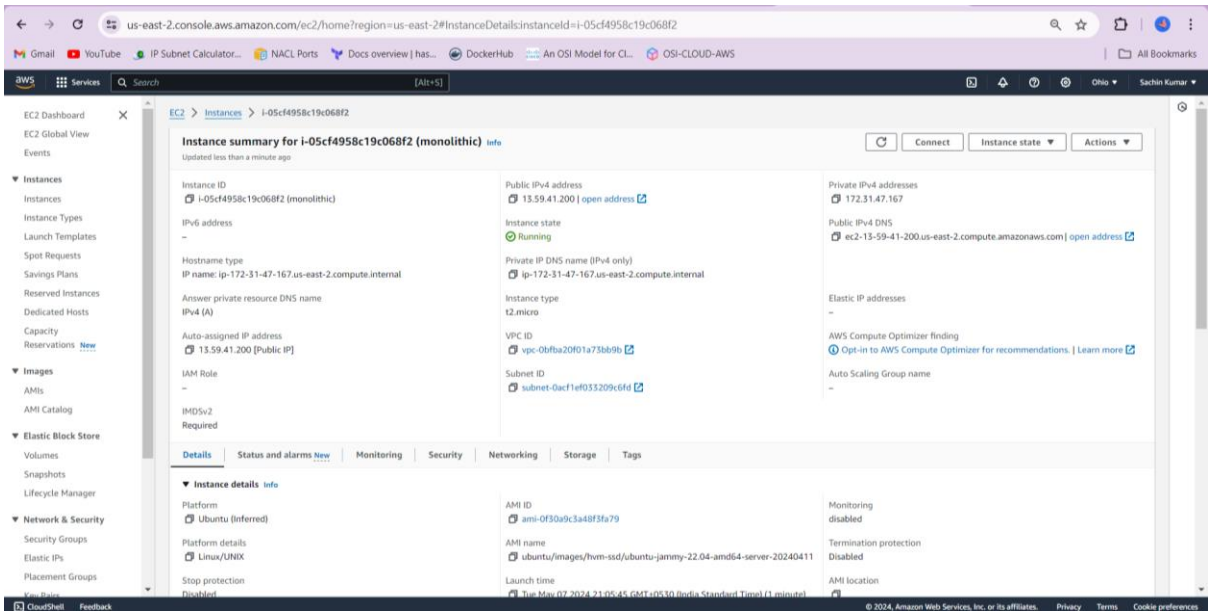
Cloud(AWS) Week 1 Task:

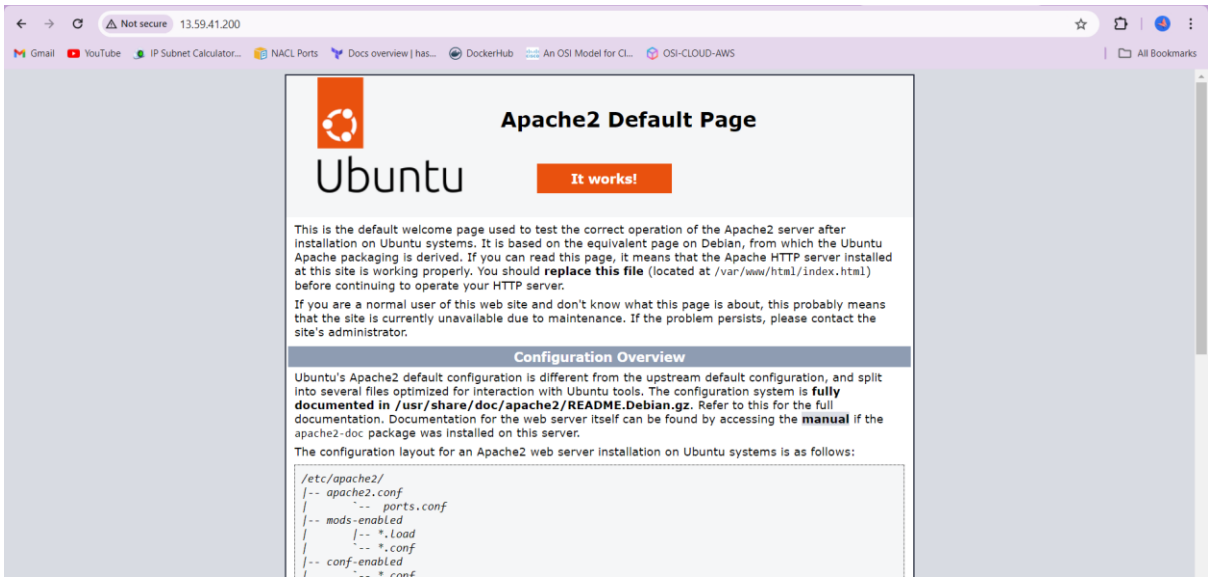
❖ Prerequisites: Create your free-tier AWS account.
❖ Task: Deploy application in monolithic and microservices architecture.

❖ Description:

- For monolithic : 1 EC2 instance, deploy wordpress and MYSQL on the same instances.

