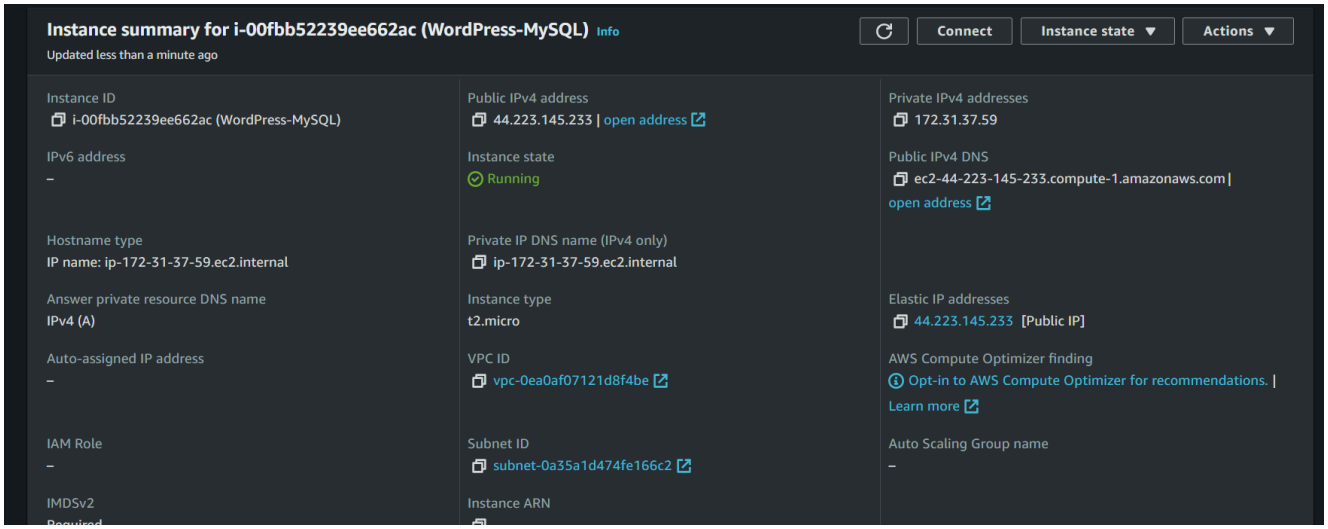
Techplement Week 1 Tasks

- Task 1st - Deploy Services in Monolithic Architecture.

In this 1 EC2 Instance is used for deploying WordPress and MySQL on same the instance.

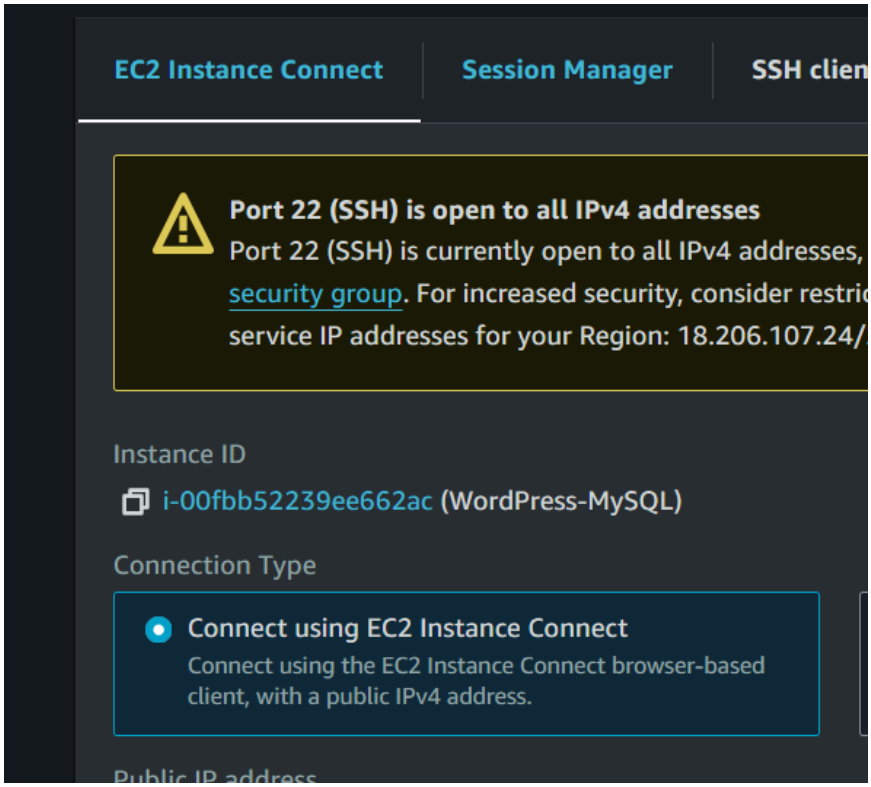
Following are the steps:

Step1-> Created an EC2 Instance :

