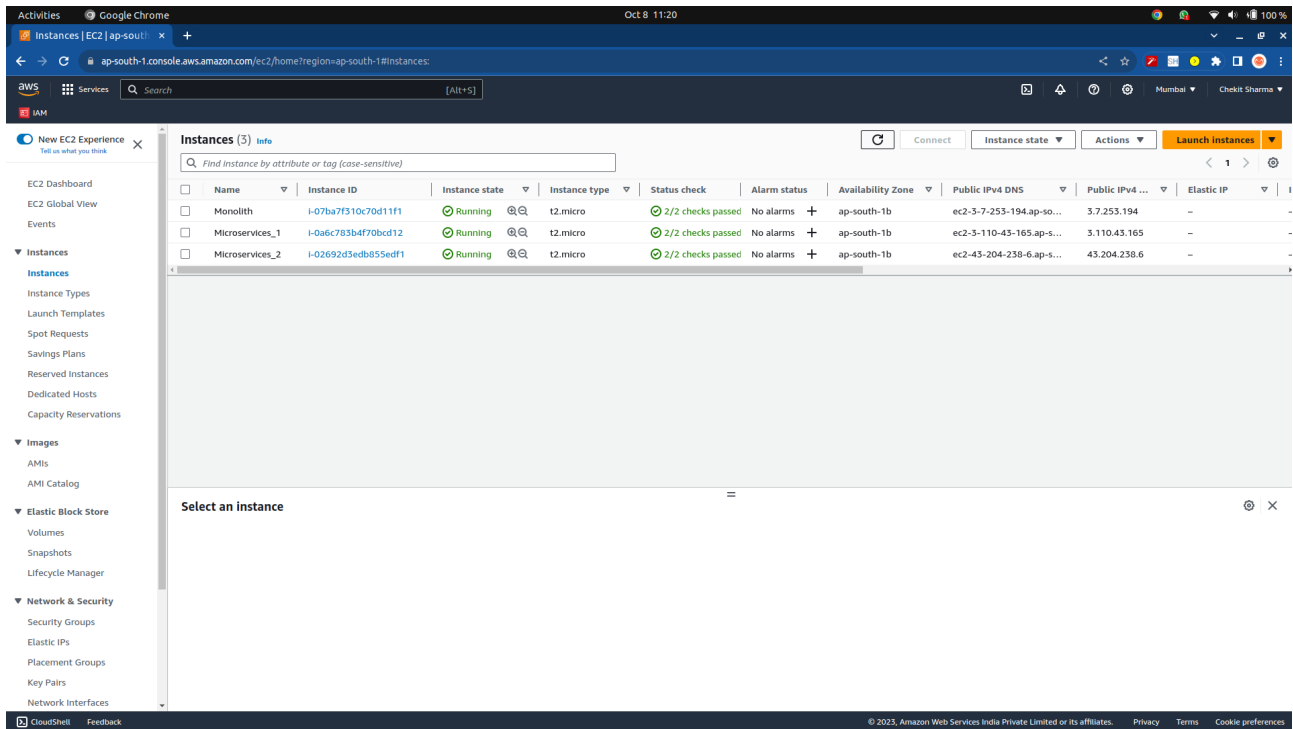


# MICROSERVICES

steps -

## 1. Create 2 EC2 Instances



2. Perform Ubuntu 22.04 update on both

3. Install Apache & PHP in (Instance 1) for Wordpress

```
Activities Google Chrome Oct 8 11:25
Connect to Instance | EC2 Instance Connect | EC2 Instance Connect | +
ap-south-1.console.aws.amazon.com/ec2-instance-connect/sub?region=ap-south-1&connType=standard&instanceId=i-0a6c783b4f70bcd12&osUser=ubuntu&sshPort=22#

AWS IAM Search [Alt+S]

Running linux images... [=====] Scan
Running linux images... [=====] Scann
Running linux images... [=====]

Restarting services...
Service restarts being deferred:
systemctl restart chrony.service
systemctl restart cron.service
/etc/needrestart/restart.d/dbus.service
systemctl restart getty@tty1.service
systemctl restart multipathd.service
systemctl restart networkd-dispatcher.service
systemctl restart packagekit.service
systemctl restart polkit.service
systemctl restart serial-getty@ttyS0.service
/etc/needrestart/restart.d/systemd-manager
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-13-249:/home/ubuntu# sudo systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable apache2