Screenshots:





```
ubuntu@ip-172-31-47-167:~$ sudo mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.36-0ubuntu0.22.04.1 (Ubuntu)

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affiliates. Other names may be trademarks of their respective
owners.

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

mysql> CREATE DATABASE wordpress;
Query OK, 1 row affected (0.01 sec)

mysql> CREATE USER 'wordpressuser'@'localhost' IDENTIFIED BY 'password';
Query OK, 0 rows affected (0.02 sec)

mysql> GRANT ALL PRIVILEGES ON wordpress.* TO 'wordpressuser'@'localhost';
Query OK, 0 rows affected (0.00 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.01 sec)

mysql> exit
Bye
```
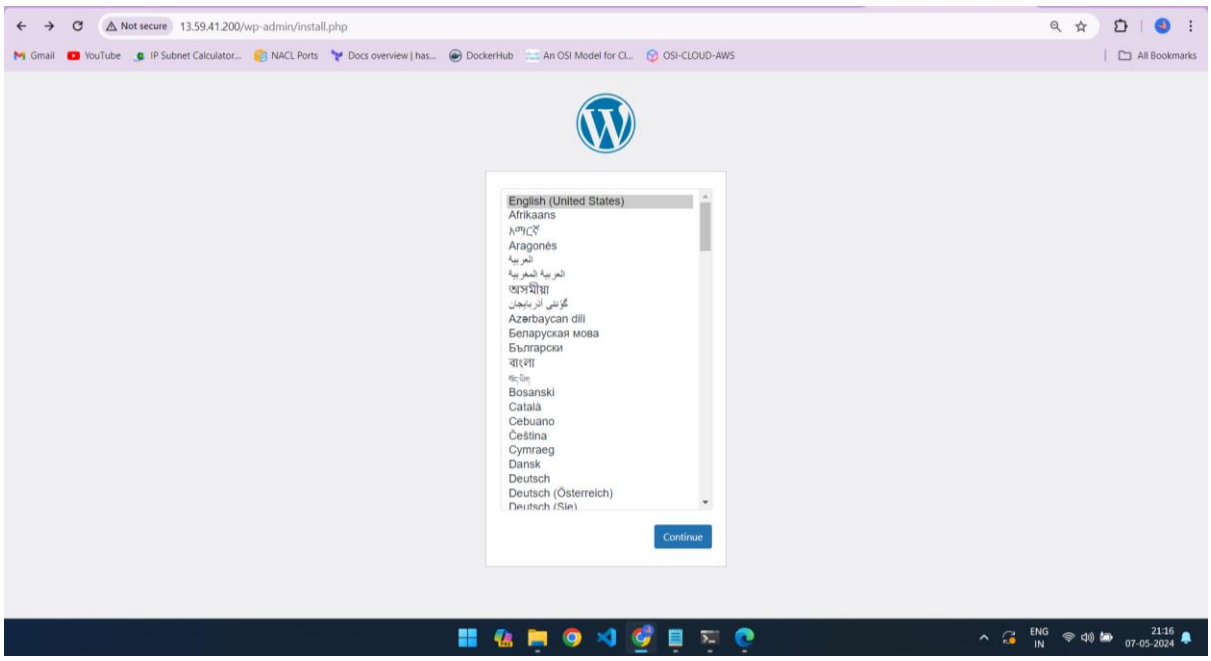
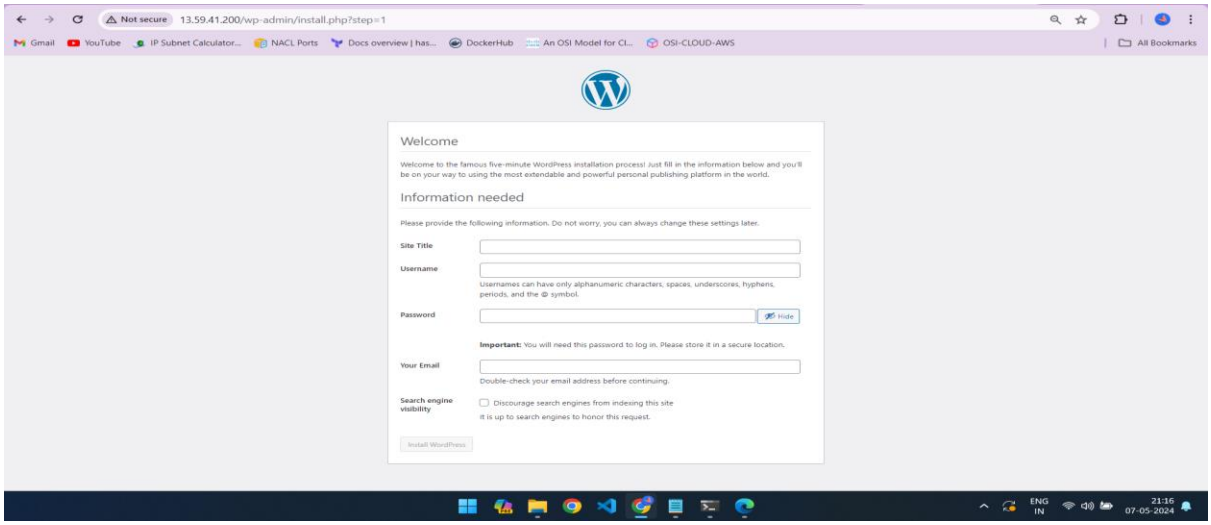
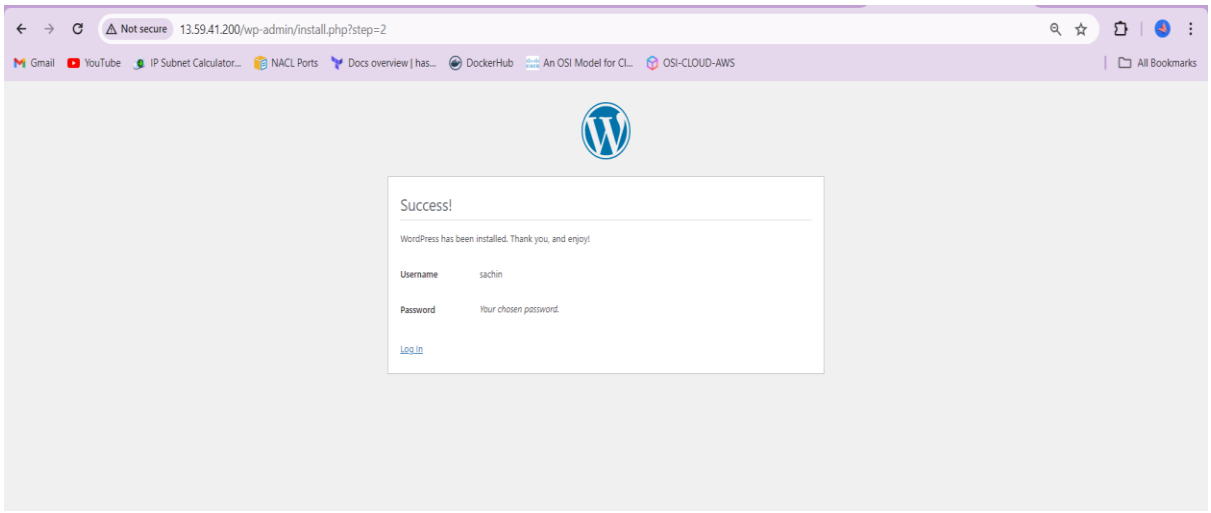
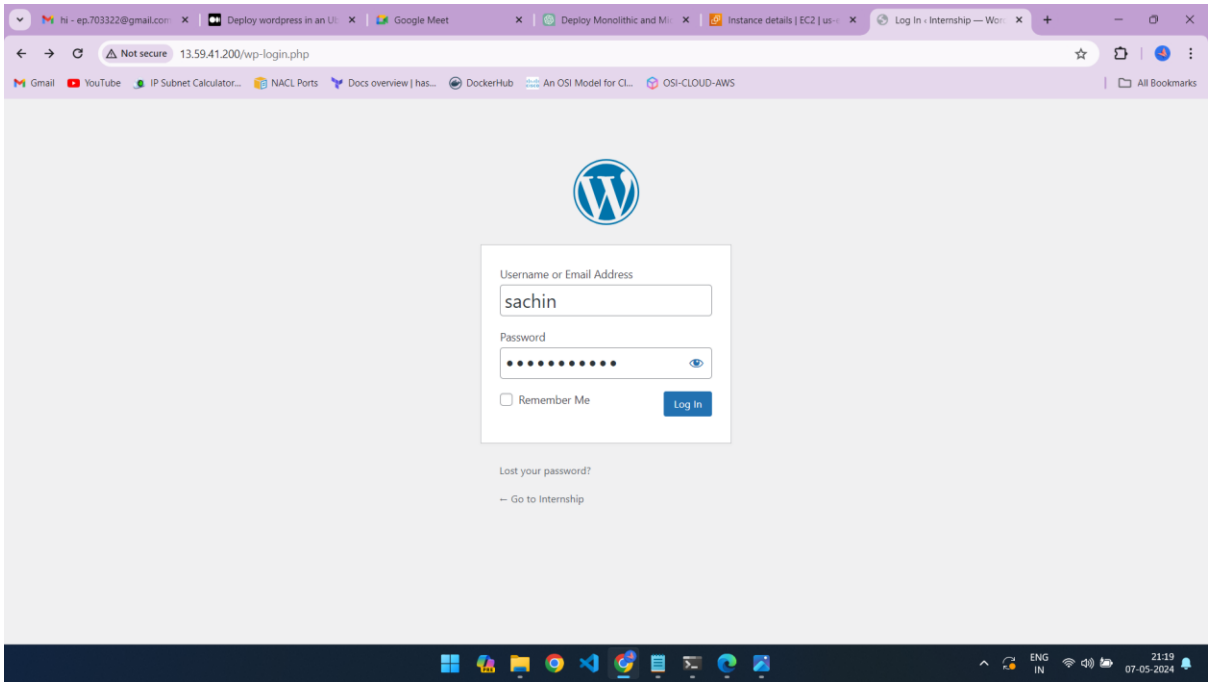