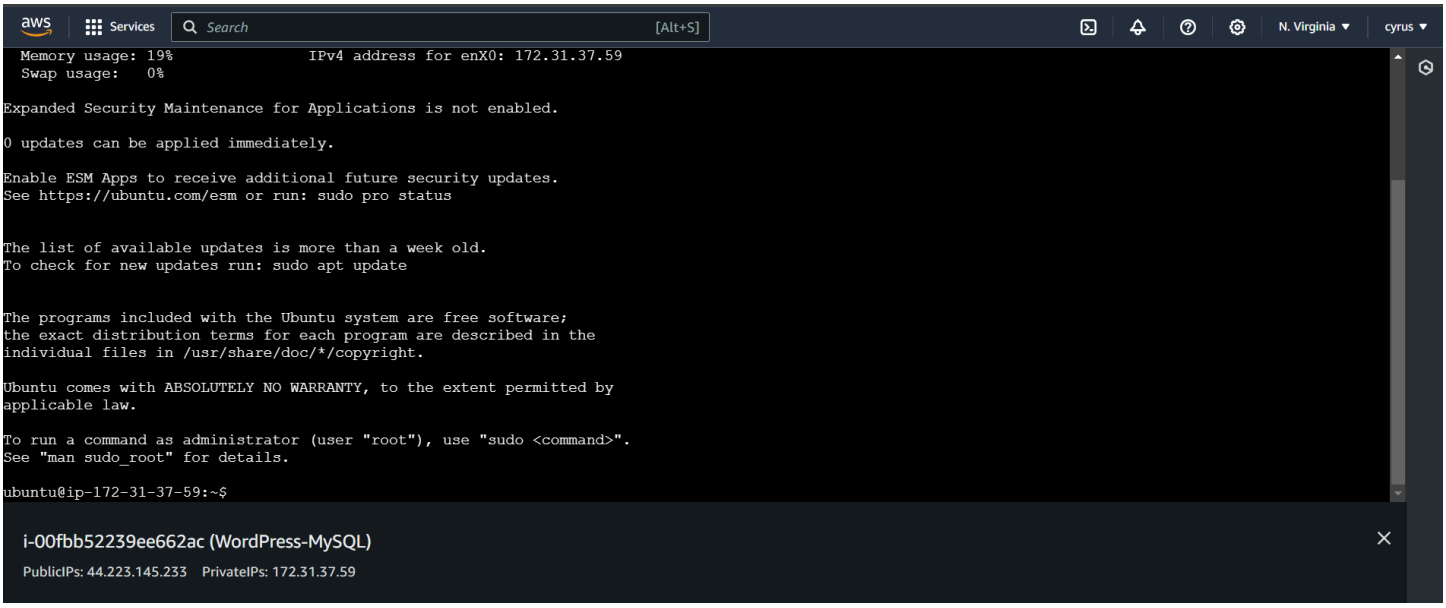


- This instance is associated with an Elastic Ip Address.

Step2-> Connecting Instance on "EC2 instance Connect".



Then Ubuntu Terminal opened.



Step3-> Executing commands for "WordPress and MySQL" configuration.

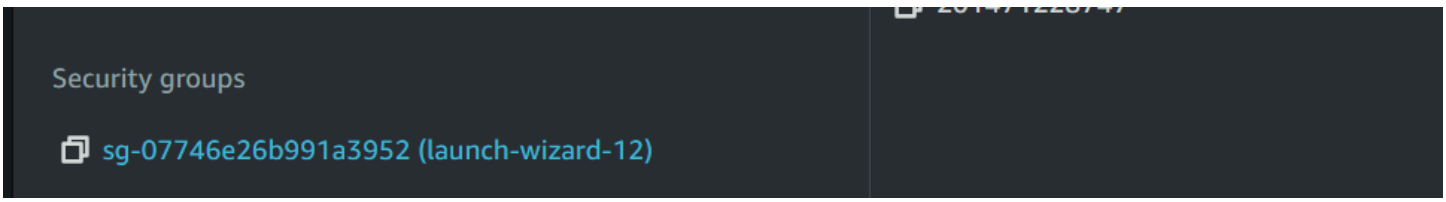
>Sudo apt update

```
ubuntu@ip-172-31-37-59:~$ sudo apt update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:4 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:6 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [269 kB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [64.4 kB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [3696 B]
Get:9 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [249 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [108 kB]
Get:11 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [8632 B]
Get:12 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [9376 B]
Get:13 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [208 kB]
Get:14 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [40.7 kB]
```

>sudo apt upgrade -y

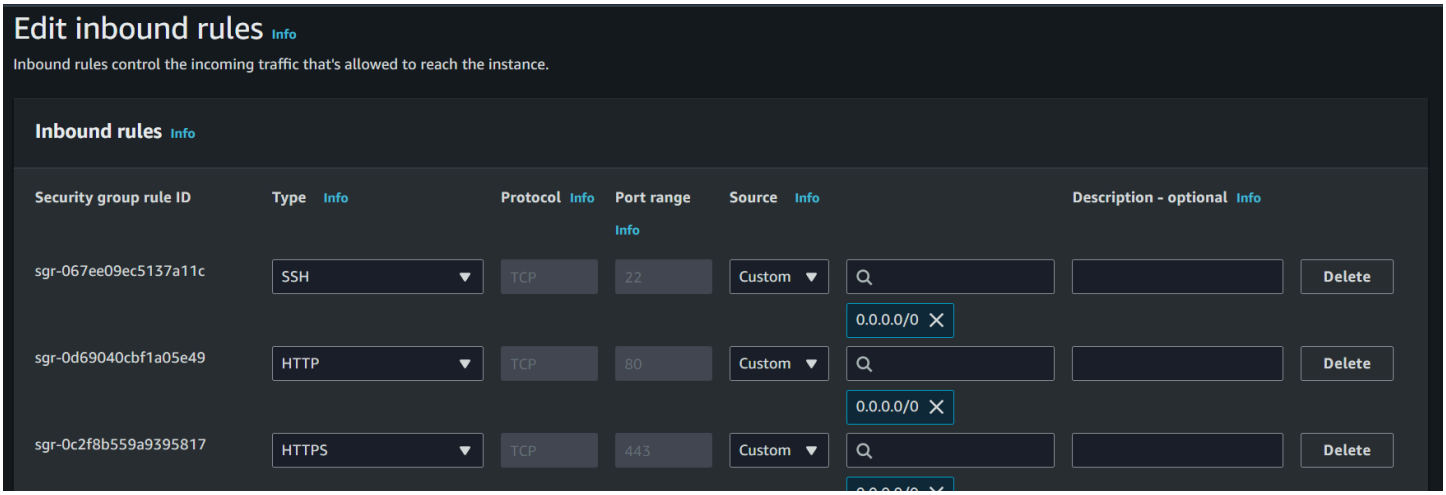
```
ubuntu@ip-172-31-37-59:~$ sudo apt upgrade -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following NEW packages will be installed:
  linux-aws-headers-6.8.0-1013 linux-aws-tools-6.8.0-1013 linux-headers-6.8.0-1013-aws
  linux-image-6.8.0-1013-aws linux-modules-6.8.0-1013-aws linux-tools-6.8.0-1013-aws
The following packages will be upgraded:
  apparmor bind9-dnsutils bind9-host bind9-libs chrony curl dracut-install krb5-locales
  landscape-common libapparmor1 libcurl3t64-gnutls libcurl4t64 libgssapi-krb5-2
  libk5crypto3 libkrb5-3 libkrb5support0 libnss-systemd libopeniscsiusr libpam-systemd
  libpython3.12-minimal libpython3.12-stdlib libpython3.12t64 libssl3t64
  libsystemd-shared libsystemd0 libudev1 linux-aws linux-headers-aws linux-image-aws
  linux-tools-common lxd-installer needrestart open-iscsi openssh-client openssh-server
  openssh-sftp-server openssl python3.12 python3.12-minimal snapd systemd systemd-dev
  systemd-resolved systemd-sysv thin-provisioning-tools udev xkb-data
47 upgraded, 6 newly installed, 0 to remove and 0 not upgraded.
22 standard LTS security updates
Need to get 128 MB of archives.
```

