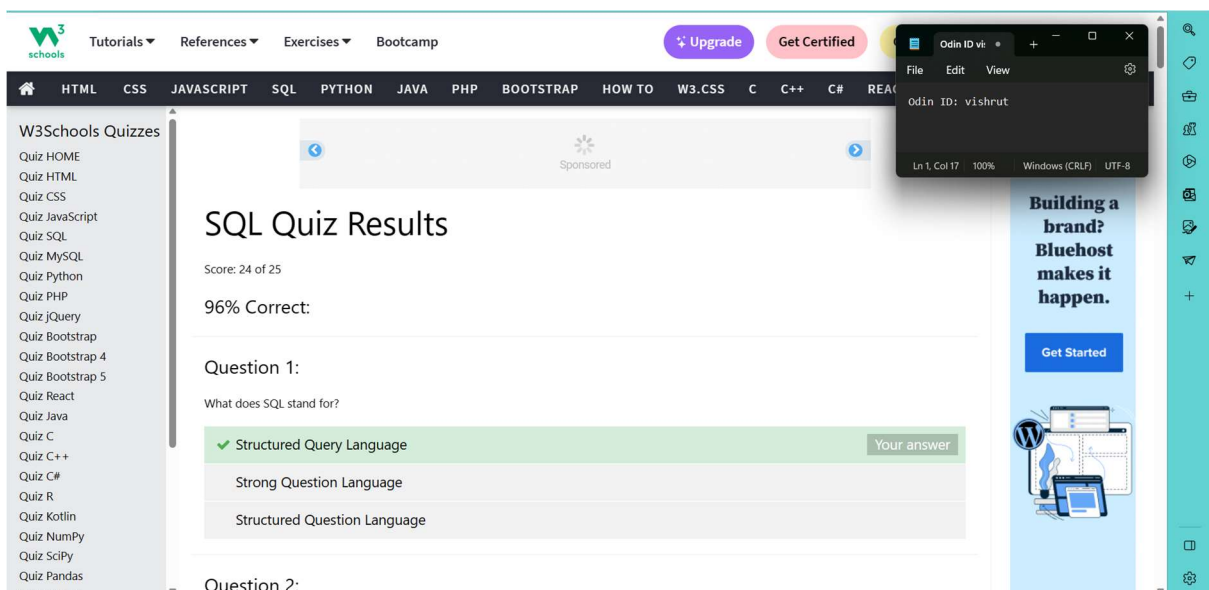
```
Activities Terminal vboxuser@vishrut: ~/cs430-src/01_mvc_pylist
Building dependency tree
Reading state information... Done
76 packages can be upgraded. Run 'apt list --upgradable' to see them.
vboxuser@vishrut:~/cs430-src/01_mvc_pylist$ sudo apt install python3-dev build-essential python3-venv -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
python3-dev is already the newest version (3.8.2-0ubuntu2).
python3-venv is already the newest version (3.8.2-0ubuntu2).
build-essential is already the newest version (12.8ubuntu1.1).
0 upgraded, 0 newly installed, 0 to remove and 76 not upgraded.
vboxuser@vishrut:~/cs430-src/01_mvc_pylist$ python3 -m venv env
vboxuser@vishrut:~/cs430-src/01_mvc_pylist$ source env/bin/activate
(env) vboxuser@vishrut:~/cs430-src/01_mvc_pylist$ pip install -r requirements.txt
Collecting Flask
  Downloading Flask-2.2.3-py3-none-any.whl (101 kB)
Collecting Werkzeug==2.2.2
  Downloading Werkzeug-2.2.3-py3-none-any.whl (233 kB)
Collecting Jinja2==3.0
  Downloading Jinja2-3.1.2-py3-none-any.whl (133 kB)
Collecting importlib-metadata==3.6.0; python_version < "3.10"
  Downloading importlib_metadata-6.5.0-py3-none-any.whl (22 kB)
Collecting click==8.0
  Downloading click-8.1.3-py3-none-any.whl (96 kB)
Collecting itsdangerous==2.0
  Downloading itsdangerous-2.1.2-py3-none-any.whl (15 kB)
Collecting MarkupSafe==2.1.1
  Downloading MarkupSafe-2.1.2-cp38-cp38-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (25 kB)
Collecting zipp==0.5
  Downloading zipp-3.15.0-py3-none-any.whl (6.8 kB)
Installing collected packages: MarkupSafe, Werkzeug, Jinja2, zipp, importlib-metadata, click, itsdangerous, flask
Successfully installed Jinja2-3.1.2 MarkupSafe-2.1.2 Werkzeug-2.2.3 click-8.1.3 flask-2.2.3 importlib-metadata-6.5.0 itsdangerous-2.1.2 zipp-3.15.0
(env) vboxuser@vishrut:~/cs430-src/01_mvc_pylist$ python app.py
 * Serving Flask app 'app'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:5000
 * Running on http://10.0.2.15:5000
Press CTRL-C to quit
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 694-562-325
```





