

DS561-HW5

Github Link:

<https://github.com/tigeryi1998/ds561-tigeryi/tree/main/hw5>

1. SQL Database

<https://console.cloud.google.com/sql/instances/instance-tigeryi/overview?project=feisty-gasket-398719>

Public IP address

34.138.218.160

INSTANCE_CONNECTION_NAME= \

feisty-gasket-398719:us-east1:instance-tigeryi

Add the following tables into the database in the following schemas:

table1

ip	time_of_day	filename
----	-------------	----------

table2

ip	gender	age	income	country	is_banned
----	--------	-----	--------	---------	-----------

table3

time_of_day	filename	error
-------------	----------	-------

2. Web Server VM

Instance id:
7486858492408310658

name:
instance-tigeryi

external ip:
34.138.95.195

Command Line to install python3, pip, default mysql server

```
sudo apt-get update
sudo apt-get install default-mysql-server
sudo apt-get install wget git python3-pip
```

Command Line to get the mysql server from tar file:

```
tar -xvf mysql-server_8.2.0-1debian11_amd64.deb-bundle.tar
sudo apt-get install libaio1
sudo dpkg-preconfigure mysql-community-server_*.deb
sudo dpkg -i mysql*.deb
sudo apt-get -f install
```

Command Line in VM to connect to mysql database:

```
mysql -h 34.138.218.160 -u root -p

export INSTANCE_CONNECTION_NAME=' feisty-gasket-398719:us-east1:instance-tigeryi '
export DB_USER='root'
export DB_NAME=' dbhw5 '
export DB_PASS=''
export DB_HOST=' 34.138.218.160 '
export PROJECT_ID=' feisty-gasket-398719 '
```

Virtual Environment

```
pip3 install virtualenv
python3 -m virtualenv env
source env/bin/activate
pip3 install -r requirements.txt
```

Run to start the web-server

```
python3 http-server-cloud.py
```

Or can install all packages and run web server with bash script

```
bash start.sh
```

3. Curl Commands

200

```
curl -X GET -G "http://34.138.95.195:8080/ds561-tigeryi-hw2/files/1.html" -i
```

404

```
curl -X GET -G "http://34.138.95.195:8080/ds561-tigeryi-hw2/files/20000.html" -i
```

500

```
curl -X POST -G "http://34.138.95.195:8080/ds561-tigeryi-hw2/files/1.html" -i
```

4. http client VM2

VM2 (http client)

name:
instance-1

external ip:
34.148.138.4

Run the command line to issue html requests, after put http-client.py into the VM2

```
python3 http-client.py --domain=34.138.95.195 --port=8080 --bucket=ds561-tigeryi-hw2 --webdir=files  
--num_requests=50000 --index=10000
```

5.