Step4-> making changes in "Inbound Rules" of Security Group

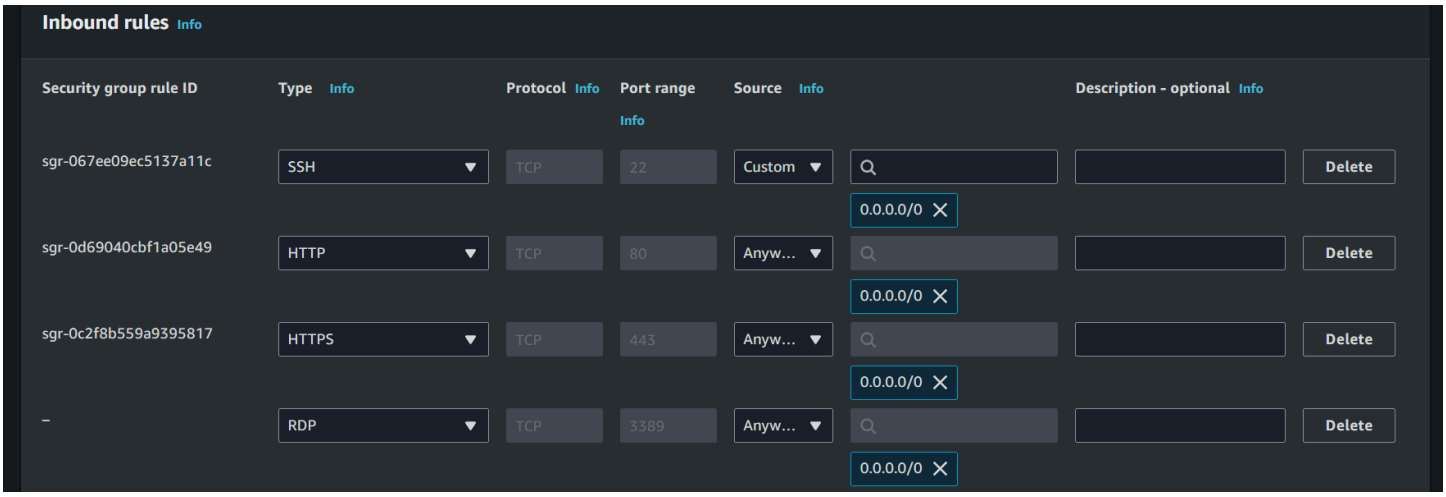


Adding a new rule and making changes in the sources.

before:



after:



Step5-> Going back to the ubuntu terminal to execute commands

>sudo apt install apache2 -y

```
ubuntu@ip-172-31-37-59:~$ sudo apt install apache2 -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1t64 libaprutil1-dbd-sqlite3
  libaprutil1-ldap libaprutil1t64 liblua5.4-0 ssl-cert
```

>sudo apt install php libapache2-mod-php php-mysql -y

```
ubuntu@ip-172-31-37-59:~$ sudo apt install php libapache2-mod-php php-mysql -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libapache2-mod-php8.3 php-common php8.3 php8.3-cli php8.3-common php8.3-mysql
  php8.3-opcache php8.3-readline
```

>sudo apt install mysql-server -y

```
ubuntu@ip-172-31-37-59:~$ sudo apt install mysql-server -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libcgi-fast-perl libcgi-pm-perl libclone-perl libencode-locale-perl
  libevent-pthreads-2.1-7t64 libfcgi-bin libfcgi-perl libfcgi0t64 libhtml-parser-perl
  libhtml-tagset-perl libhtml-template-perl libhttp-date-perl libhttp-message-perl
  libio-html-perl liblwp-mediatypes-perl libmecab2 libprotobuf-lite32t64 libtimedate-perl
  liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0
  mysql-client-core-8.0 mysql-common mysql-server-8.0 mysql-server-core-8.0
Suggested packages:
```