root@ip-172-31-13-249:/home/ubuntu# systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Sun 2023-10-08 05:55:25 UTC; 17s ago
     Docs: https://httpd.apache.org/docs/2.4/
    Main PID: 24332 (apache2)
      Tasks: 55 (limit: 1141)
     Memory: 5.0M
        CPU: 29ms
    CGroup: /system.slice/apache2.service
            └─24332 /usr/sbin/apache2 -k start
              └─24334 /usr/sbin/apache2 -k start
                └─24335 /usr/sbin/apache2 -k start

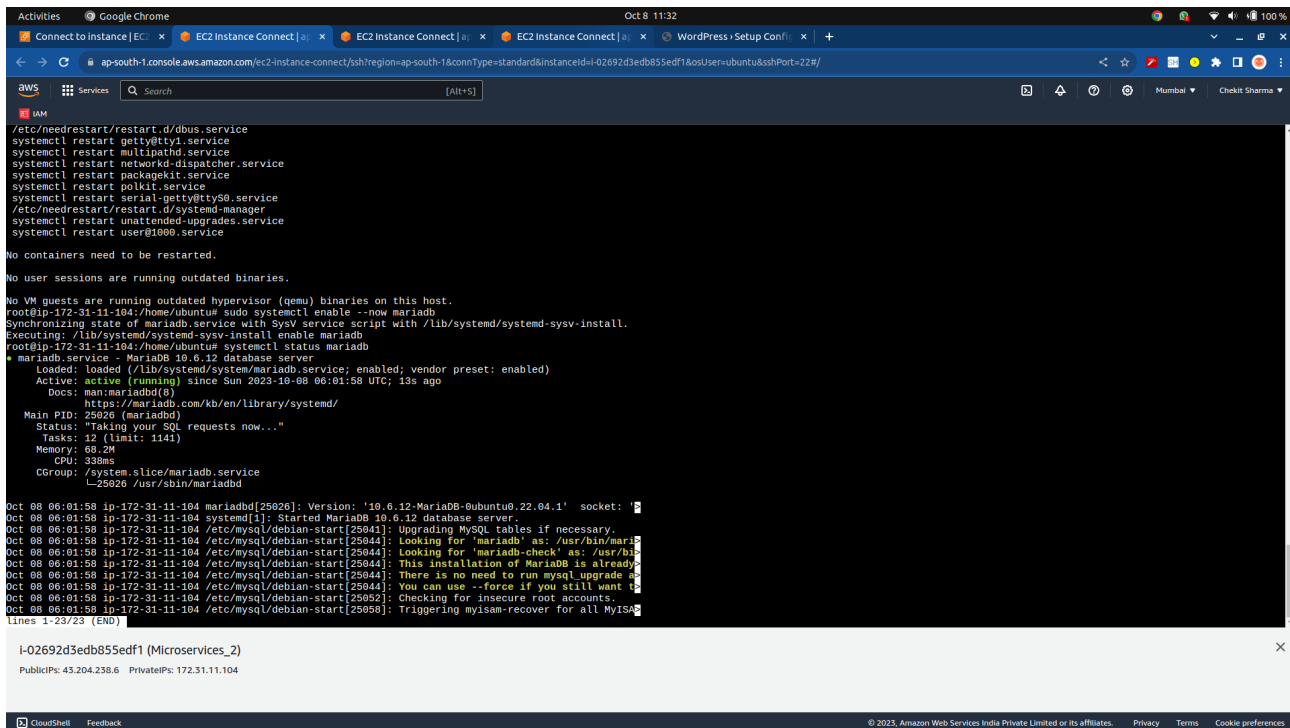
Oct 08 05:55:25 ip-172-31-13-249 systemd[1]: Starting The Apache HTTP Server...
Oct 08 05:55:25 ip-172-31-13-249 systemd[1]: Started The Apache HTTP Server.
root@ip-172-31-13-249:/home/ubuntu#

i-0a6c783b4f70bcd12 (Microservices_1)
PublicIPs: 3.110.43.165 PrivateIPs: 172.31.13.249

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```



## 4. Install MariaDB or MySQL in (Instance 2)



The screenshot shows a terminal window within the AWS Management Console, connected to an EC2 instance. The terminal displays the following commands and output:

