

Yogeshwaran s

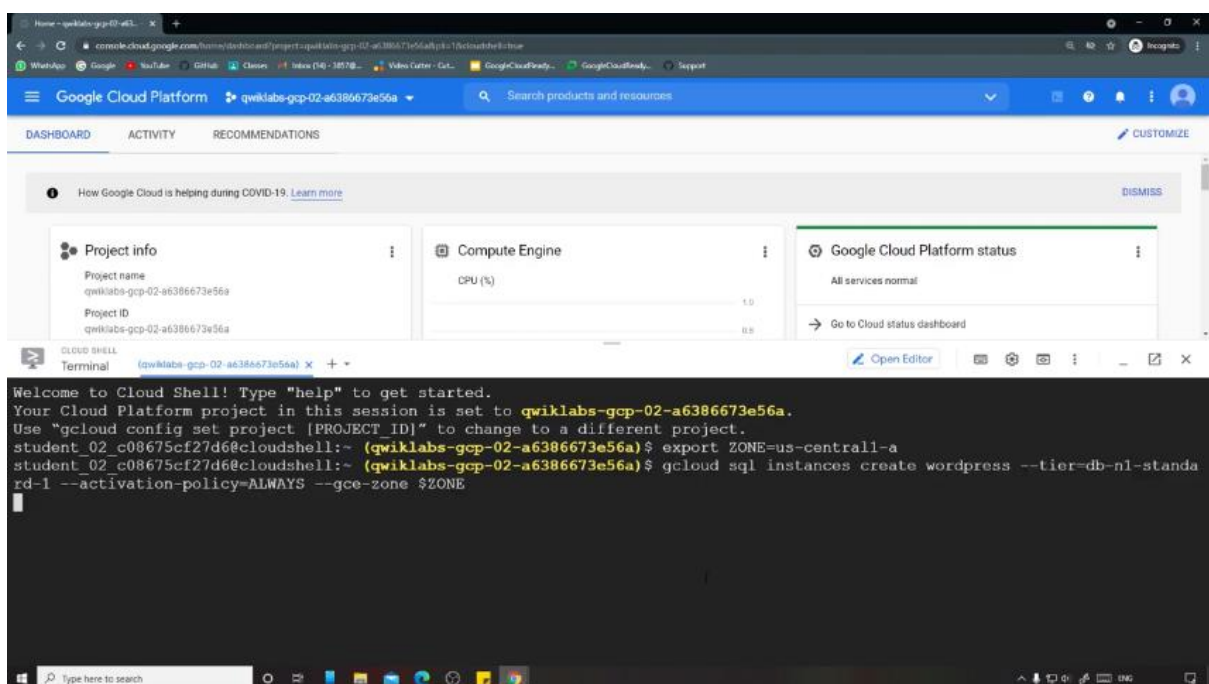
Module 12: GCP Architect Exam Case Study Understanding

Step 1 :

I am here a bit of confusion of what I am wanted to do here, so I take a conclusion to do a assignment to migrate the MySQL database to google cloud sql challenge lab