Step6-> Making changes for Mysql-database

```
ubuntu@ip-172-31-37-59:~$ sudo mysql -u root
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.39-0ubuntu0.24.04.1 (Ubuntu)

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owners.

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

mysql> ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password BY 'Cyrus@08';
Query OK, 0 rows affected (0.01 sec)

mysql> CREATE USER 'wp_user'@localhost IDENTIFIED BY 'Cyrus@08';
Query OK, 0 rows affected (0.03 sec)

mysql> CREATE DATABASE wp;
Query OK, 1 row affected (0.02 sec)

mysql> GRANT ALL PRIVILEGES ON wp.* TO 'wp_user'@localhost;
Query OK, 0 rows affected (0.01 sec)

mysql> exit;
```

Step7-> Changing directory to /tmp, downloading wordpress latest zip file and unziping it.

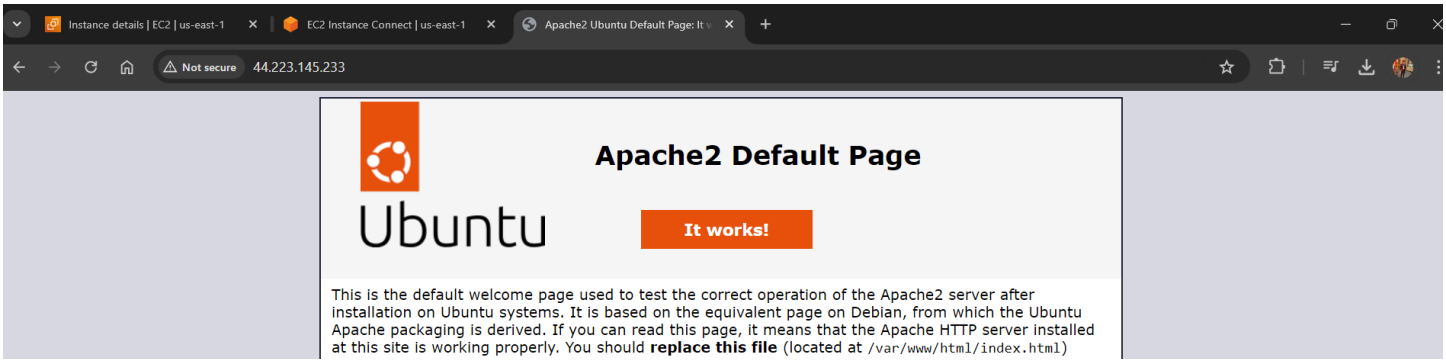
```
ubuntu@ip-172-31-37-59:~$ cd /tmp
ubuntu@ip-172-31-37-59:/tmp$ wget https://wordpress.org/latest.zip
--2024-08-08 15:56:00--  https://wordpress.org/latest.zip
Resolving wordpress.org (wordpress.org)... 198.143.164.252
Connecting to wordpress.org (wordpress.org)|198.143.164.252|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 26138467 (25M) [application/zip]
Saving to: 'latest.zip'

latest.zip            100%[=========================>]  24.93M  24.3MB/s    in 1.0s

2024-08-08 15:56:01 (24.3 MB/s) - 'latest.zip' saved [26138467/26138467]
```