```
/etc/needrestart/restart.d/dbus.service
systemctl restart getty@tty1.service
systemctl restart multipathd.service
systemctl restart networkd-dispatcher.service
systemctl restart packagekit.service
systemctl restart polkit.service
systemctl restart serial-getty@ttyS0.service
/etc/needrestart/restart.d/systemd-manager
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-11-104:/home/ubuntu# sudo systemctl enable --now mariadb
Synchronizing state of mariadb.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable mariadb
root@ip-172-31-11-104:/home/ubuntu# systemctl status mariadb
* mariadb.service - MariaDB 10.6.12 database server
   Loaded: loaded (/lib/systemd/system/mariadb.service; enabled; vendor preset: enabled)
   Active: active (running) since Sun 2023-10-08 06:01:58 UTC; 13s ago
     Docs: man:mariadb(8)
           https://mariadb.com/kb/en/library/systemd/
   Main PID: 25026 (mariadb)
   Status: "Taking your SQL requests now..."
     Tasks: 12 (limit: 1141)
    Memory: 68.2M
       CPU: 338ms
   CGroup: /system.slice/mariadb.service
           └─25026 /usr/sbin/mariadbd

Oct 08 06:01:58 ip-172-31-11-104 mariadbd[25026]: Version: '10.6.12-MariaDB-0ubuntu0.22.04.1' socket: '
Oct 08 06:01:58 ip-172-31-11-104 systemd[1]: Started MariaDB 10.6.12 database server.
Oct 08 06:01:58 ip-172-31-11-104 /etc/mysql/debian-start[25041]: Upgrading MySQL tables if necessary.
Oct 08 06:01:58 ip-172-31-11-104 /etc/mysql/debian-start[25044]: Looking for 'mariadb' as: /usr/bin/mariadb
Oct 08 06:01:58 ip-172-31-11-104 /etc/mysql/debian-start[25044]: Looking for 'mariadb-check' as: /usr/bin/mariadb-check
Oct 08 06:01:58 ip-172-31-11-104 /etc/mysql/debian-start[25044]: This installation of MariaDB is already
Oct 08 06:01:58 ip-172-31-11-104 /etc/mysql/debian-start[25044]: There is no need to run mysql_upgrade
Oct 08 06:01:58 ip-172-31-11-104 /etc/mysql/debian-start[25044]: You can use --force if you still want to
Oct 08 06:01:58 ip-172-31-11-104 /etc/mysql/debian-start[25052]: Checking for insecure root accounts.
Oct 08 06:01:58 ip-172-31-11-104 /etc/mysql/debian-start[25058]: Triggering myisam-recover for all MyISAM
lines 1-23/23 (END)
```

Below the terminal output, the instance details are shown:

i-02692d3edb855edf1 (Microservices\_2)  
PublicIPs: 43.204.238.6 PrivateIPs: 172.31.11.104

The footer of the console shows the copyright notice: © 2023, Amazon Web Services India Private Limited or its affiliates. Privacy Terms Cookie preferences

## 5. Create Database for WordPress (Instance 2)

```
Remove test database and access to it? [Y/n] y
- Dropping test database...
... Success!
- Removing privileges on test database...
... Success!

Reloading the privilege tables will ensure that all changes made so far
will take effect immediately.