PowerShell | PowerShell | ubuntu@ip-172-31-47-167: ~

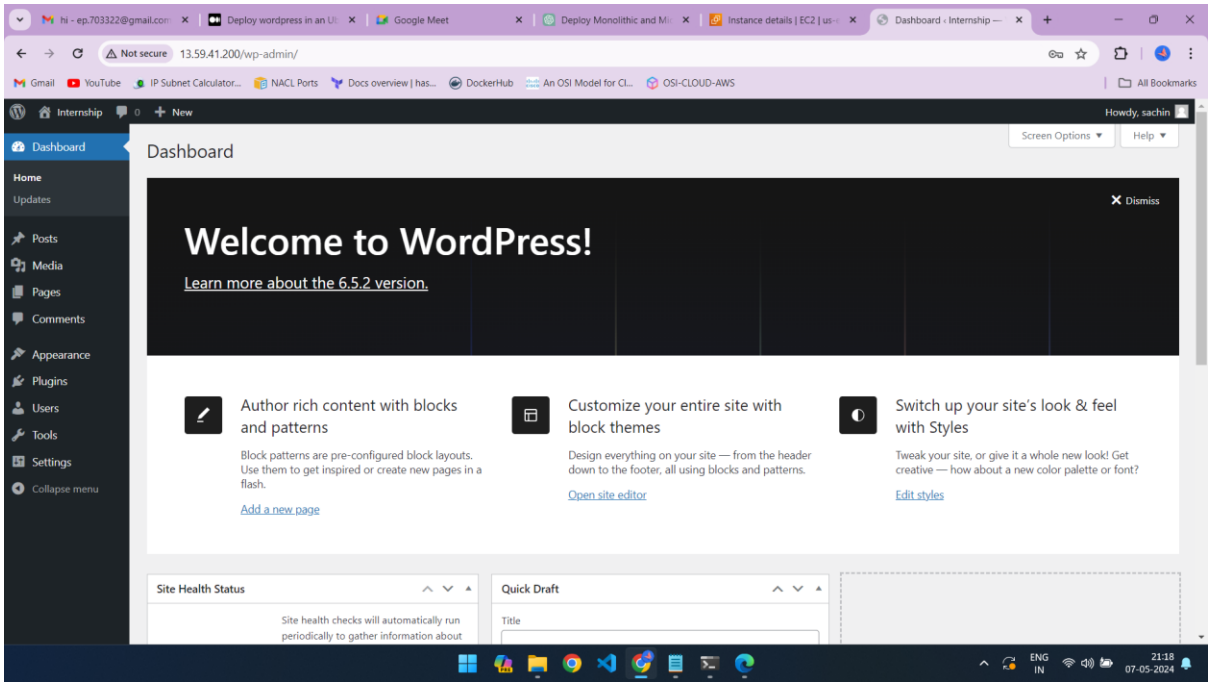
```
 GNU nano 6.2                                  /var/www/html/wp-config.php
 *
 * @link https://wordpress.org/documentation/article/editing-wp-config-php/
 *
 * @package WordPress
 */

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

/** Database username */
define( 'DB_USER', 'wordpressuser' );

/** Database password */
define( 'DB_PASSWORD', 'password' );

/** Database hostname */
define( 'DB_HOST', 'localhost' );

/** Database charset to use in creating database tables. */
define( 'DB_CHARSET', 'utf8' );

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

/**#@+
 * Authentication unique keys and salts.
 *
 * Change these to different unique phrases! You can generate these using
 * the {@link https://api.wordpress.org/secret-key/1.1/salt/ WordPress.org secret-key service}.
 *
 * You can change these at any point in time to invalidate all existing cookies.
 * This will force all users to have to log in again.
 *
 * @since 2.6.0
 */
define( 'AUTH_KEY',         'put your unique phrase here' );

^G Help          ^O Write Out     ^W Where Is      ^K Cut           ^T Execute       ^C Location      M-U Undo         M-A Set Mark     M-] To Bracket
^X Exit          ^R Read File     ^\ Replace       ^U Paste         ^J Justify       ^/ Go To Line    M-E Redo         M-6 Copy         ^Q Where Was
```




Not secure 13.59.41.200/wp-admin/install.php?step=1
Welcome
Welcome to the famous five-minute WordPress installation process! Just fill in the information below and you'll be on your way to using the most extendable and powerful personal publishing platform in the world.
Information needed
Please provide the following information. Do not worry, you can always change these settings later.
Site Title
Username
Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol.
Password
Hide
Important: You will need this password to log in. Please store it in a secure location.
Your Email
Double-check your email address before continuing.
Search engine visibility
Discourage search engines from indexing this site
It is up to search engines to honor this request.
Install WordPress


Not secure 13.59.41.200/wp-admin/install.php?step=2
Success!
WordPress has been installed. Thank you, and enjoy!
Username sachin
Password Your chosen password.
Log In


Not secure 13.59.41.200/wp-login.php
Username or Email Address
sachin
Password
Remember Me
Log In
Lost your password?
← Go to Internship



