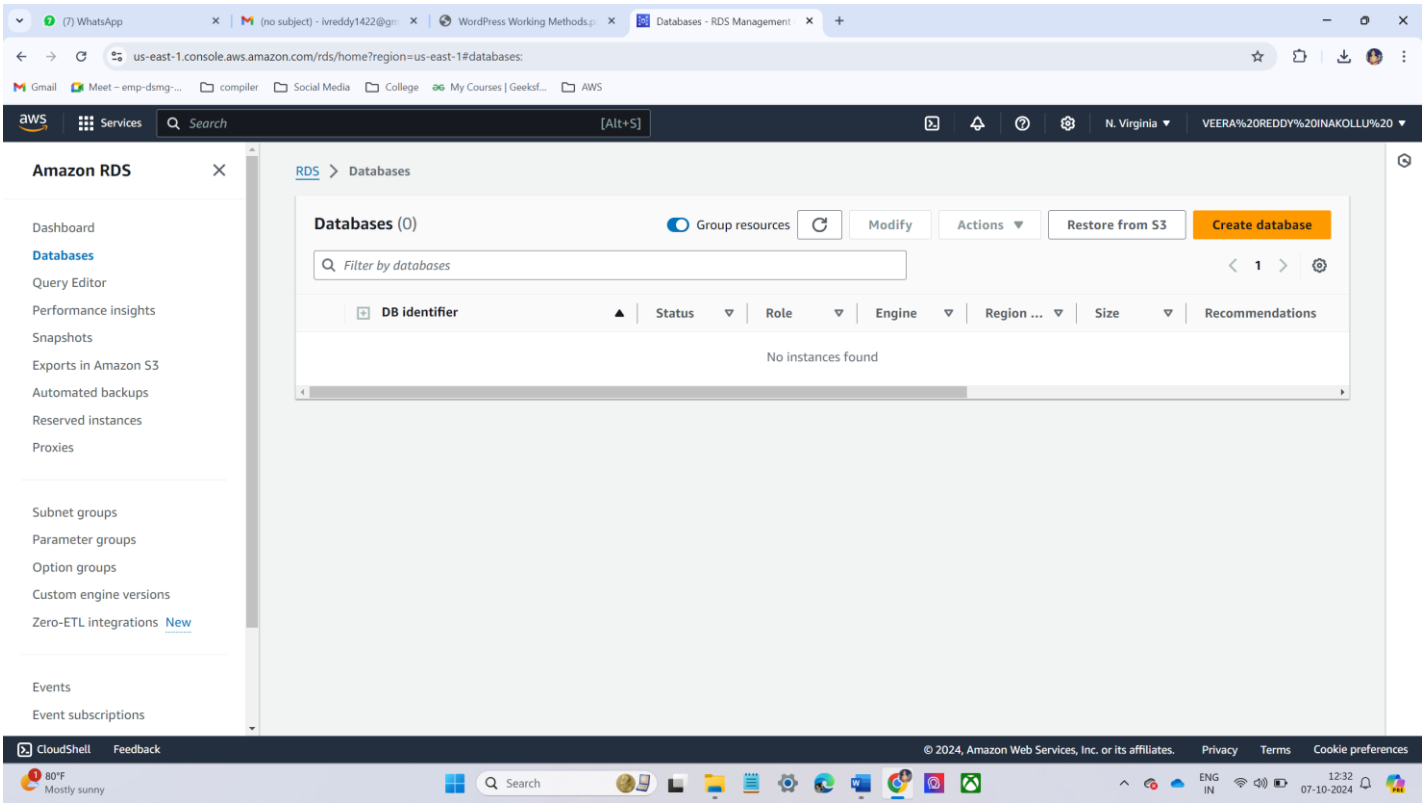
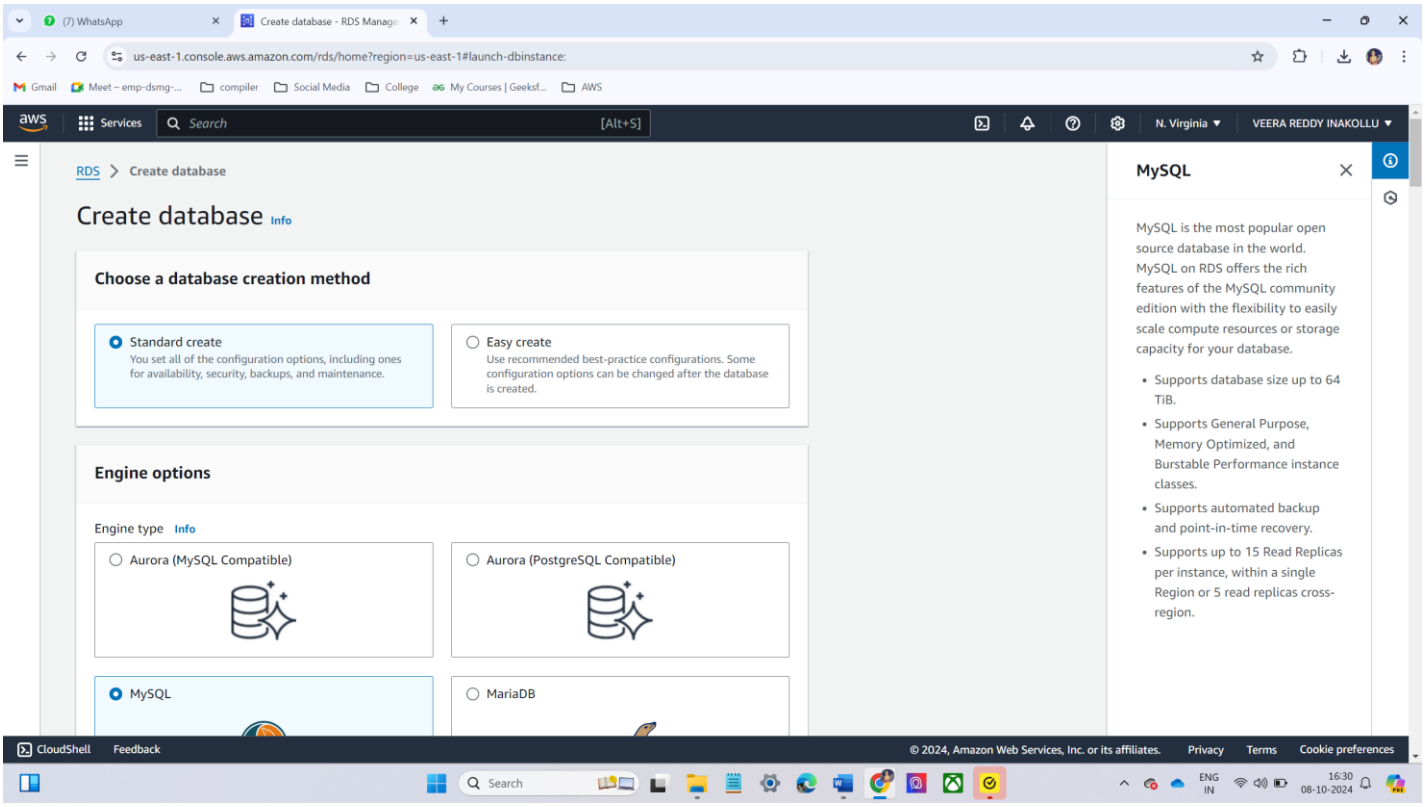
Deploy WordPress web application by using AWS RDS(MYSQL) service (manually).