Reload privilege tables now? [Y/n] y
... Success!

Cleaning up...

All done! If you've completed all of the above steps, your MariaDB
installation should now be secure.

Thanks for using MariaDB!
root@ip-172-31-3-210:/home/ubuntu# sudo mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 41
Server version: 10.6.12-MariaDB-0ubuntu0.22.04.1 Ubuntu 22.04

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

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

MariaDB [(none)]> CREATE USER 'new_user'@'localhost' IDENTIFIED BY 'your_password';
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]> CREATE DATABASE new_db;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON new_db.* TO 'new_user'@'localhost';
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]> Exit;
Bye
root@ip-172-31-3-210:/home/ubuntu#
```

6. Install WordPress on Ubuntu 22.04 (Instance 1)

7. Configure Apache on Ubuntu 22.04 (Instance 1)

```
<VirtualHost *:80>
ServerAdmin admin@example.com

DocumentRoot /var/www/html/wordpress
ServerName example.com
ServerAlias www.example.com

<Directory /var/www/html/wordpress/>

Options FollowSymLinks
AllowOverride All
Require all granted

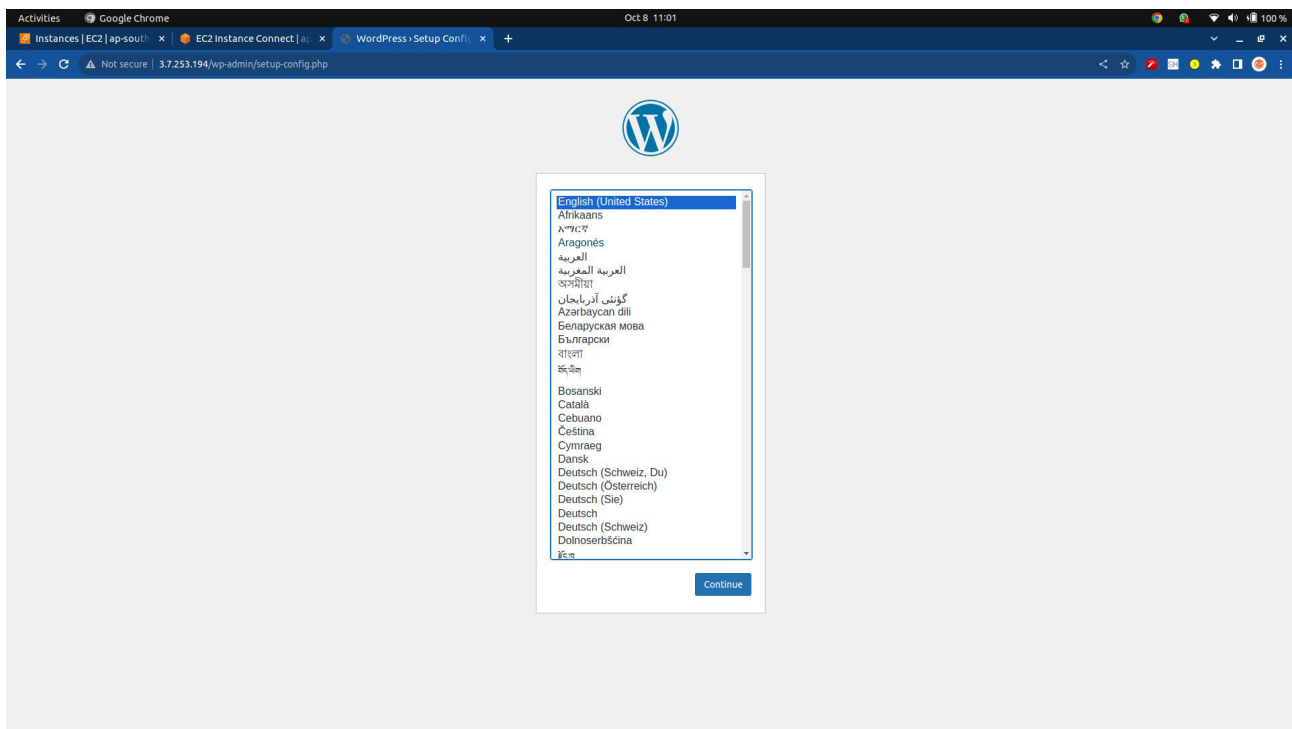
</Directory>

ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined

</VirtualHost>
```

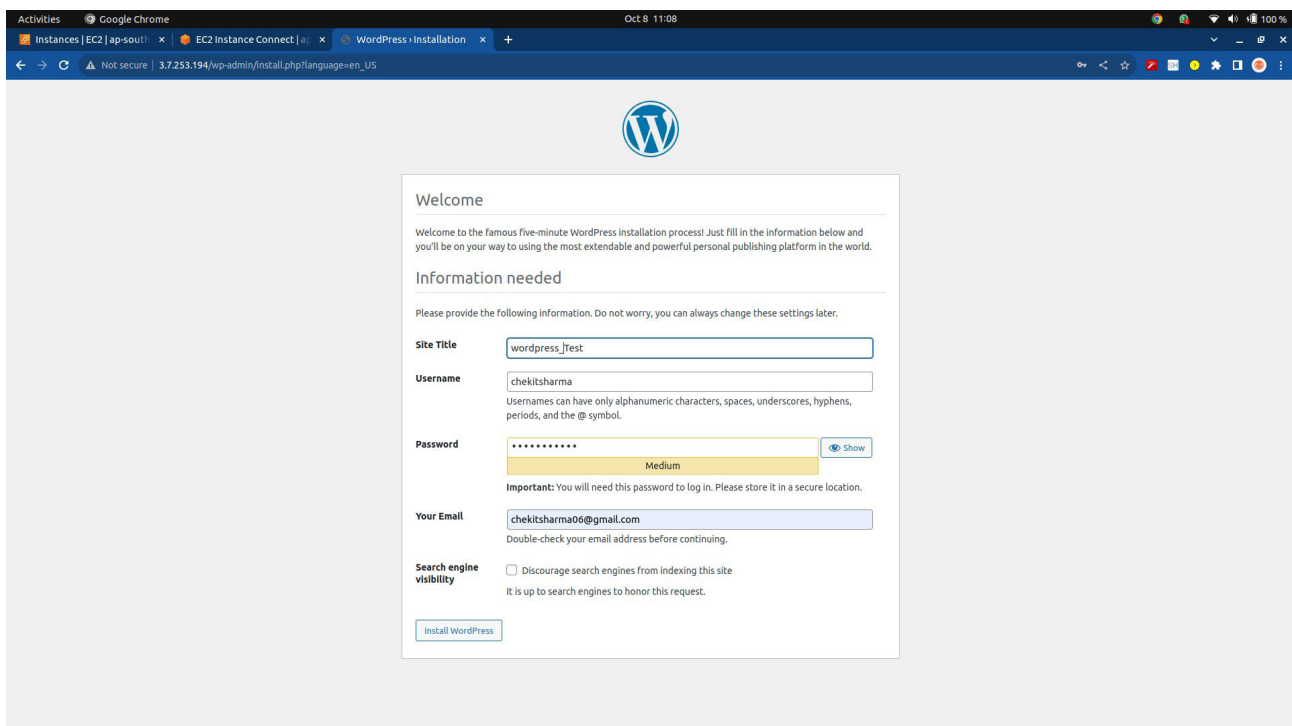
^G Help	^O Write Out	^W Where Is	^K Cut	^T Execute	^C Location	[ New