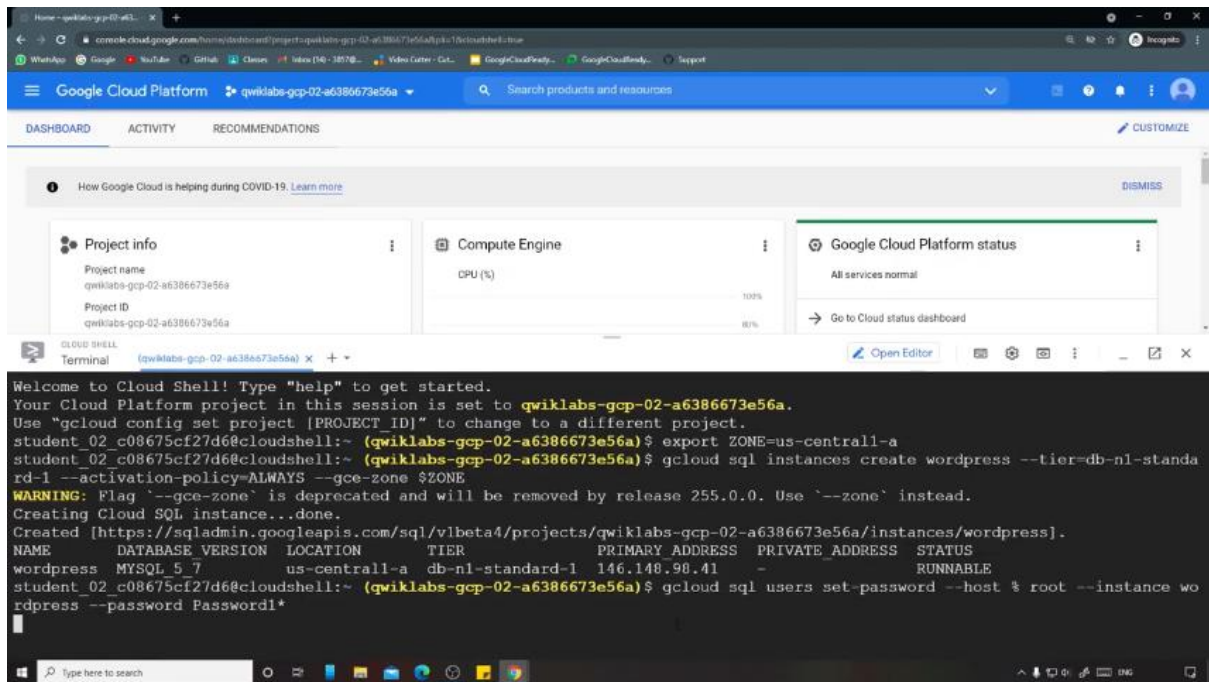
Step 1

Check the cloud sql instance of wordpress



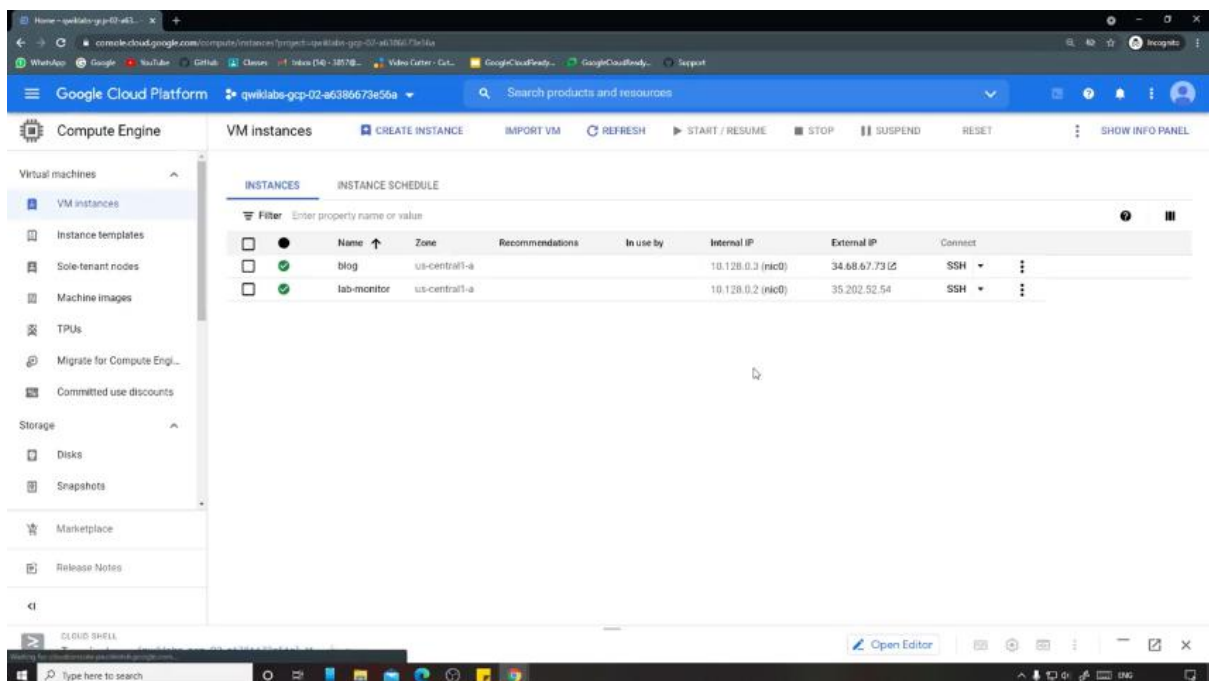