03.2ag: SQL

2. SQL quiz



3. GCP Cloud SQL

1)The names of the tables that are created are: Accommodation, Rating, Recommendation

2) The primary keys of each table are as follows:

Accommodation->ID

Rating->accoID, userID

Recommendation-> userID, accoId

- 3) The data held by Accommodation is: ID, title, location, price, rooms, rating, type
- 4) The accommodations in Dublin are:
 - a) Pleasant Quiet Place, Dublin
 - b) Great Private Country House, Dublin
- 5) The table below lists the attributes and their values for each accommodation in Dublin.

ID	Title	Location	Price	Rooms	Rating	Type
6	Pleasant Quiet Place	Dublin	35	5	4.3	House
77	Great Private Country House	Dublin	1150	10	2.4	Mansion

- 6) The screenshot below shows the IP address of the Cloud Shell session.

The screenshot shows a Google Cloud Cloud Shell terminal session. The terminal displays a list of accommodations with columns: ID, Title, Location, Price, Rooms, Rating, and Type. The list includes various properties like 'Great Private Country House, Dublin', 'Giant Private Fortress, Tokyo', etc. A command is entered to filter the list for 'Dublin':

```
cat accommodation.csv | grep Dublin
```

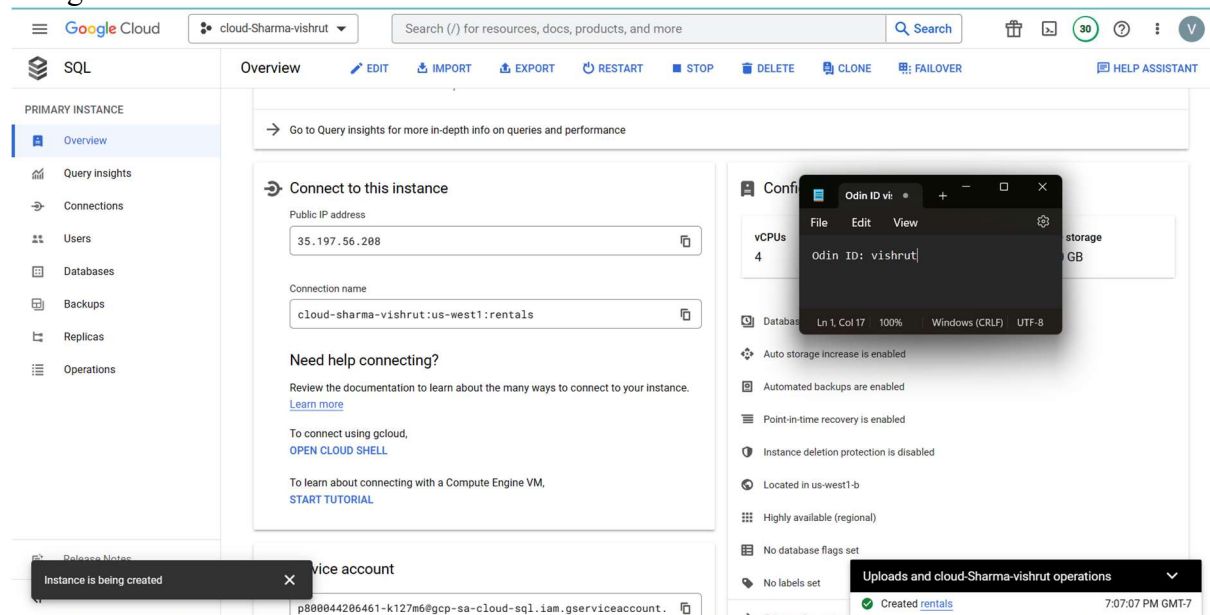
The output shows the following results:

```
6,Pleasant Quiet Place,Dublin,35,5,4.3,house
77,Great Private Country House,Dublin,1150,10,2.4,mansion
```