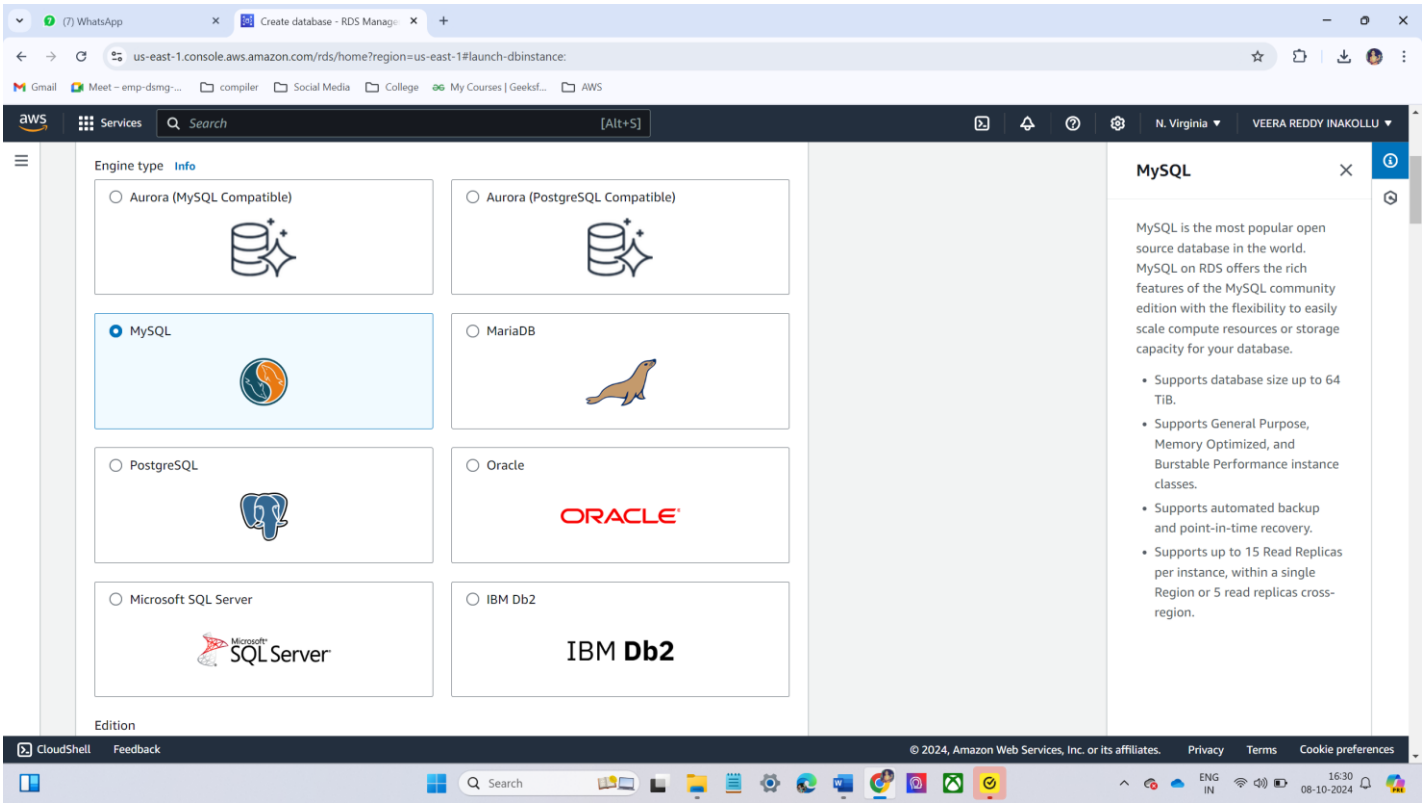
- Now first go to aws account and log into aws and search RDS and click on create database.