Step 2

Set sql user and password and connect to WordPress instance



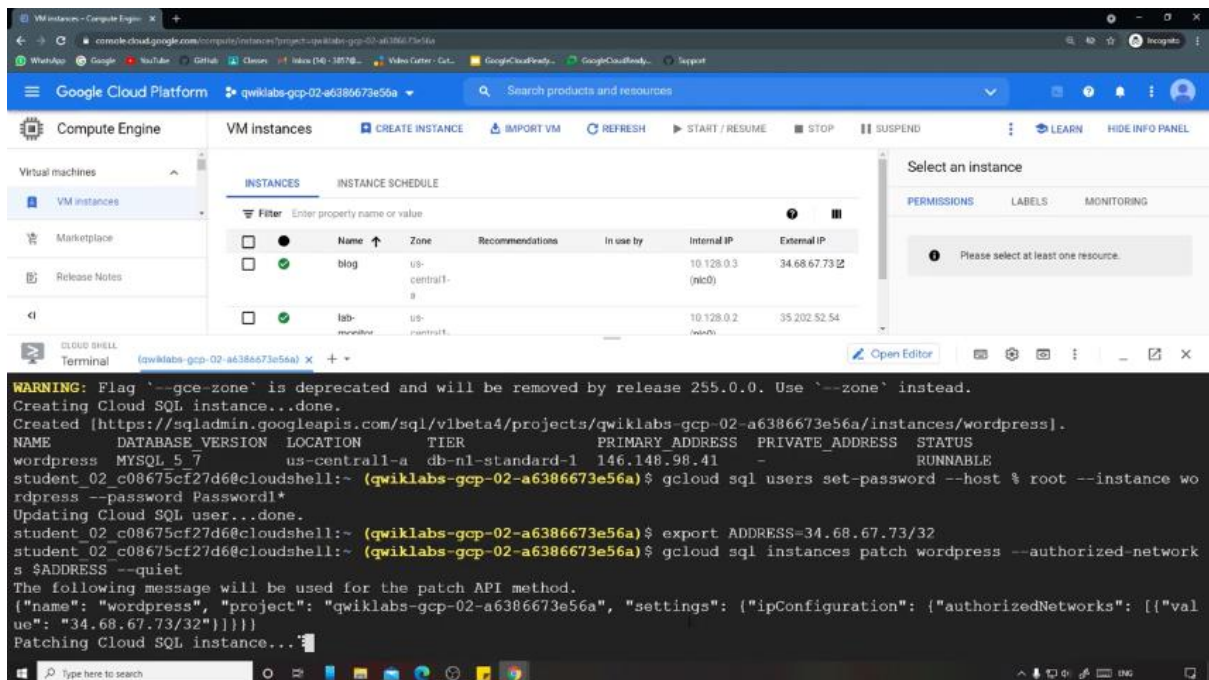
Step 3:

