

# Monolithic Architecture

## 1. Install apache php and mysql

```
sudo apt update  
sudo apt install apache2 php php-mysql mysql-server -y
```

## 2. Download and install wordpress

```
wget https://wordpress.org/latest.tar.gz  
tar -xzf latest.tar.gz  
sudo mv wordpress /var/www/html/
```

## 3. Configure mysql

```
sudo mysql_secure_installation  
sudo mysql -u root -p
```

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

## 4. Configure wordpress

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

Update database settings in wp-config.php.

## 5. Set Permissions and Restart Apache

```
sudo chown -R www-data:www-data /var/www/html/wordpress  
sudo systemctl restart apache2
```

# Microservices Architecture

1. Create two EC2 instances
2. Configure mysql on instance 2

```
sudo apt update
```

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

```
sudo mysql_secure_installation
```

```
sudo mysql -u root -p
```

```
CREATE DATABASE wordpress;
```

```
CREATE USER 'wp_user'@'%' IDENTIFIED BY 'password';
```

```
GRANT ALL PRIVILEGES ON wordpress.* TO 'wp_user'@'%';
```

```
FLUSH PRIVILEGES;
```

```
EXIT;
```

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

```
bind-address to 0.0.0.0
```

```
sudo systemctl restart mysql
```

3. Install wordpress on instance 2

```
sudo apt update
```

```
sudo apt install apache2 php php-mysql -y
```

```
wget https://wordpress.org/latest.tar.gz
```

```
tar -xzf latest.tar.gz
```

```
sudo mv wordpress /var/www/html/
```

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

```
/var/www/html/wordpress/wp-config.php
```

```
sudo nano /var/www/html/wordpress/wp-config.php
```

4. Setup permissions and restart apache

```
sudo chown -R www-data:www-data /var/www/html/wordpress
```

```
sudo systemctl restart apache2
```