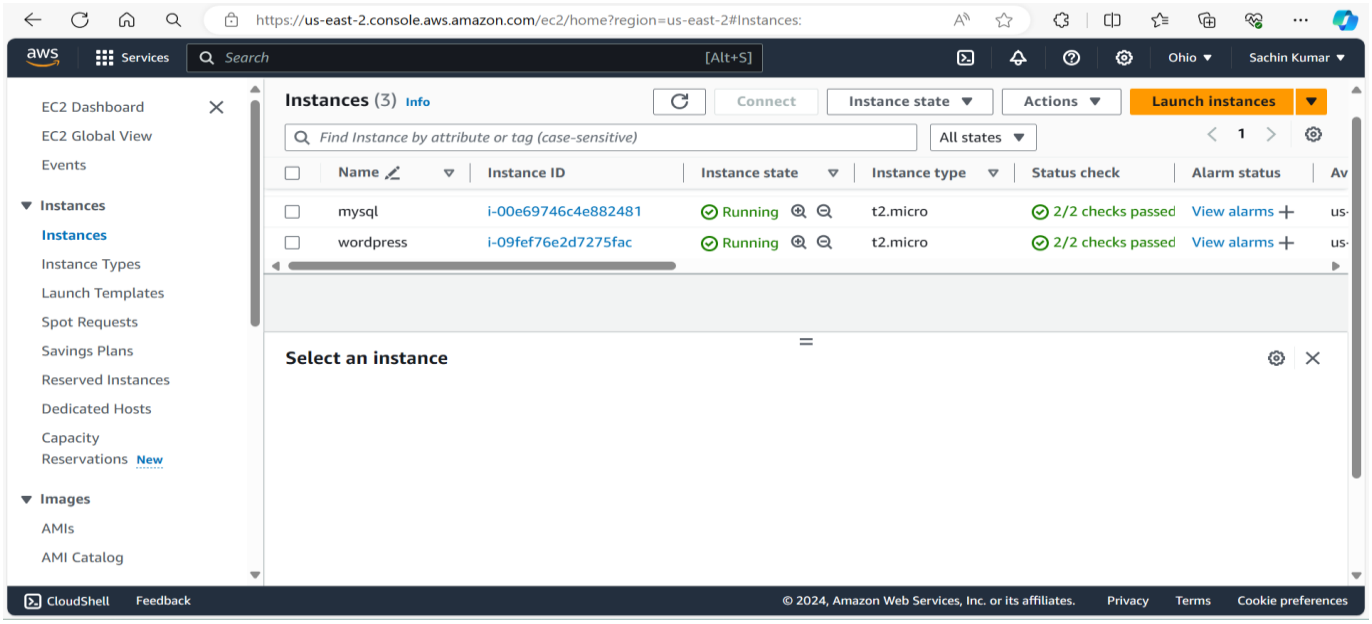
Commands used:

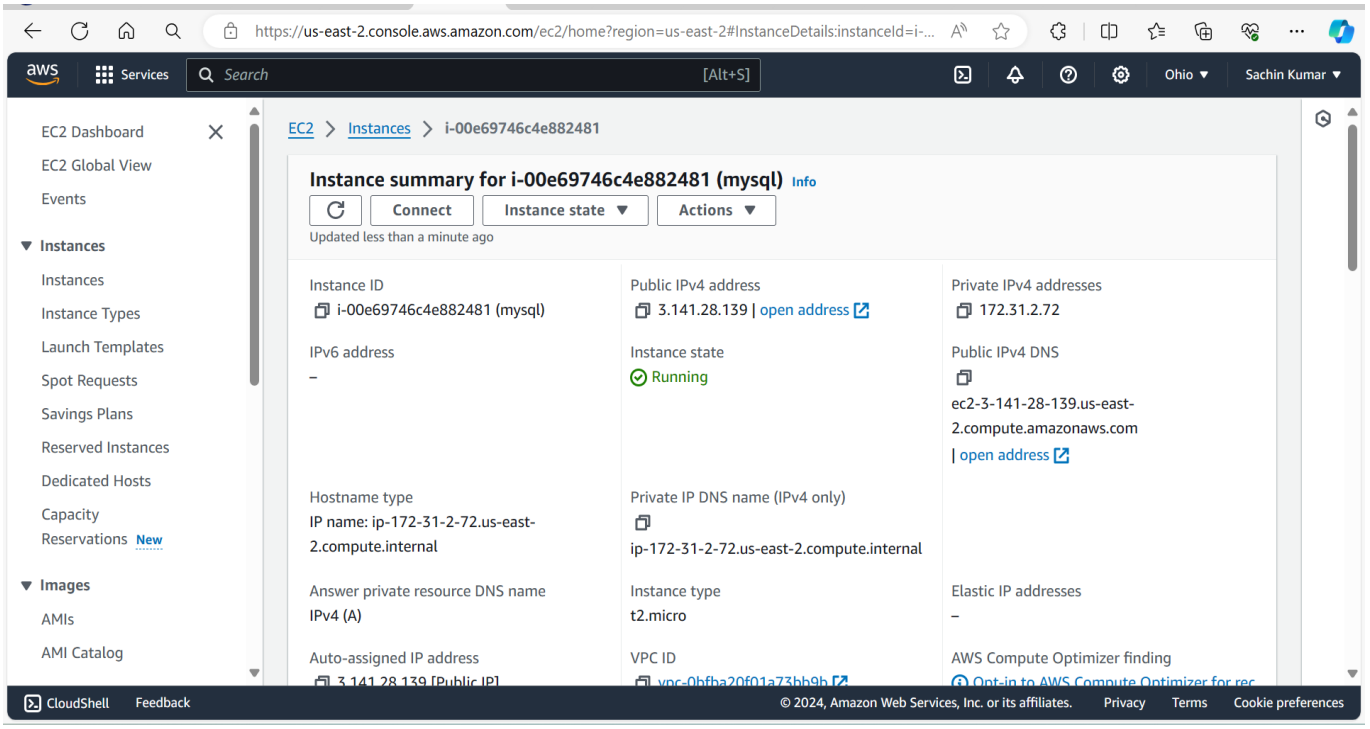
1. sudo apt update
2. sudo apt install apache2 mysql-server mysql-client php libapache2-mod-php php-mysql
3. sudo mysql_secure_installation
4. wget https://wordpress.org/latest.tar.gz
5. tar -xzvf latest.tar.gz
6. sudo cp -r wordpress/* /var/www/html
7. cd /var/www/html
8. sudo chown -R www-data:www-data /var/www/html/
9. ls
10. sudo rm -rf index.html
11. cd
12. sudo mysql -u root -p
13. sudo cp /var/www/html/wp-config-sample.php /var/www/html/wp-config.php
14. sudo nano /var/www/html/wp-config.php