Check the vm's



Step 4

Connect the sql with created vm

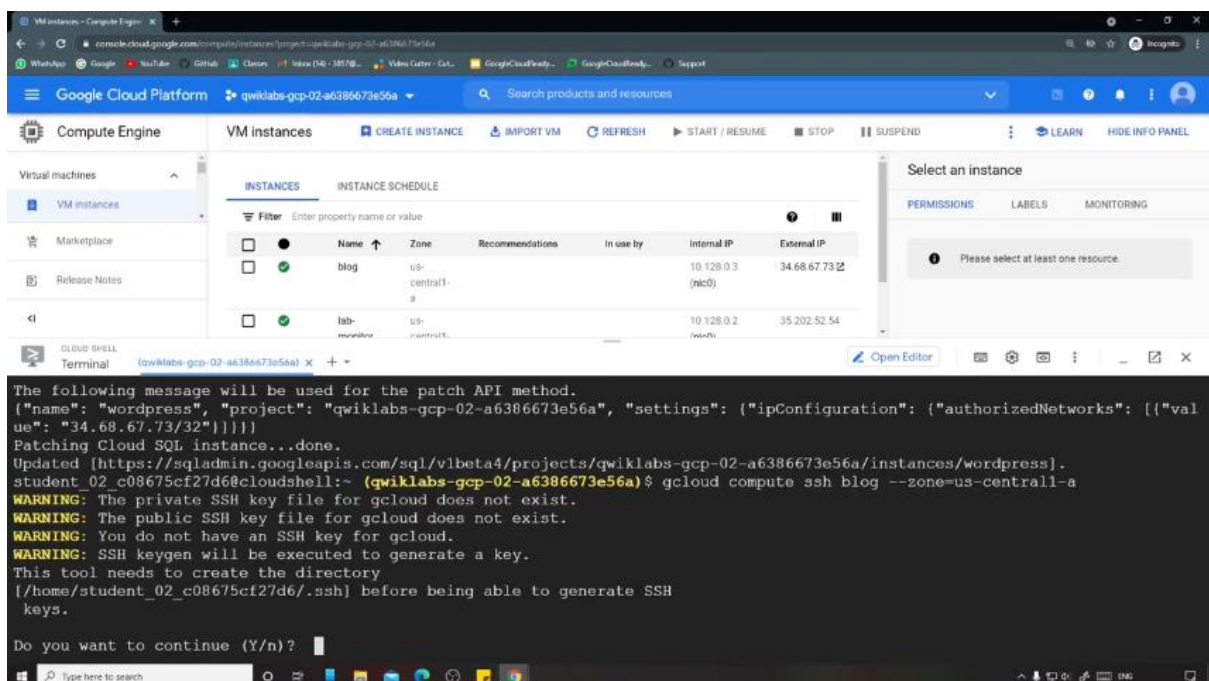


The screenshot shows the Google Cloud Platform interface for VM instances. The 'INSTANCES' tab is active, displaying a table with two instances: 'blog' and 'lab-'. The 'blog' instance is in the 'us-central1-a' zone with an internal IP of 10.128.0.3 and an external IP of 34.68.67.73. The 'lab-' instance is in the 'us-central1-f' zone with an internal IP of 10.128.0.2 and an external IP of 35.202.52.54. A terminal window is open at the bottom, showing the following commands and output:

```
WARNING: Flag '--gce-zone' is deprecated and will be removed by release 255.0.0. Use '--zone' instead.
Creating Cloud SQL instance...done.
Created [https://sqladmin.googleapis.com/sql/v1beta4/projects/qwiklabs-gcp-02-a6386673e56a/instances/wordpress].
NAME      DATABASE_VERSION LOCATION    TIER      PRIMARY_ADDRESS PRIVATE_ADDRESS STATUS
wordpress MYSQL_5_7      us-central1-a db-n1-standard-1 146.148.98.41 -      RUNNABLE
student_02_c08675cf27d6@cloudshell:~ (qwiklabs-gcp-02-a6386673e56a)$ gcloud sql users set-password --host % root --instance wo
rdpress --password Password1*
Updating Cloud SQL user...done.
student_02_c08675cf27d6@cloudshell:~ (qwiklabs-gcp-02-a6386673e56a)$ export ADDRESS=34.68.67.73/32
student_02_c08675cf27d6@cloudshell:~ (qwiklabs-gcp-02-a6386673e56a)$ gcloud sql instances patch wordpress --authorized-network
s $ADDRESS --quiet
The following message will be used for the patch API method.
{"name": "wordpress", "project": "qwiklabs-gcp-02-a6386673e56a", "settings": {"ipConfiguration": {"authorizedNetworks": [{"val
ue": "34.68.67.73/32"}]}}}
Patching Cloud SQL instance...
```

Step 5

Create ssh for vm



The screenshot shows the Google Cloud Platform interface for VM instances. The 'INSTANCES' tab is active, displaying a table with two instances: 'blog' and 'lab-'. The 'blog' instance is in the 'us-central1-a' zone with an internal IP of 10.128.0.3 and an external IP of 34.68.67.73. The 'lab-' instance is in the 'us-central1-f' zone with an internal IP of 10.128.0.2 and an external IP of 35.202.52.54. A terminal window is open at the bottom, showing the following commands and output:

```
The following message will be used for the patch API method.
{"name": "wordpress", "project": "qwiklabs-gcp-02-a6386673e56a", "settings": {"ipConfiguration": {"authorizedNetworks": [{"val
ue": "34.68.67.73/32"}]}}}
Patching Cloud SQL instance...done.
Updated [https://sqladmin.googleapis.com/sql/v1beta4/projects/qwiklabs-gcp-02-a6386673e56a/instances/wordpress].
student_02_c08675cf27d6@cloudshell:~ (qwiklabs-gcp-02-a6386673e56a)$ gcloud compute ssh blog --zone=us-central1-a
WARNING: The private SSH key file for gcloud does not exist.
WARNING: The public SSH key file for gcloud does not exist.
WARNING: You do not have an SSH key for gcloud.
WARNING: SSH keygen will be executed to generate a key.
This tool needs to create the directory
[/home/student_02_c08675cf27d6/.ssh] before being able to generate SSH
keys.
Do you want to continue (Y/n)?
```

