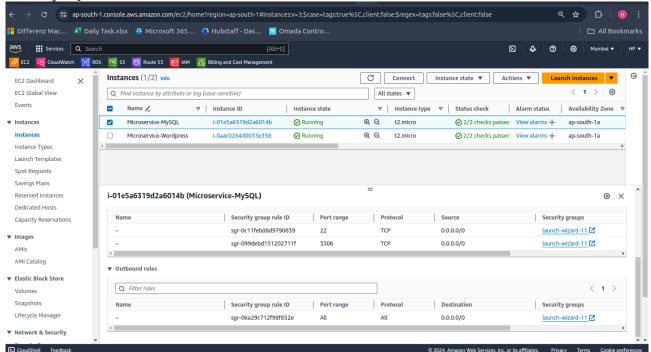
## For Microservices

Launch 2 ubuntu instance (t2.micro free tier) individually for wordpress & MySQL.

On MySQL instance Allow 3306 port via security group in inbound rule. Then install & configure it with MySQL installation.



Connect instance via terminal like below screenshot, through command.

ssh -i "Techplement.pem" <u>ubuntu@(instance public ip/DNS)</u> <u>like below,</u>

ssh -i "Techplement.pem" <u>ubuntu@ec2-13-201-60-19.ap-south-1.compute.amazonaws.com</u>

```
ubuntu@ip-172-31-33-203: ~
 ſŦ
differenz117@differenz117:~/Downloads$ ssh -i "Techplement.pem" ubuntu@ec2-13-201-60-19.ap-south-1.
compute.amazonaws.com
Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.8.0-1009-aws x86_64)
 * Documentation: https://help.ubuntu.com
                    https://landscape.canonical.com
https://ubuntu.com/pro
 * Management:
 * Support:
 System information as of Thu Aug 8 10:09:20 UTC 2024
  System load:
                 0.0
                                     Processes:
                                                               113
  Usage of /:
                 33.5% of 6.71GB
                                     Users logged in:
  Memory usage: 70%
                                     IPv4 address for enX0: 172.31.33.203
  Swap usage:
  => There is 1 zombie process.
Expanded Security Maintenance for Applications is not enabled.
53 updates can be applied immediately.
32 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable
Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status
Last login: Thu Aug 8 08:4<u>4</u>:57 2024 from 115.246.18.252
ubuntu@ip-172-31-33-203:~$
```

Then update ubuntu & install mysql server in it via below command.

```
sudo apt update
sudo apt install mysql-server –y
```

then check it's service status & then configure MySQL via below command,

Then again login with user root & password

```
mysql –u root –p
```

After Database login create DB with all needed privileges

```
CREATE DATABASE wordpress;
CREATE USER 'wordpress'@' % ' IDENTIFIED BY 'wordpress';
GRANT ALL PRIVILEGES ON wordpress.* TO 'wordpress'@' % ';
FLUSH PRIVILEGES;
EXIT;
```

Then Edit the MySQL configuration file (mysqld.cnf)to allow remote access

sudo nano /etc/mysql/mysql.conf.d/mysqld.cnf

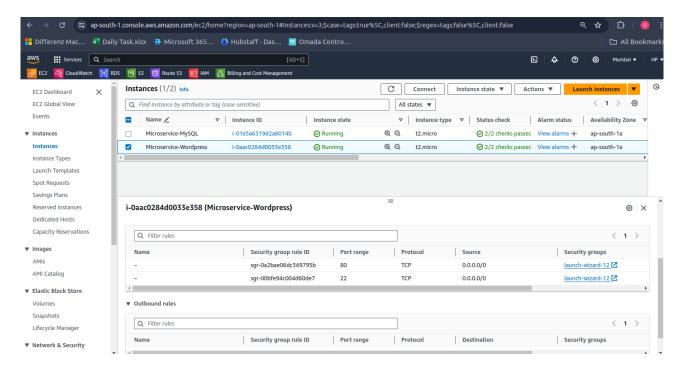
```
ubuntu@ip-172-31-33-203: ~
                                                                                Q
 GNU nano 7.2
                                    /etc/mysql/mysql.conf.d/mysqld.cnf
user
               = mysql
               = /var/run/mysqld/mysqld.pid
# pid-file
  localhost which is more compatible and is not less secure
bind-address
                        = 0.0.0.0
mysqlx-bind-address
                        = 127.0.0.1
key_buffer_size
                        = 16M
# max_allowed_packet
myisam-recover-options = BACKUP
                ^O Write Out
                                ^W Where Is
                                                 ^K Cut
                                                                 ^T Execute
                                                                                  ^C Location
```

Change bind-address with localhost to 0.0.0.0 bind-address = 0.0.0.0

Then restart MySQL service & check it's status. sudo systemctl restart mysql

\_\_\_\_\_\_

Then Launch wordpress instance & allow port no 80 via security group in inbound rule.