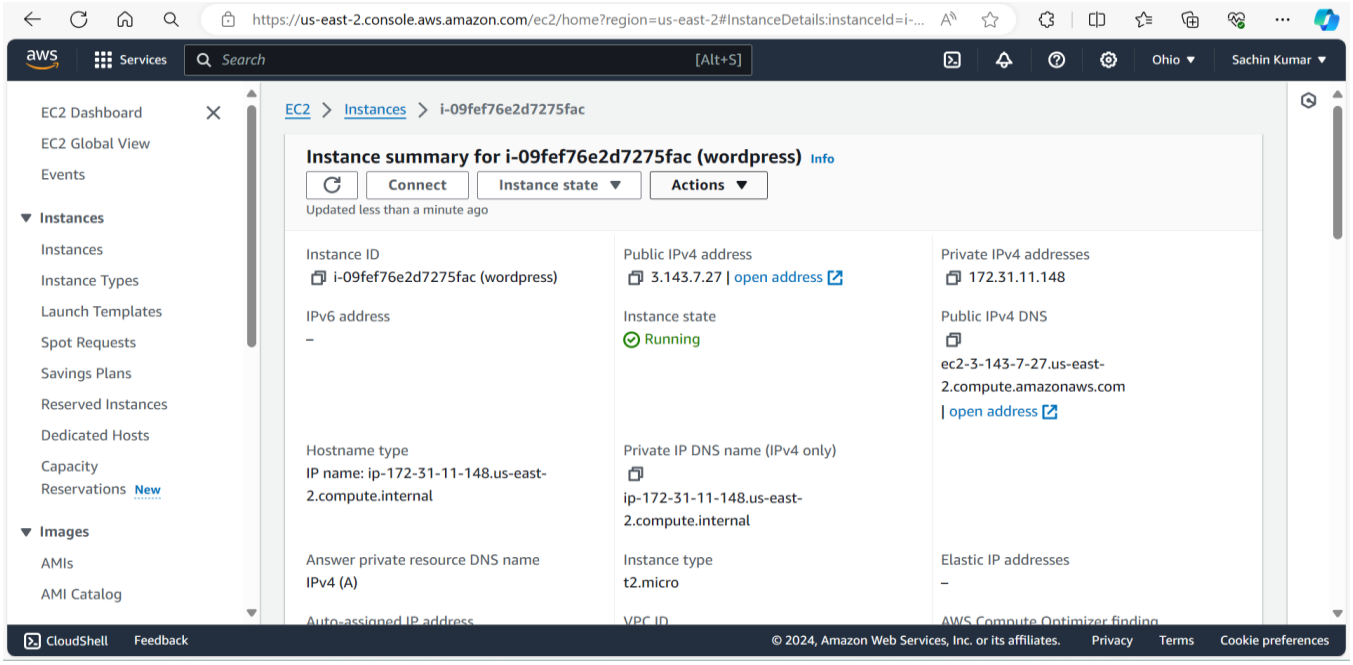
- For microservices: 2 EC2 instances, 1 for wordpress and 1 for MYSQL.
- Configure the necessary security group for the instances. EC2 instance type: t2-micro, AMI: ubuntu-*.
- Create a welcome page in wordpress that will be the homepage.

Screeshots:

http://3.143.7.27/index.php/2024/05/07/welcome-to-my-page/






https://us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#InstanceDetails:instanceId=i-...
aws
Services
Search
[Alt+S]
Ohio
Sachin Kumar
EC2 Dashboard
EC2 Global View
Events
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations New
Images
AMIs
AMI Catalog
EC2 > Instances > i-09fef76e2d7275fac
Instance summary for i-09fef76e2d7275fac (wordpress) Info
Connect
Instance state
Actions
Updated less than a minute ago
Instance ID
i-09fef76e2d7275fac (wordpress)
Public IPv4 address
3.143.7.27 | open address
Private IPv4 addresses
172.31.11.148
IPv6 address
–
Instance state
Running
Public IPv4 DNS
ec2-3-143-7-27.us-east-2.compute.amazonaws.com | open address
Hostname type
IP name: ip-172-31-11-148.us-east-2.compute.internal
Private IP DNS name (IPv4 only)
ip-172-31-11-148.us-east-2.compute.internal
Answer private resource DNS name
IPv4 (A)
Instance type
t2.micro
Elastic IP addresses
–
CloudShell
Feedback
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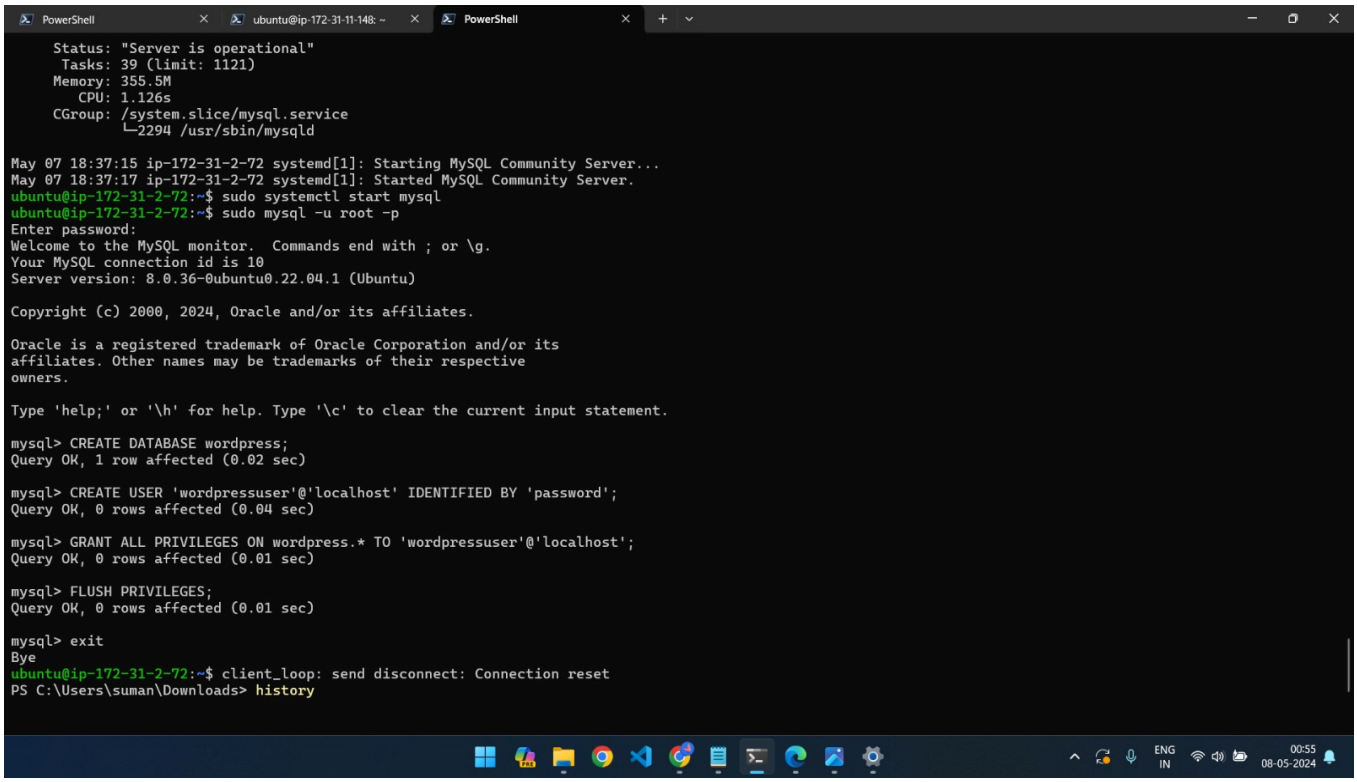
Privacy
Terms
Cookie preferences


