# End to End (E2E) Steps

1. AWS, computer EC2, Ubuntu 18.04, create instance i-0944d71e55dba83d3

2. Create User

sudo adduser client

Adding user `client' ...

Adding new group `client' (1001) ...

Adding new user `client' (1001) with group `client' ...

Creating home directory `/home/client' ...

Copying files from `/etc/skel' ...

Enter new UNIX password:

Retype new UNIX password:

passwd: password updated successfully

Changing the user information for client

Enter the new value, or press ENTER for the default

Full Name []:

Room Number []:

Work Phone []:

Home Phone []:

Other []:

Is the information correct? [Y/n]

Remove .pem requirement

sudo vi /etc/ssh/sshd\_config

Press i to start insert mode

Use arrow keys to locate

Press ESC key after editing

Input :wq to save and exit

Restart ssh service

sudo service ssh restart

3. Install MySQL

sudo apt-get update

sudo apt-get upgrade

sudo apt-get install mysql-server mysql-client

sudo mysql

to check

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 2

Server version: 5.7.36-0ubuntu0.18.04.1 (Ubuntu)

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owners.

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

mysql>

Input “quit”

**ubuntu@ip-172-31-28-104**:**~**$ sudo mysql -u root -p mysql

Enter password:

Reading table information for completion of table and column names

You can turn off this feature to get a quicker startup with -A

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 3

Server version: 5.7.36-0ubuntu0.18.04.1 (Ubuntu)

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owners.

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

mysql>

4. Create MySQL User

mysql> create user 'DBA'@'%' identified by 'ahi2021';

Query OK, 0 rows affected (0.00 sec)

mysql> grant all privileges on \*.\* to 'DBA'@'%'with grant option;

Query OK, 0 rows affected (0.00 sec)

mysql> show grants for DBA;

+------------------------------------------------------------+

| Grants for DBA@% |

+------------------------------------------------------------+

| GRANT ALL PRIVILEGES ON \*.\* TO 'DBA'@'%' WITH GRANT OPTION |

+------------------------------------------------------------+

1 row in set (0.00 sec)

mysql> FLUSH PRIVILEGES;

Query OK, 0 rows affected (0.01 sec)

5. Create a new database

mysql> CREATE DATABASE e2e;

Query OK, 1 rows affected (0.01 sec)

6. Python Code to connect SQL Instance

MYSQL\_HOSTNAME = '13.59.91.28'

MYSQL\_USER = 'DBA'

MYSQL\_PASSWORD = 'ahi2021'

MYSQL\_DATABASE = 'e2e'

connection\_string = f'mysql+pymysql://{MYSQL\_USER}:{MYSQL\_PASSWORD}@{MYSQL\_HOSTNAME}:3306/{MYSQL\_DATABASE}'

engine = create\_engine(connection\_string)

TABLENAME = 'h1n1'

h1n1.to\_sql(TABLENAME, con=engine, if\_exists='append')

print (engine.table\_names())

7. Create dump file

sudo mysqldump --databases e2e>backup.sql

8. Use SCP

scp client@13.59.91.28:/home/ubuntu/backup.sql /Users/yiyiwang/Desktop/local\_backup.sql

9. Trigger

On separate file

Extra credit:

I-0f17cb5bb23f6ab79(slave instance)

Public IP 3.145.127.107