>unzip latest.zip

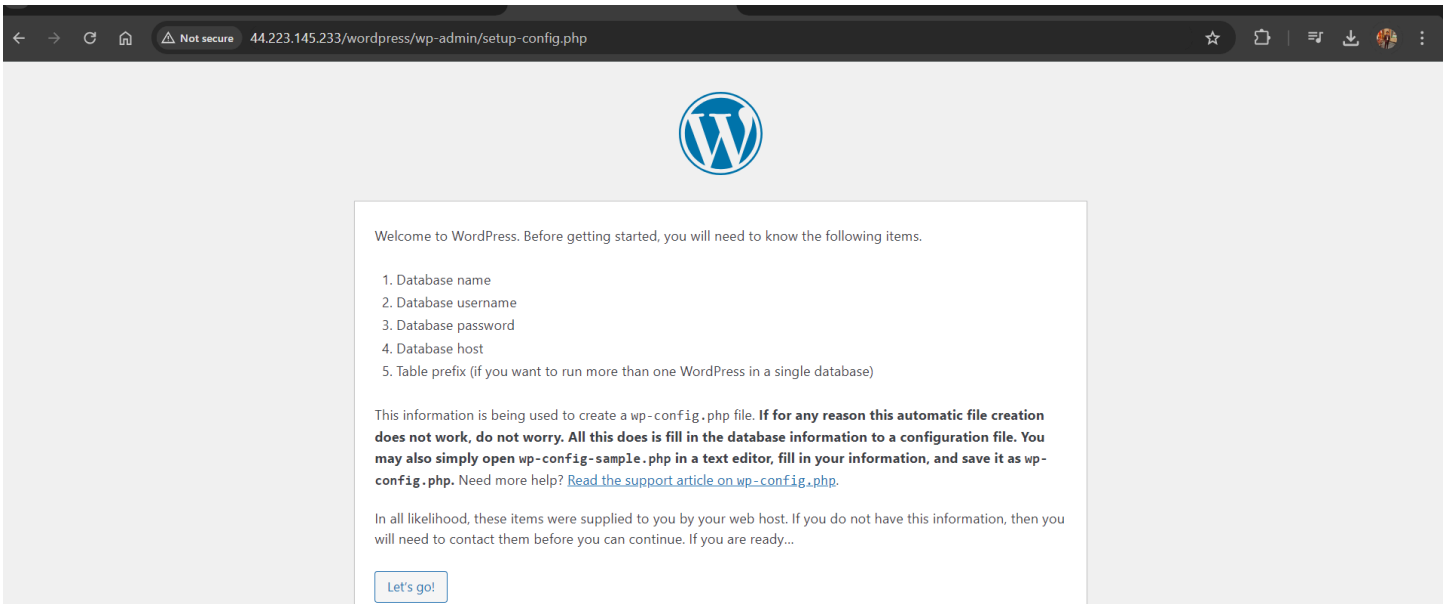
>sudo mv wordpress/ /var/www/html/

>sudo systemctl restart apache2

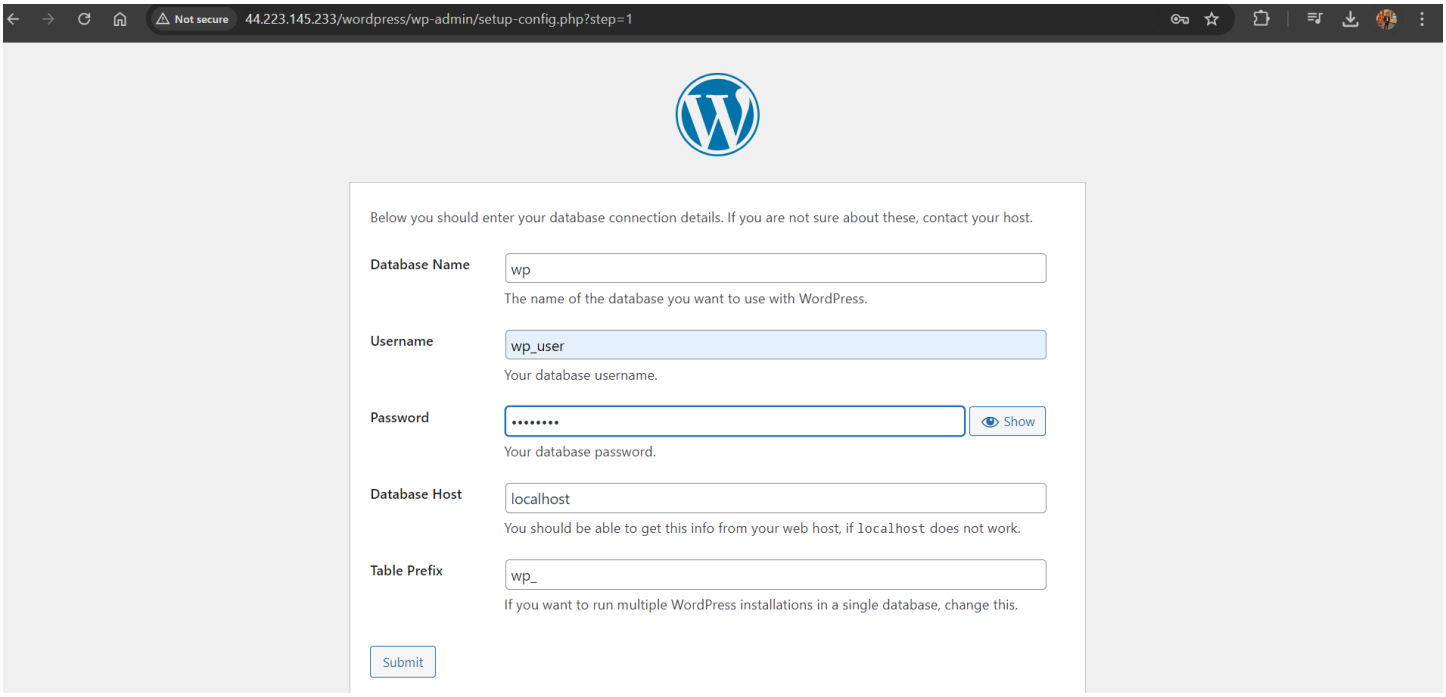
Step8-> copy & paste the public ip of the instance on the browser and this page will appear:



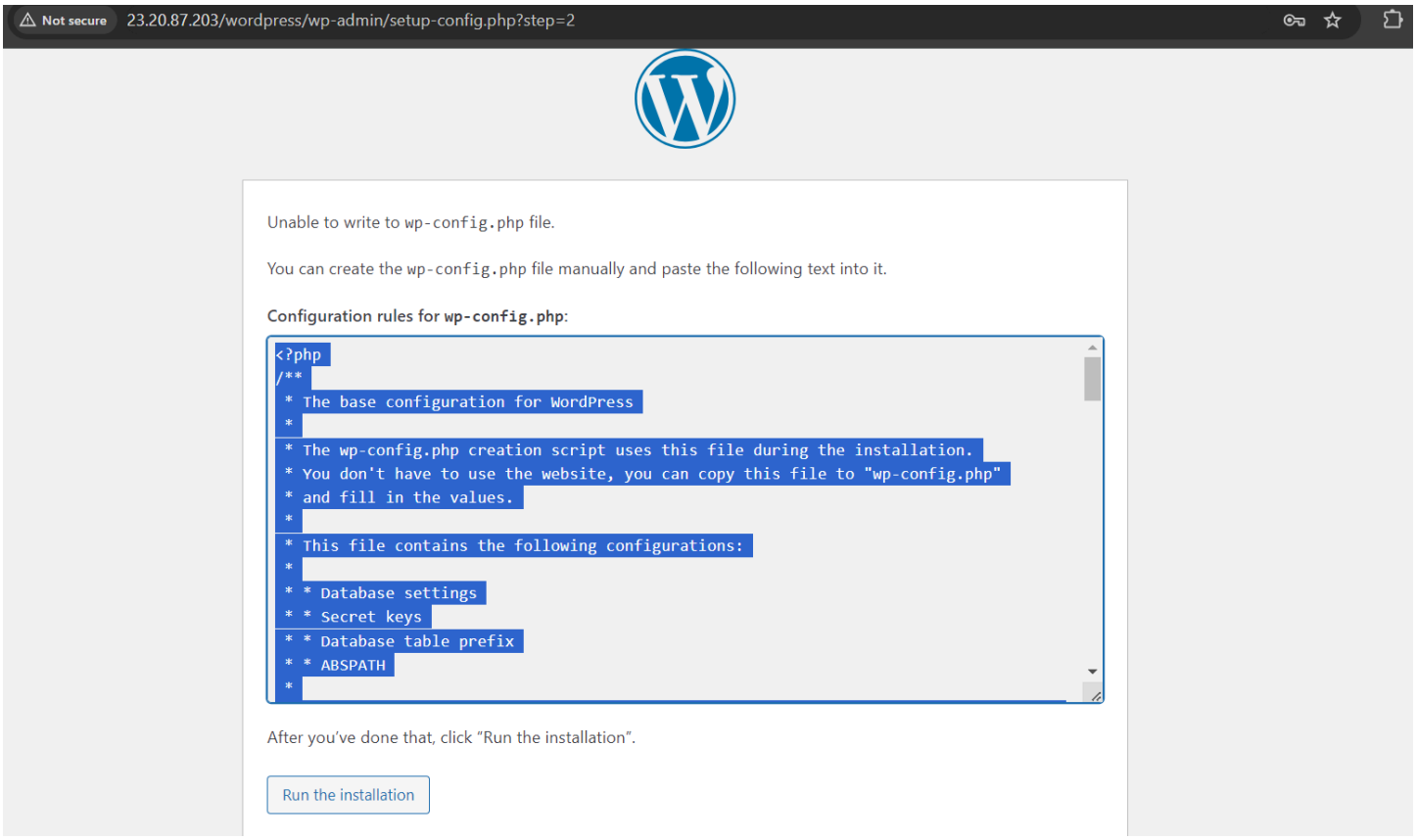
Step9-> write /wordpress after the ip address in url box and this page will appear:



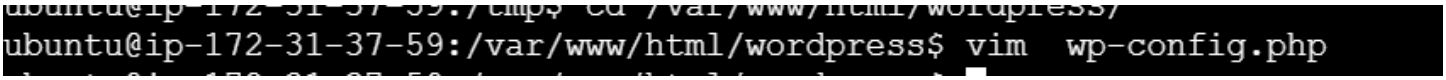
click on “let's go” button and next page will be :



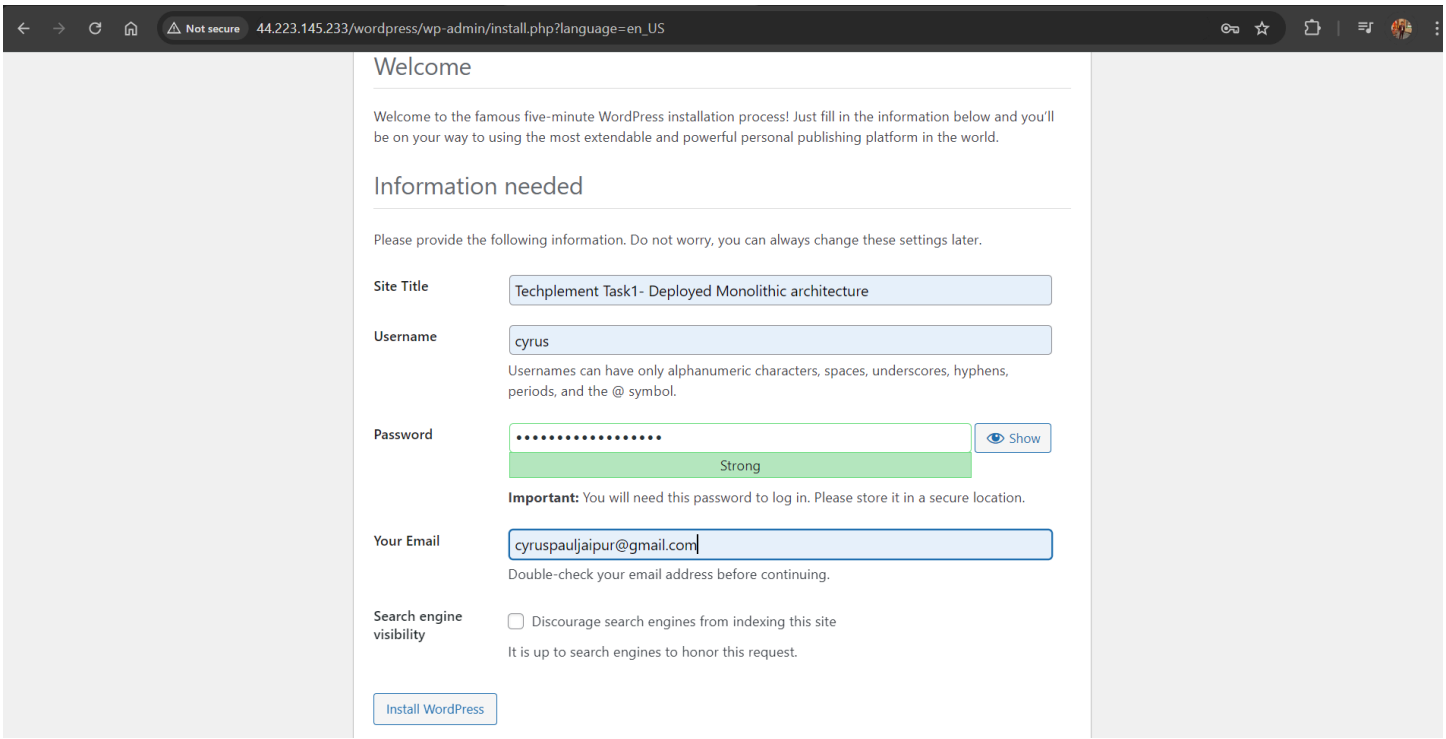
fill the following like in the above pic and click on "submit" button.