PowerShell
ubuntu@ip-172-31-11-148: ~
PowerShell
Status: "Server is operational"
Tasks: 39 (limit: 1121)
Memory: 355.5M
CPU: 1.126s
CGroup: /system.slice/mysql.service
└─2294 /usr/sbin/mysqld
May 07 18:37:15 ip-172-31-2-72 systemd[1]: Starting MySQL Community Server...
May 07 18:37:17 ip-172-31-2-72 systemd[1]: Started MySQL Community Server.
ubuntu@ip-172-31-2-72:~$ sudo systemctl start mysql
ubuntu@ip-172-31-2-72:~$ sudo mysql -u root -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.36-0ubuntu0.22.04.1 (Ubuntu)
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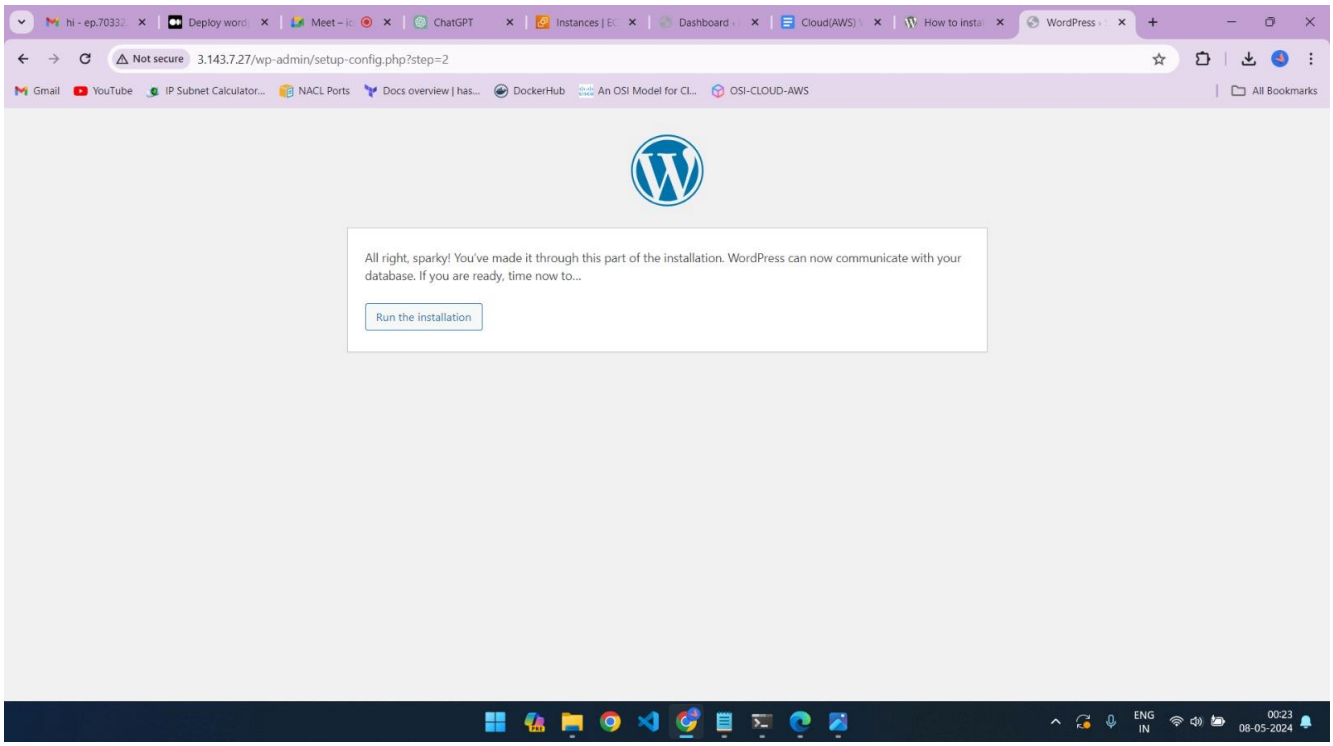
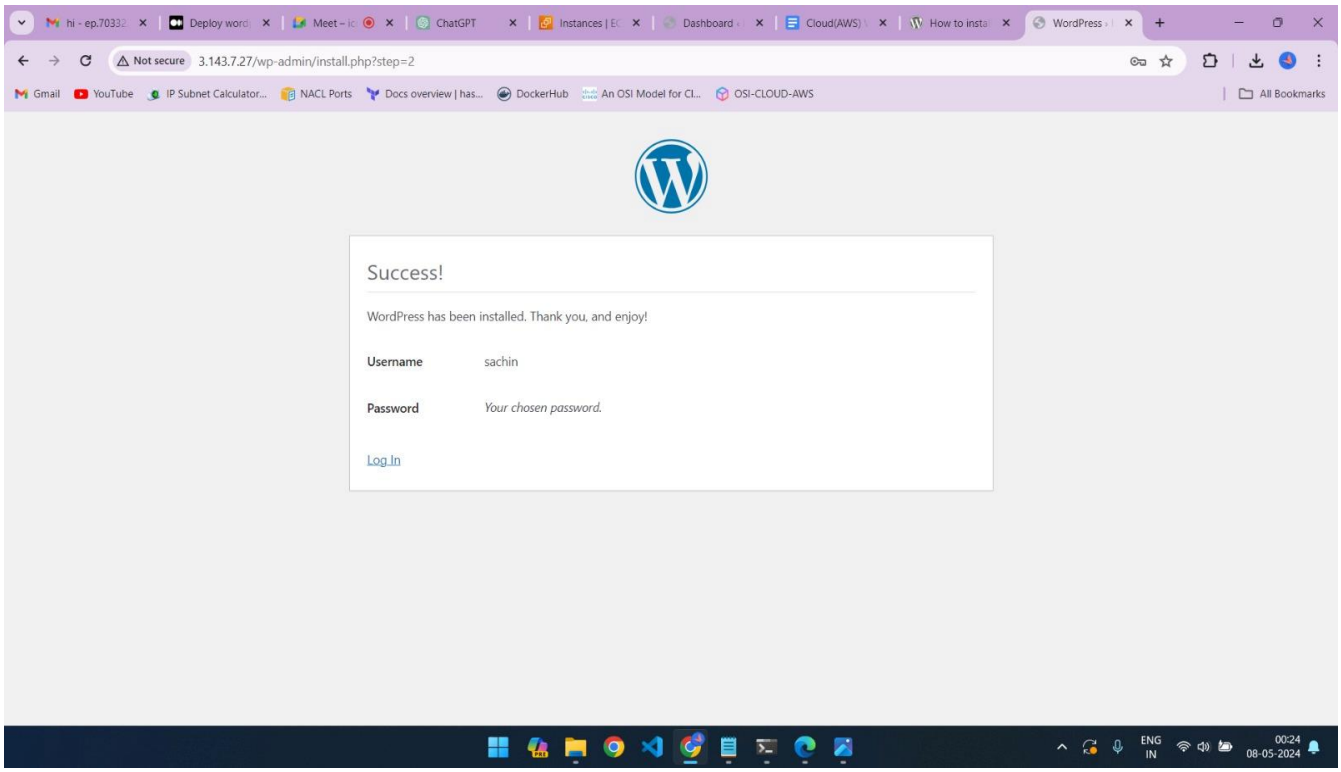
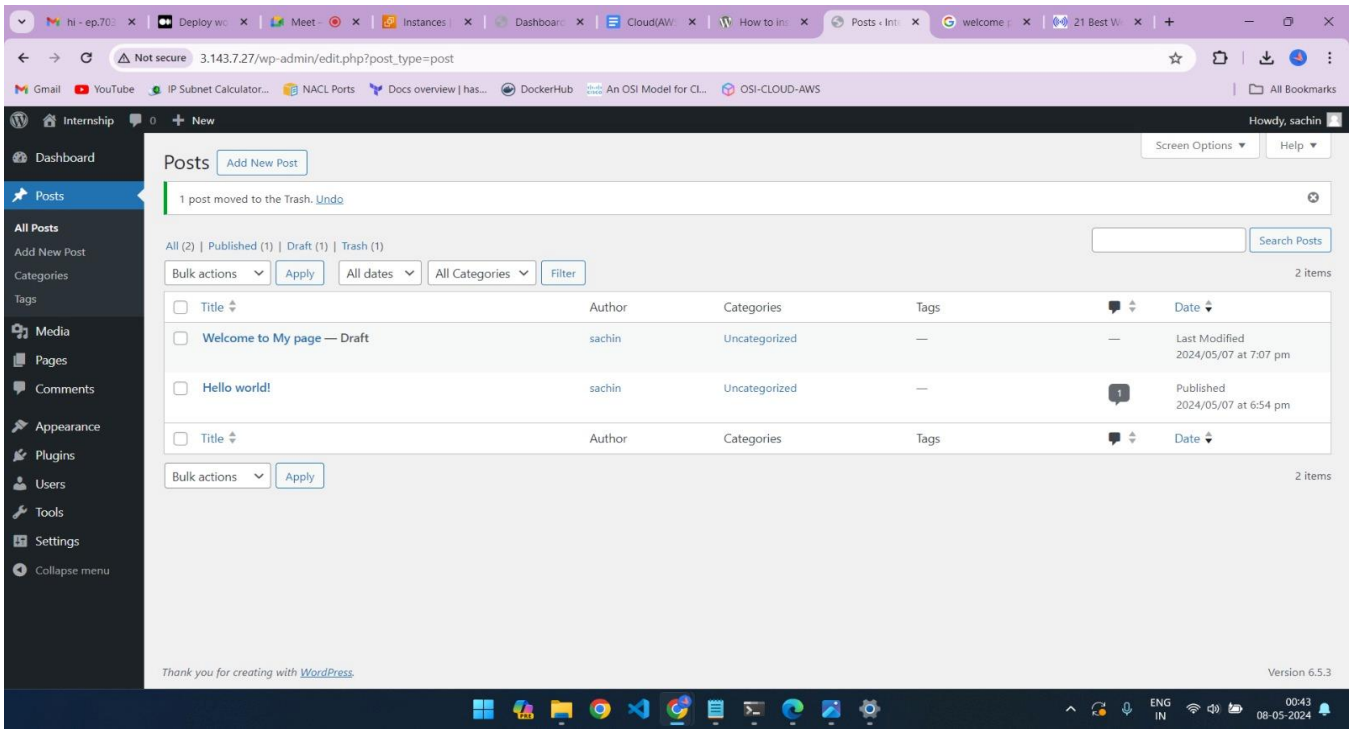