Step 6

Connect sql inside the vm

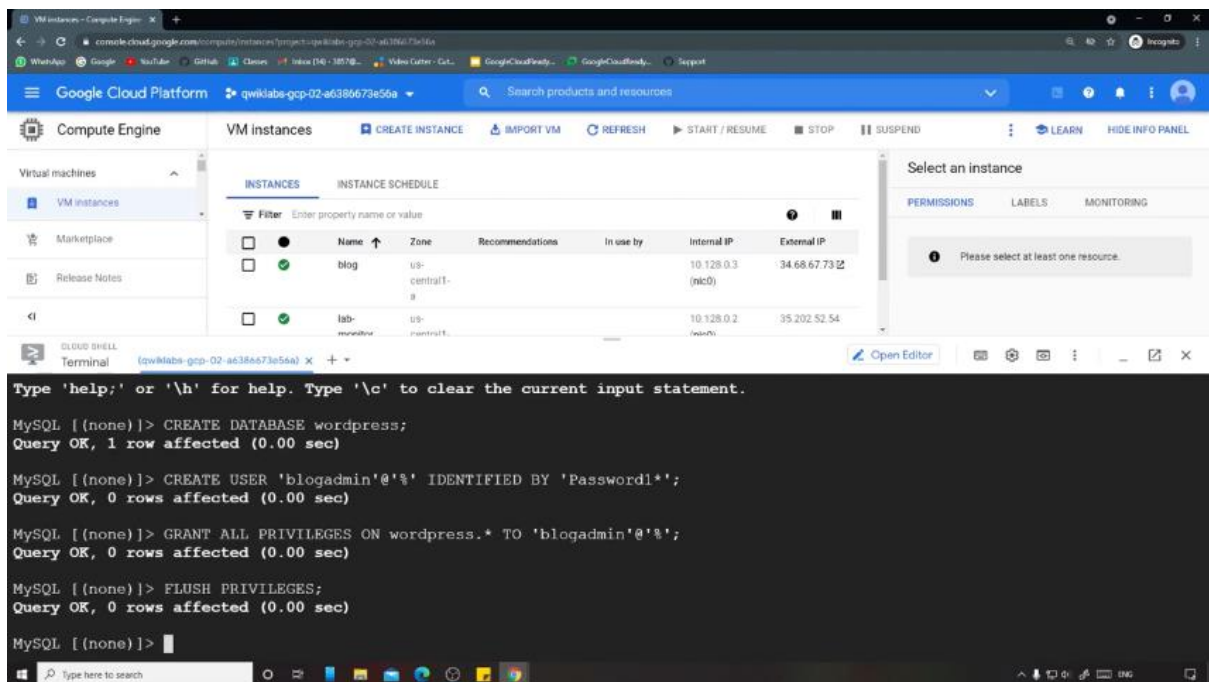
```
Enter passphrase for key '/home/student-02-c08675cf27d6/.ssh/google_compute_engine':
Linux blog 4.9.0-15-amd64 #1 SMP Debian 4.9.258-1 (2021-03-08) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Creating directory '/home/student-02-c08675cf27d6'.
student-02-c08675cf27d6@blog:~$ MYSQLIP=$(gcloud sql instances describe wordpress --format="value(ipAddresses.ipAddress)")
student-02-c08675cf27d6@blog:~$ mysql --host=146.148.98.41 \
> --user=root --password
```

Step 7

Check the sql connection by giving query



The screenshot shows the Google Cloud Platform console. The 'VM instances' tab is selected, displaying a table of instances. Below the table, a terminal window is open, showing the execution of MySQL commands to create a database, user, and grant privileges.

Filter	Name	Zone	Recommendations	In use by	Internal IP	External IP
	blog	us-central1-f			10.128.0.3 (nic0)	34.68.67.73
	lab-mysql	us-central1-f			10.128.0.2 (nic0)	35.202.52.54

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

MySQL [(none)]> CREATE DATABASE wordpress;
Query OK, 1 row affected (0.00 sec)

MySQL [(none)]> CREATE USER 'blogadmin'@'%' IDENTIFIED BY 'Password1*';
Query OK, 0 rows affected (0.00 sec)

MySQL [(none)]> GRANT ALL PRIVILEGES ON wordpress.* TO 'blogadmin'@'%';
Query OK, 0 rows affected (0.00 sec)

MySQL [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)

MySQL [(none)]>
```

Step 8

Take back up the sql

```
MySQL [(none)]> CREATE USER 'blogadmin'@'%' IDENTIFIED BY 'Password1*';
Query OK, 0 rows affected (0.00 sec)