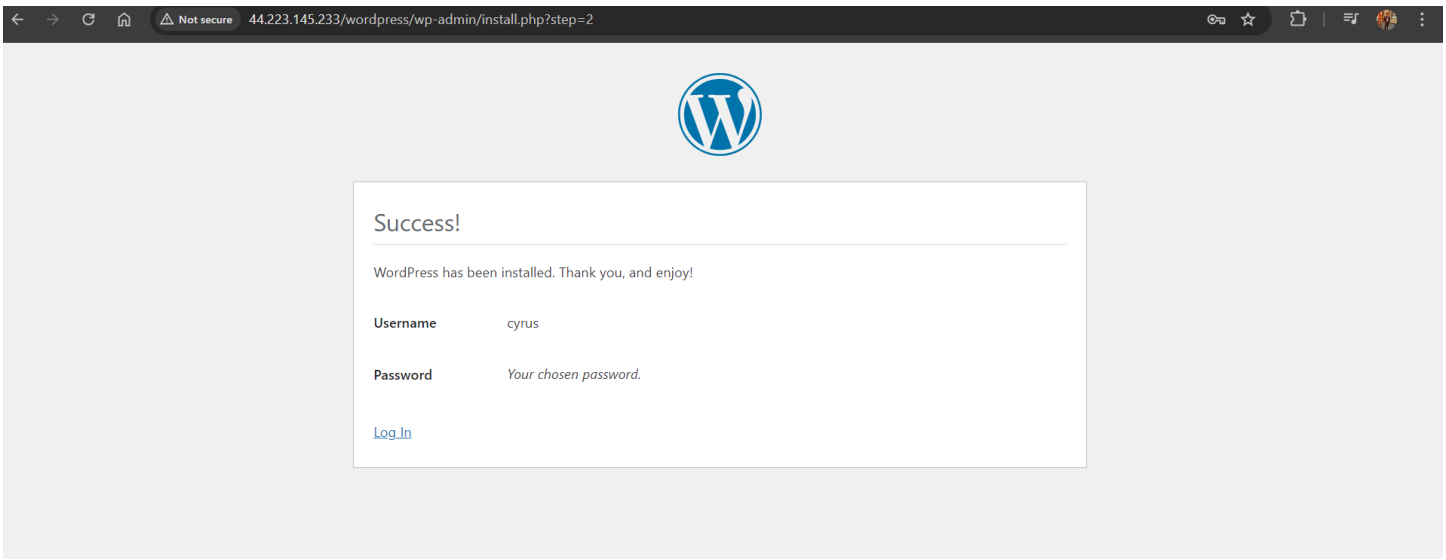
Step10-> Now go to the terminal and create a file "wp-config.php" and paste all the configuration rules highlighted in the above pic into the file, then save & exit the file.