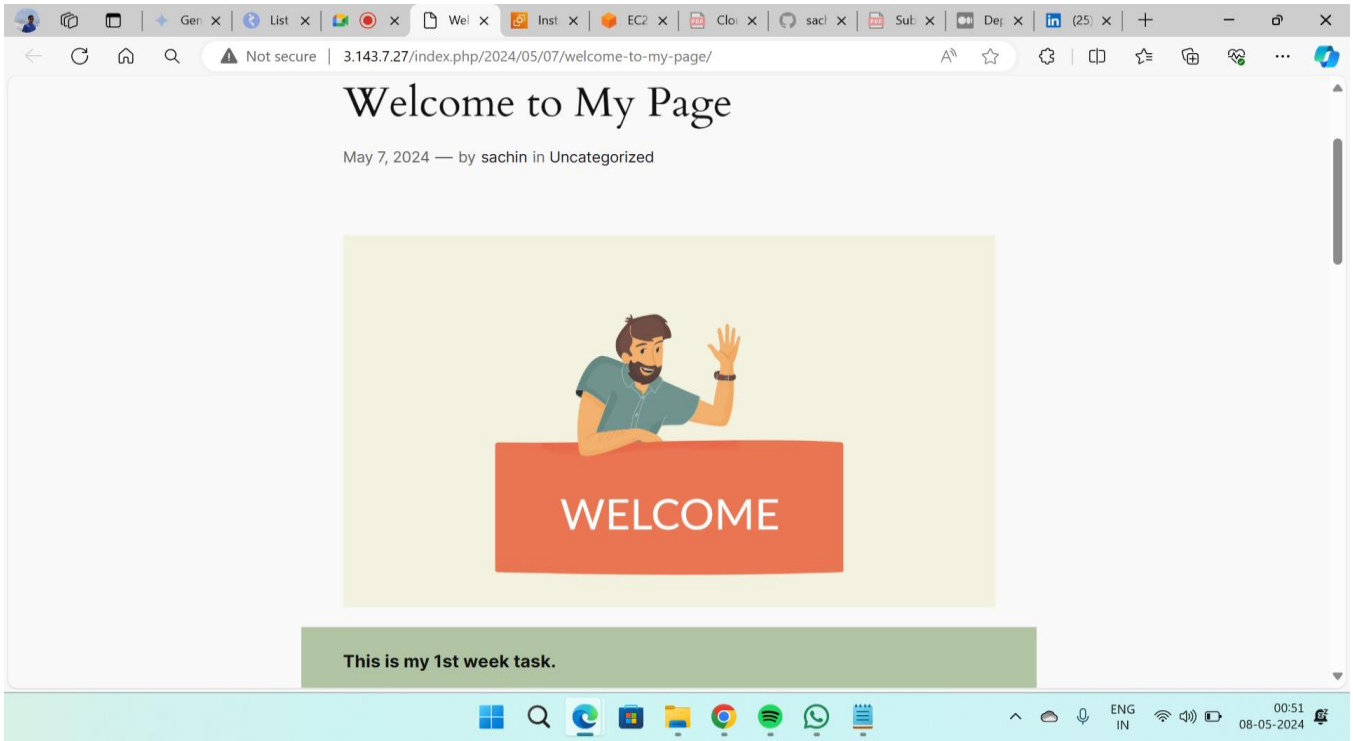
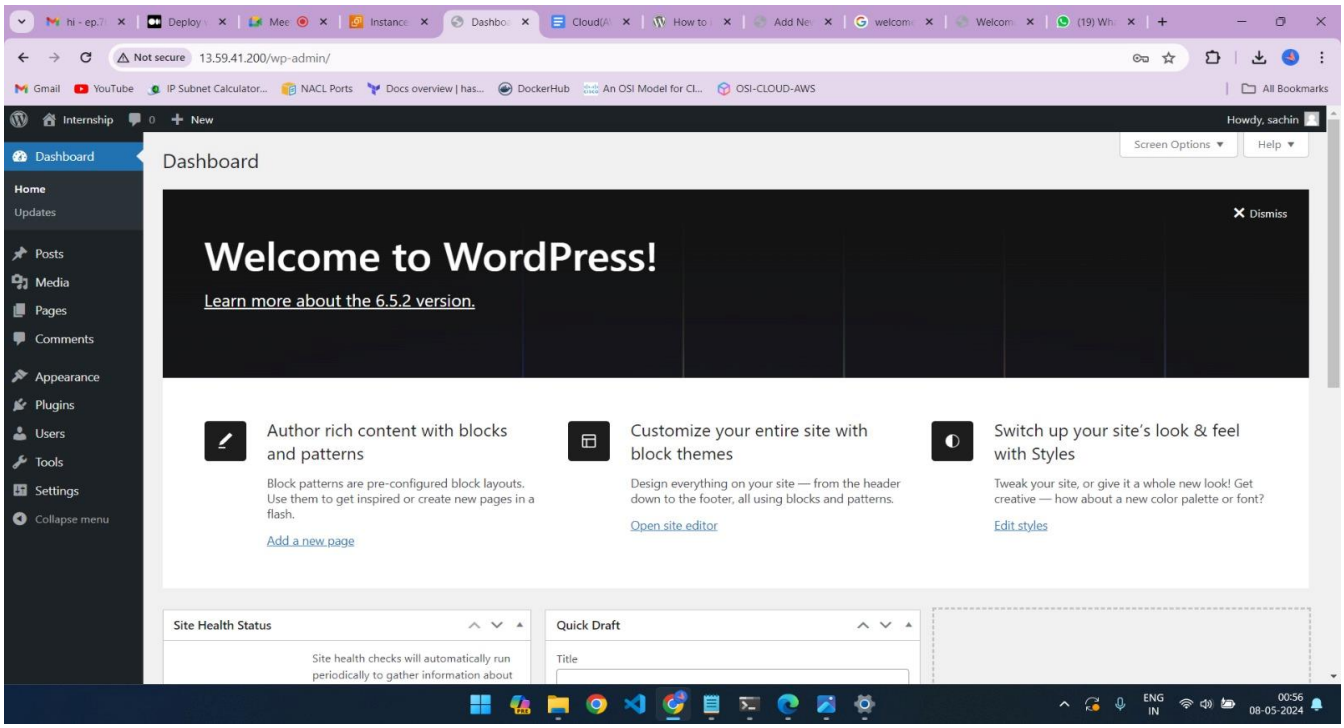
affiliates. Other names may be trademarks of their respective
owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> CREATE DATABASE wordpress;
Query OK, 1 row affected (0.02 sec)
mysql> CREATE USER 'wordpressuser'@'localhost' IDENTIFIED BY 'password';
Query OK, 0 rows affected (0.04 sec)
mysql> GRANT ALL PRIVILEGES ON wordpress.* TO 'wordpressuser'@'localhost';
Query OK, 0 rows affected (0.01 sec)
mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.01 sec)
mysql> exit
Bye
ubuntu@ip-172-31-2-72:~$ client_loop: send disconnect: Connection reset
PS C:\Users\suman\Downloads> history
ENG
IN
00:55
08-05-2024