An inset window titled 'Odin ID vishrut' shows the Odin ID: vishrut. The terminal also shows the creation of a bucket and the upload of files to it.

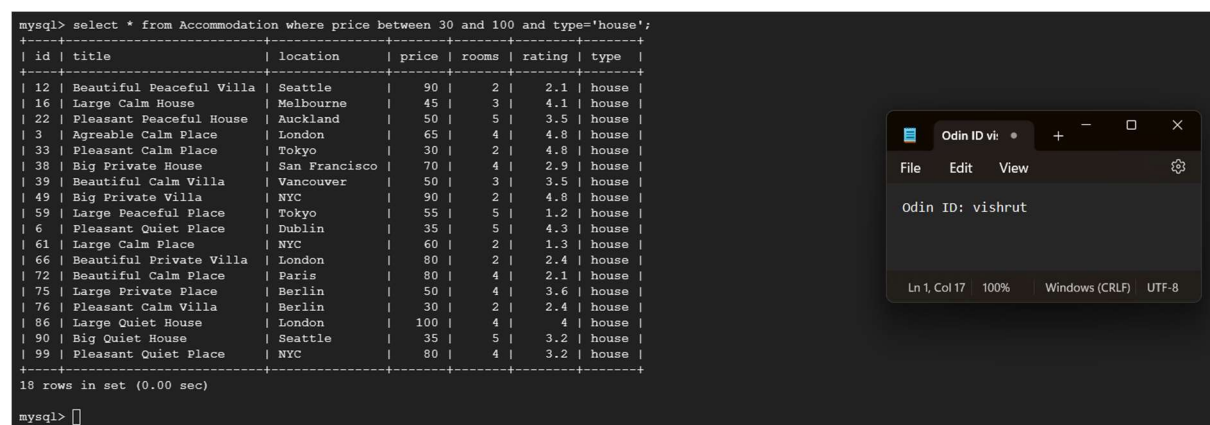
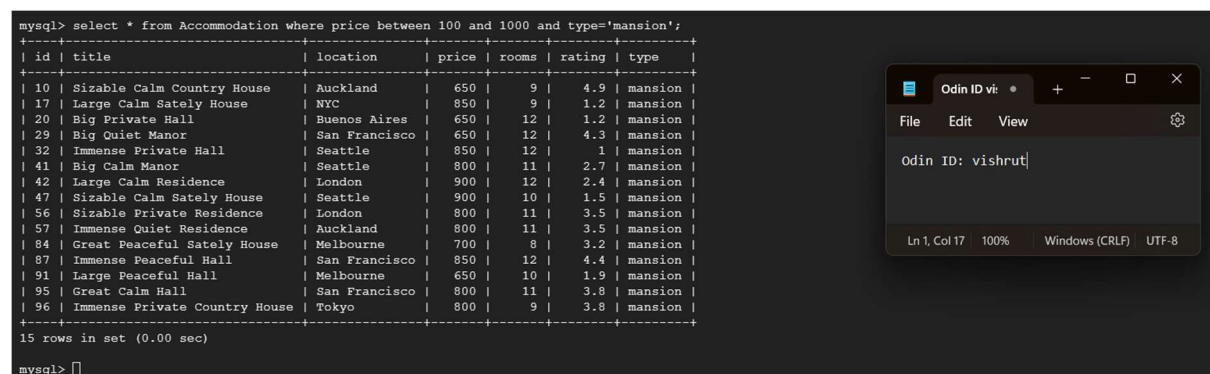
4. Cloud SQL instance creation

The screenshot below shows the External IP address after creating a cloud SQL instance in Google Cloud.