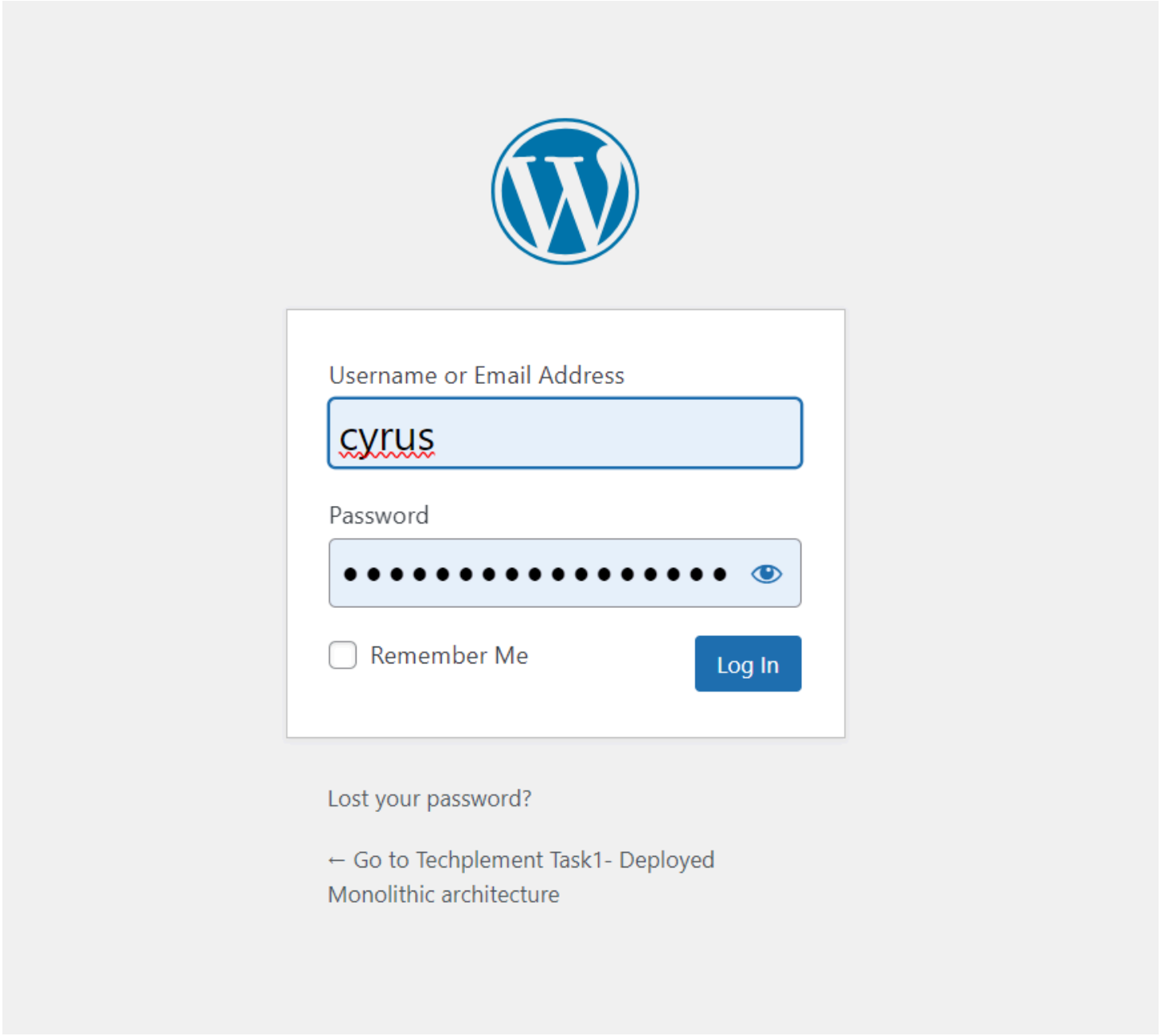
Step11-> Go to the browser



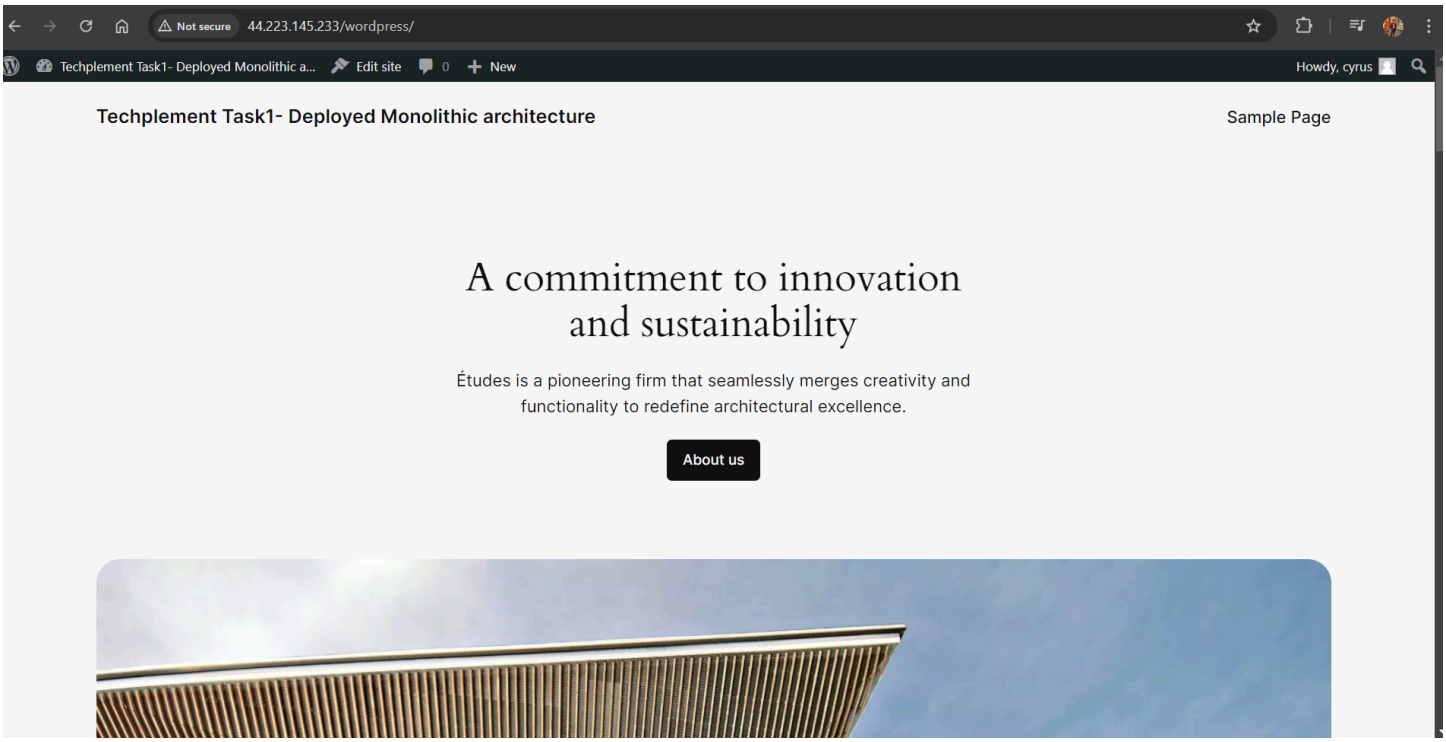
fill the information like in the above pic and click on "Install wordpress".



Click on “Log in” button.



And the "WordPress-MySQL " website will be displayed.


Not secure
44.223.145.233/wordpress/
Techplement Task1- Deployed Monolithic a...
Edit site
0
New
Howdy, cyrus
Techplement Task1- Deployed Monolithic architecture
Sample Page
A commitment to innovation and sustainability
Études is a pioneering firm that seamlessly merges creativity and functionality to redefine architectural excellence.
About us