Connect instance via terminal with below command, ssh -i "Techplement.pem" <a href="mailto:ubuntu@(instance public ip/DNS">ubuntu@(instance public ip/DNS)</a> like below,

ssh -i "Techplement.pem" ubuntu@ec2-13-201-88-133.ap-south-1.compute.amazonaws.com

Then install & configure Apache2,php 8.2 & wordpress

sudo apt update sudo apt install apache2 -y

For PHP 8.3 installation we need to follow it's required depandancy via below command

apt-get install ca-certificates apt-transport-https software-properties-common sudo add-apt-repository ppa:ondrej/php

& then install php8.3 with below command & check php version sudo apt-get install php8.3 php -v

After installation of PHP & Apache download & install wordpress

```
wget -c http://wordpress.org/latest.tar.gz
tar -xzvf latest.tar.gz
sudo cp wordpress/ /var/www/html/wordpress
sudo chown -R www-data:www-data /var/www/html/wordpress
sudo chmod -R 755 /var/www/html/wordpress
```

Then configure WordPress to connect to the MySQL database by updating the wp-config.php file: 1st from wordpress directory copy wp-config-sample.php & rename it with wp-config.php

```
cd /var/www/html/wordpress
sudo cp wp-config-sample.php wp-config.php
```

& then edit it with nano editor.

```
sudo nano /var/www/html/wp-config.php
& do change in below line,
    define('DB_NAME', 'wordpress');
    define('DB_USER', 'wordpress');
    define('DB_PASSWORD', 'wordpress');
    define('DB_HOST', '172.31.1.253');

It's Private ip of MySQL instance.
```

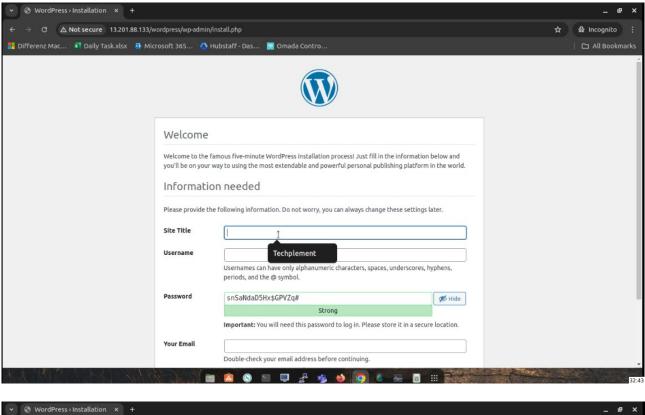
save it & restart Apcahe 2 service once systemctl restart apache2

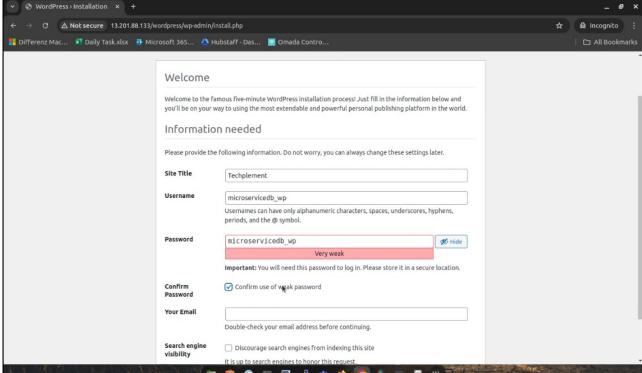
That's it.now access wordpress instance with public ip in host system browser.

for apache webpage http://13.235.69.76/

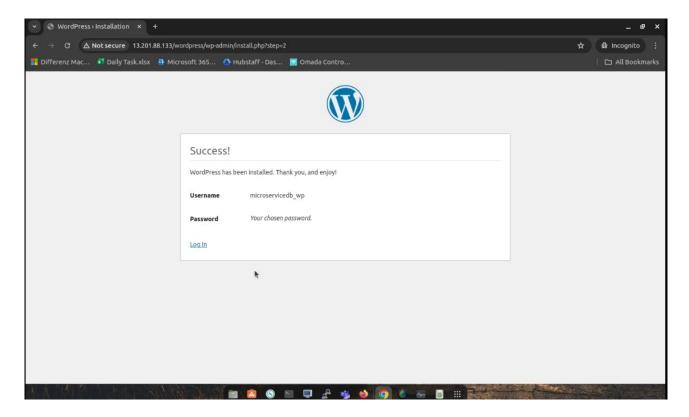
for wordpress webpage http://13.235.69.76/wordpress

After that you can configure wordpress.