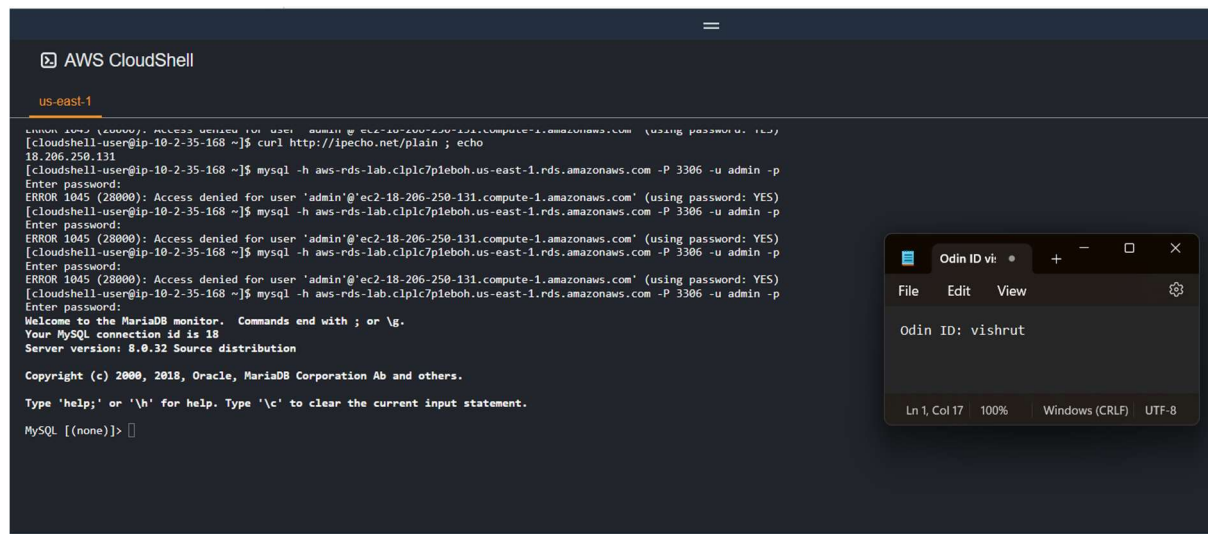
7. Cloud SQL from Cloud Shell

The 2 screenshots below show the results of running the queries for accommodations at two price ranges and two types.