^X ExitWord	M^R Read File	^_ Replaces	^^U Paste	^J Justify	^/ Go To Line	M-^
Redo						M-E
-6 Copy						M
						^
F Forward						^
Next Word						

## 8. WordPress CMS web interface setup (Instance 1 Ip)

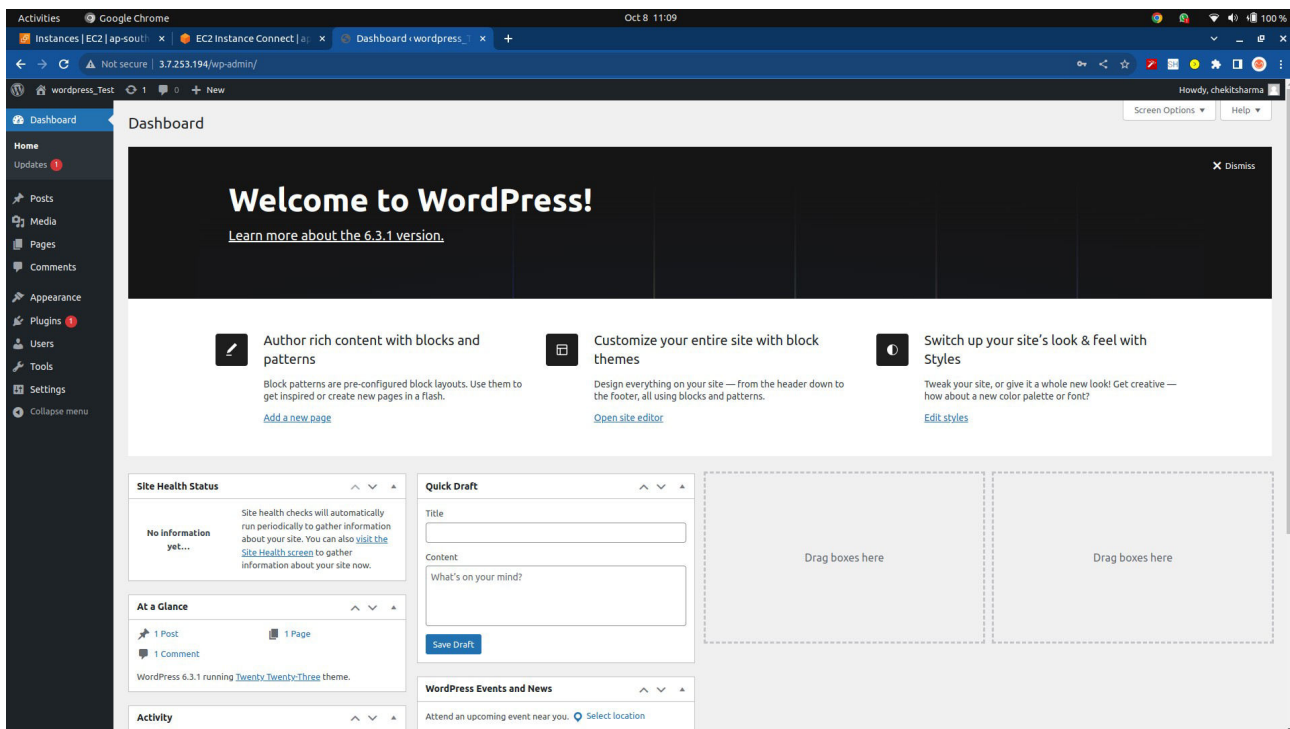


## 9. Add Database information

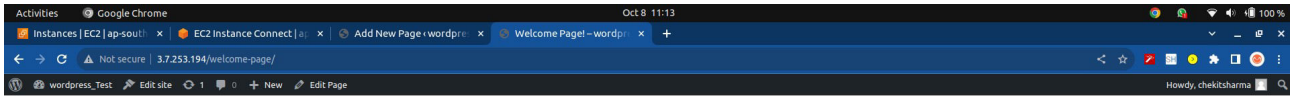
## 10. Create Admin user and password



## 11. Login to the backend (Instance 1 Ip)



## 12. Create Welcome Page (URL Provided by Wordpress)



wordpress\_Test

Sample Page Welcome Page!

# Welcome Page!

Hello! Chekit Sharma here, This is a Test Page to see if i have successfully deployed wordpress and created a welcome page.

wordpress\_Test

Proudly powered by [WordPress](#)