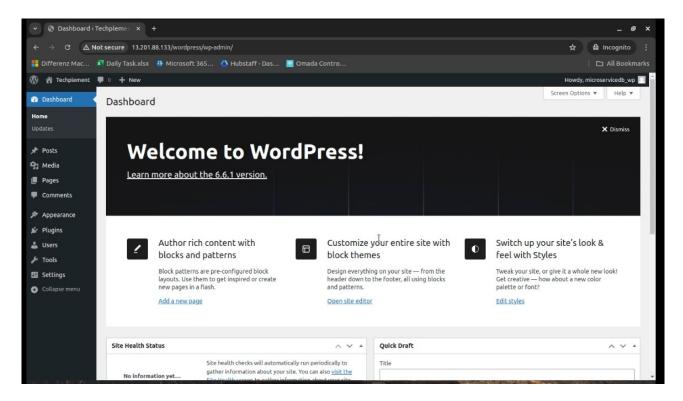


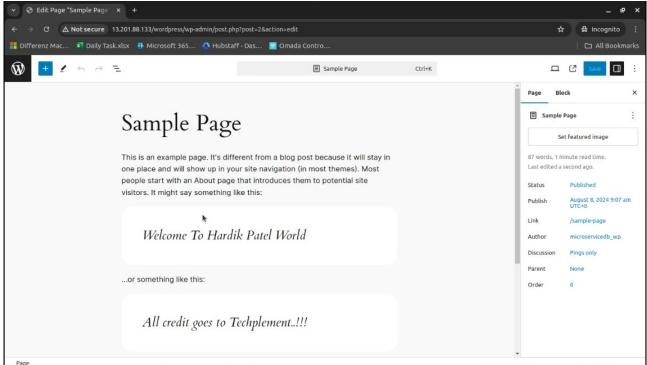
Here please enter database details which is needed.



Now login with username & password.





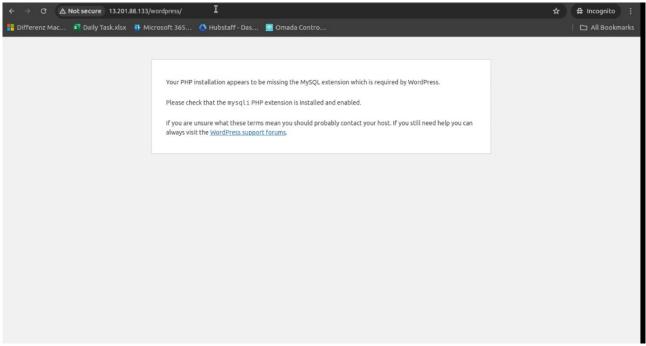


You can set pages as per your requirement from pages. Like below page.

## That's it:-)

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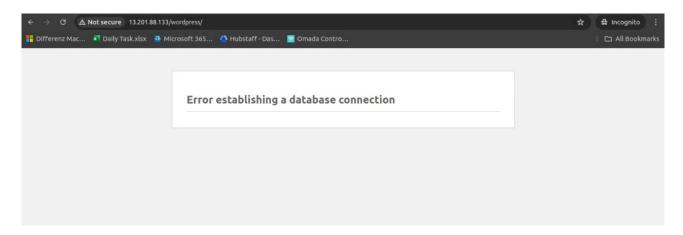
Here I faced issue in access wordpress page due to MySQL extension was missing.



If you face this issue you can solve it like below process, you have to install MySQL extension for php8.3 & restart Apache2.

sudo apt-get install php8.3-mysql sudo apt-get install php8.3-mbstring sudo systemctl restart apache2

After that I got this error due to Database misconfiguration issue.



I tried to solve it with existing database but I can't then i create new Database with new database with proper configuration & changed DB deatils in wp-config.php file.

Then I got below screen,