14. RDS test instance

The screenshot below shows the successful connection to the MySQL instance in AWS.



```
us-east-1

[cloudshell-user@ip-10-2-35-168 ~]$ curl http://ipeco.net/plain ; echo
18.206.250.131
[cloudshell-user@ip-10-2-35-168 ~]$ mysql -h aws-rds-lab.c1plc7pleboh.us-east-1.rds.amazonaws.com -P 3306 -u admin -p
Enter password:
ERROR 1045 (28000): Access denied for user 'admin'@'ec2-18-206-250-131.compute-1.amazonaws.com' (using password: YES)
[cloudshell-user@ip-10-2-35-168 ~]$ mysql -h aws-rds-lab.c1plc7pleboh.us-east-1.rds.amazonaws.com -P 3306 -u admin -p
Enter password:
ERROR 1045 (28000): Access denied for user 'admin'@'ec2-18-206-250-131.compute-1.amazonaws.com' (using password: YES)
[cloudshell-user@ip-10-2-35-168 ~]$ mysql -h aws-rds-lab.c1plc7pleboh.us-east-1.rds.amazonaws.com -P 3306 -u admin -p
Enter password:
ERROR 1045 (28000): Access denied for user 'admin'@'ec2-18-206-250-131.compute-1.amazonaws.com' (using password: YES)
[cloudshell-user@ip-10-2-35-168 ~]$ mysql -h aws-rds-lab.c1plc7pleboh.us-east-1.rds.amazonaws.com -P 3306 -u admin -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 18
Server version: 8.0.32 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

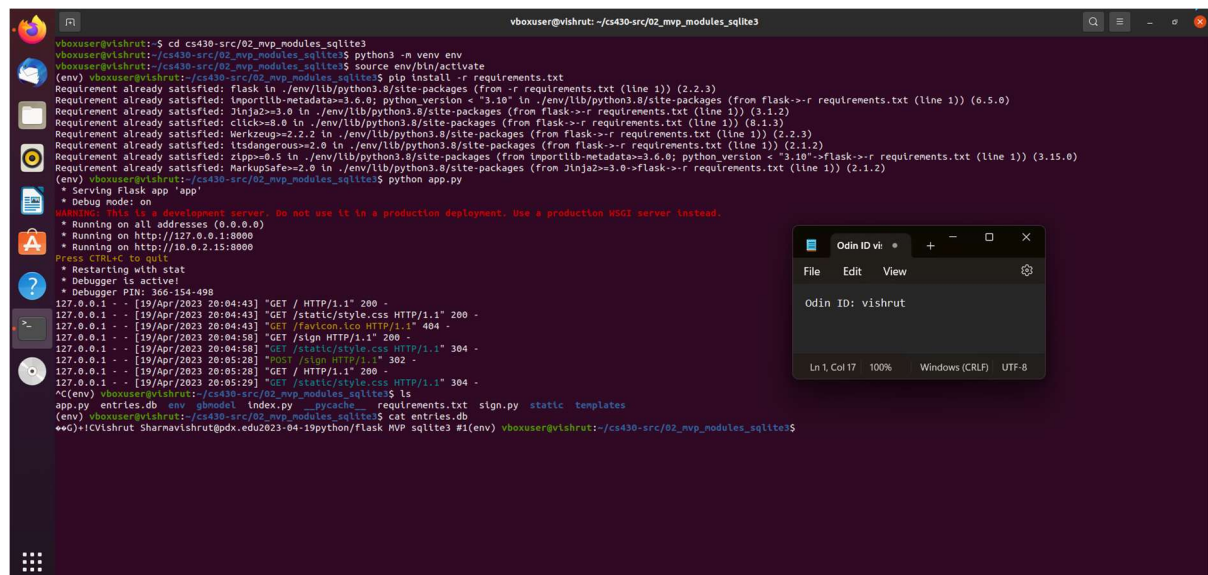
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MySQL [(none)]>
```