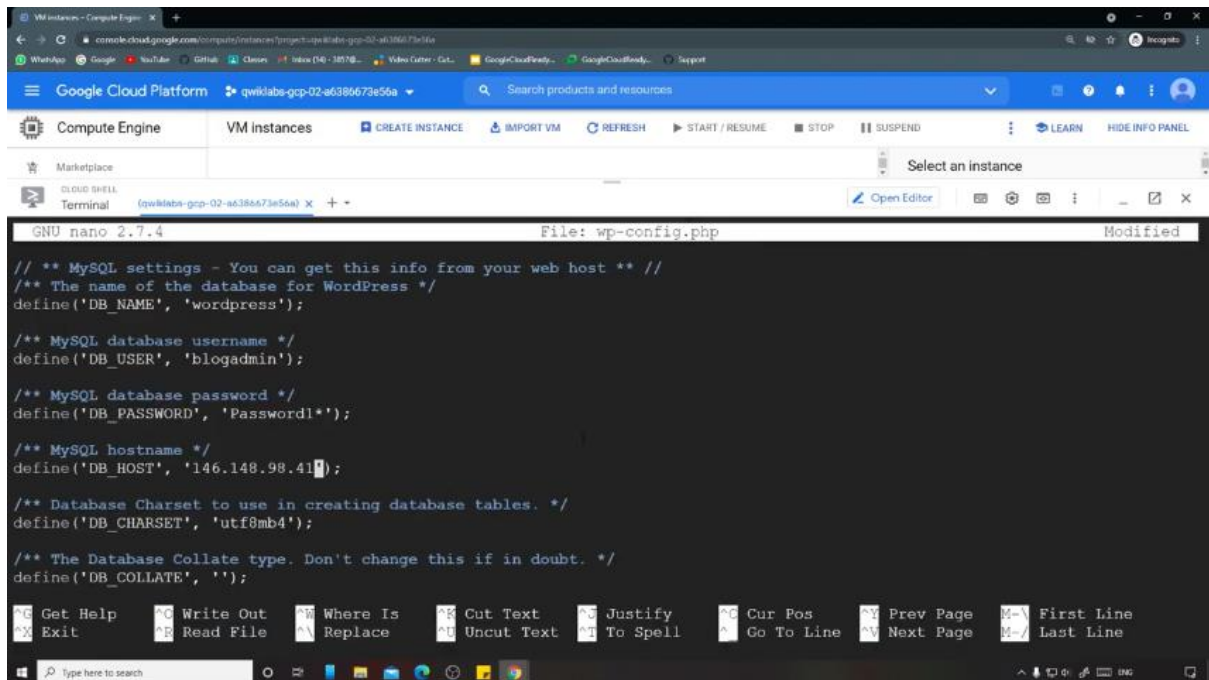
MySQL [(none)]> GRANT ALL PRIVILEGES ON wordpress.* TO 'blogadmin'@'%';
Query OK, 0 rows affected (0.00 sec)

MySQL [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)

MySQL [(none)]> exit
Bye
student-02-c08675cf27d6@blog:~$ sudo mysqldump -u root -pPassword1* wordpress > wordpress_backup.sql
student-02-c08675cf27d6@blog:~$
```

Step 9

Restart the apache2 and change the config file, with removing local host and replace with primary ip address of vm



The screenshot shows the Google Cloud Platform console with the 'VM Instances' tab selected. A terminal window is open for the instance 'qwklabs-gcp-02-a6386673e56a'. The terminal is running GNU nano 2.7.4 and editing the file 'wp-config.php'. The code in the terminal is as follows:

```
GNU nano 2.7.4 File: wp-config.php Modified

// ** MySQL settings - You can get this info from your web host ** //
/** The name of the database for WordPress */
define('DB_NAME', 'wordpress');

/** MySQL database username */
define('DB_USER', 'blogadmin');

/** MySQL database password */
define('DB_PASSWORD', 'Password!');

/** MySQL hostname */
define('DB_HOST', '146.148.98.41');

/** Database Charset to use in creating database tables. */
define('DB_CHARSET', 'utf8mb4');

/** The Database Collate type. Don't change this if in doubt. */
define('DB_COLLATE', '');

Get Help Write Out Where Is Cut Text Justify Cur Pos Prev Page First Line
Exit Read File Replace Uncut Text To Spell Go To Line Next Page Last Line
```