Not secure
3.143.7.27/wp-admin/setup-config.php?step=2
All right, sparky! You've made it through this part of the installation. WordPress can now communicate with your database. If you are ready, time now to...
Run the installation


Not secure
3.143.7.27/wp-admin/install.php?step=2
Success!
WordPress has been installed. Thank you, and enjoy!
Username
sachin
Password
Your chosen password.
Log In


Not secure 3.143.7.27/wp-admin/edit.php?post_type=post
Internship 0 New
Howdy, sachin
Dashboard
Posts
All Posts
Add New Post
Categories
Tags
Media
Pages
Comments
Appearance
Plugins
Users
Tools
Settings
Collapse menu
Posts Add New Post
Screen Options Help
1 post moved to the Trash. Undo
All (2) | Published (1) | Draft (1) | Trash (1)
Search Posts
Bulk actions Apply All dates All Categories Filter
2 items
Title Author Categories Tags Date
Welcome to My page — Draft sachin Uncategorized — Last Modified 2024/05/07 at 7:07 pm
Hello world! sachin Uncategorized — Published 2024/05/07 at 6:54 pm
Thank you for creating with WordPress.
Version 6.5.3


Not secure 3.143.7.27/index.php/2024/05/07/welcome-to-my-page/
Welcome to My Page
May 7, 2024 — by sachin in Uncategorized
WELCOME
This is my 1st week task.



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8. sudo chown -R www-data:www-data /var/www/html/
9. ls
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13. sudo cp /var/www/html/wp-config-sample.php /var/www/html/wp-config.php
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