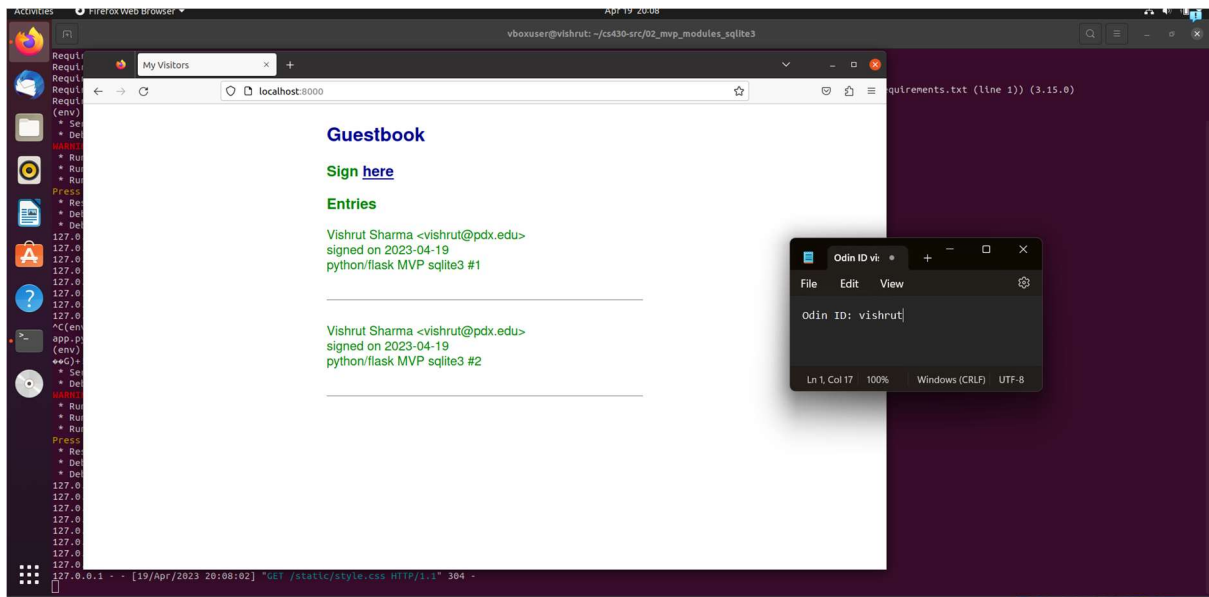
03.3: sqlite3 Guestbook

5. sqlite3 database

The 2 screenshots below show the results of running app.py provided. The 3rd screenshot shows the results of running the commands asked.



```
vboxuser@vishrut: ~/cs430-src/02_mvp_modules_sqlite3
vboxuser@vishrut:~/cs430-src/02_mvp_modules_sqlite3$ python3 -m venv env
vboxuser@vishrut:~/cs430-src/02_mvp_modules_sqlite3$ source env/bin/activate
(env) vboxuser@vishrut:~/cs430-src/02_mvp_modules_sqlite3$ pip install -r requirements.txt
Requirement already satisfied: flask in ./env/lib/python3.8/site-packages (from -r requirements.txt (line 1)) (2.2.3)
Requirement already satisfied: Jinja2>=3.0.0 in ./env/lib/python3.8/site-packages (from flask->-r requirements.txt (line 1)) (3.1.2)
Requirement already satisfied: Werkzeug>=2.2.2 in ./env/lib/python3.8/site-packages (from flask->-r requirements.txt (line 1)) (2.2.3)
Requirement already satisfied: MarkupSafe>=2.0 in ./env/lib/python3.8/site-packages (from Jinja2>=3.0.0->flask->-r requirements.txt (line 1)) (2.1.2)
Requirement already satisfied: importlib-metadata>=3.6.0; python_version < '3.10' in ./env/lib/python3.8/site-packages (from Jinja2>=3.0.0->flask->-r requirements.txt (line 1)) (3.15.0)
Requirement already satisfied: zipp>=0.5 in ./env/lib/python3.8/site-packages (from importlib-metadata>=3.6.0; python_version < '3.10'->flask->-r requirements.txt (line 1)) (3.15.0)
Requirement already satisfied: MarkupSafe>=2.0 in ./env/lib/python3.8/site-packages (from Jinja2>=3.0.0->flask->-r requirements.txt (line 1)) (2.1.2)
(env) vboxuser@vishrut:~/cs430-src/02_mvp_modules_sqlite3$ python app.py
* Serving Flask app 'app'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:8000
* Running on http://10.0.2.15:8000
Press CTRL-C to quit
Restarting with stat
Debugger is active!
Debugger PIN: 366-154-498
127.0.0.1 - - [19/Apr/2023 20:04:43] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [19/Apr/2023 20:04:43] "GET /static/style.css HTTP/1.1" 200 -
127.0.0.1 - - [19/Apr/2023 20:04:43] "GET /favicon.ico HTTP/1.1" 404 -
127.0.0.1 - - [19/Apr/2023 20:04:58] "GET /sign HTTP/1.1" 200 -
127.0.0.1 - - [19/Apr/2023 20:04:58] "GET /static/style.css HTTP/1.1" 304 -
127.0.0.1 - - [19/Apr/2023 20:05:28] "POST /sign HTTP/1.1" 302 -
127.0.0.1 - - [19/Apr/2023 20:05:28] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [19/Apr/2023 20:05:29] "GET /static/style.css HTTP/1.1" 304 -
^C(env) vboxuser@vishrut:~/cs430-src/02_mvp_modules_sqlite3$ ls
app.py  entries.db  env  gbnodel  index.py  _pycache_  requirements.txt  sign.py  static  templates
(env) vboxuser@vishrut:~/cs430-src/02_mvp_modules_sqlite3$ cat entries.db
sqlite3
sqlite3> .tables
entries
sqlite3> .dump entries
entries|1|vishrut|Sharnavishrut@dpdx.edu2023-04-19python/flask MVP sqlite3 #1(env) vboxuser@vishrut:~/cs430-src/02_mvp_modules_sqlite3$
```

The screenshot below shows the results of the commands asked to be run.