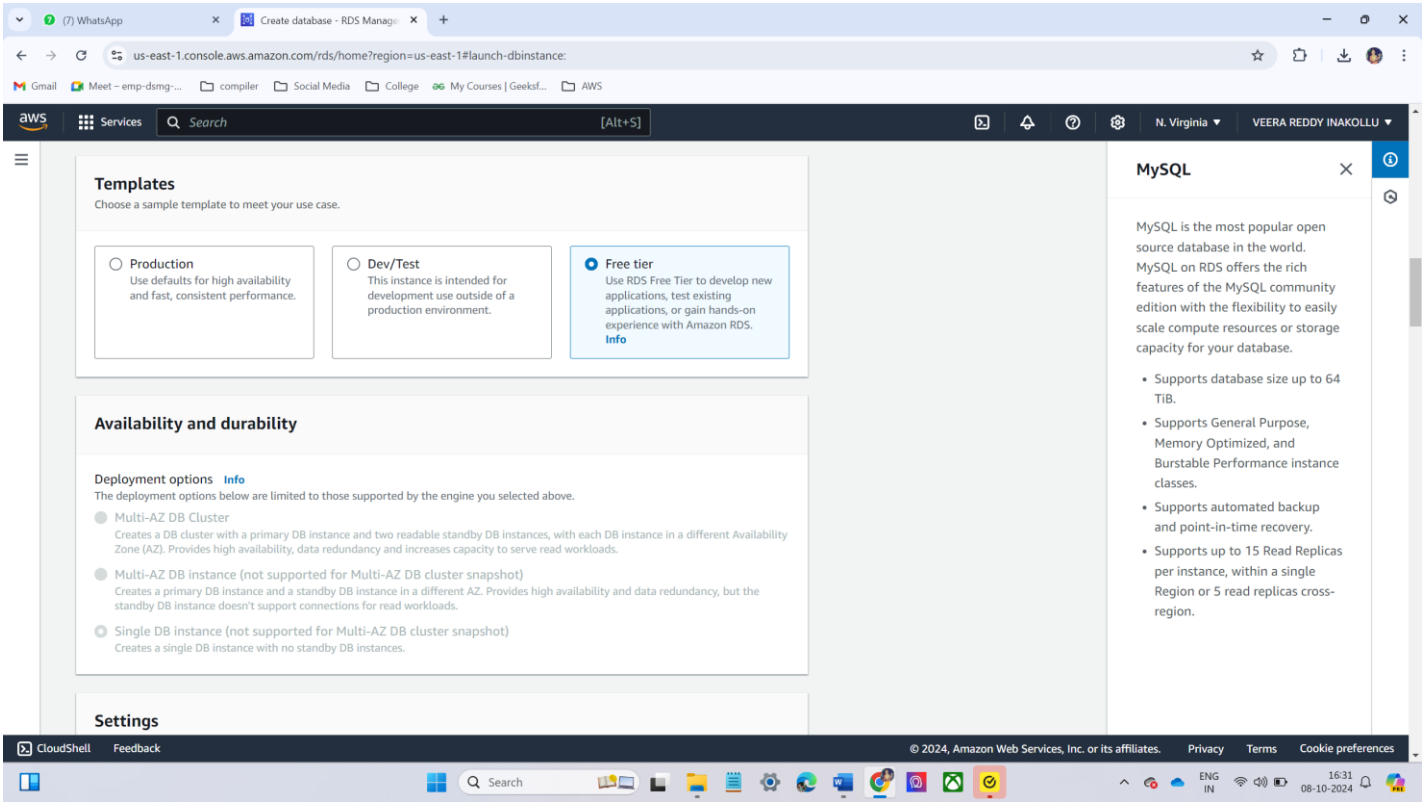
- Now select the database creation method (select standard method) because by selecting easy creation methods then its disables free tier template.



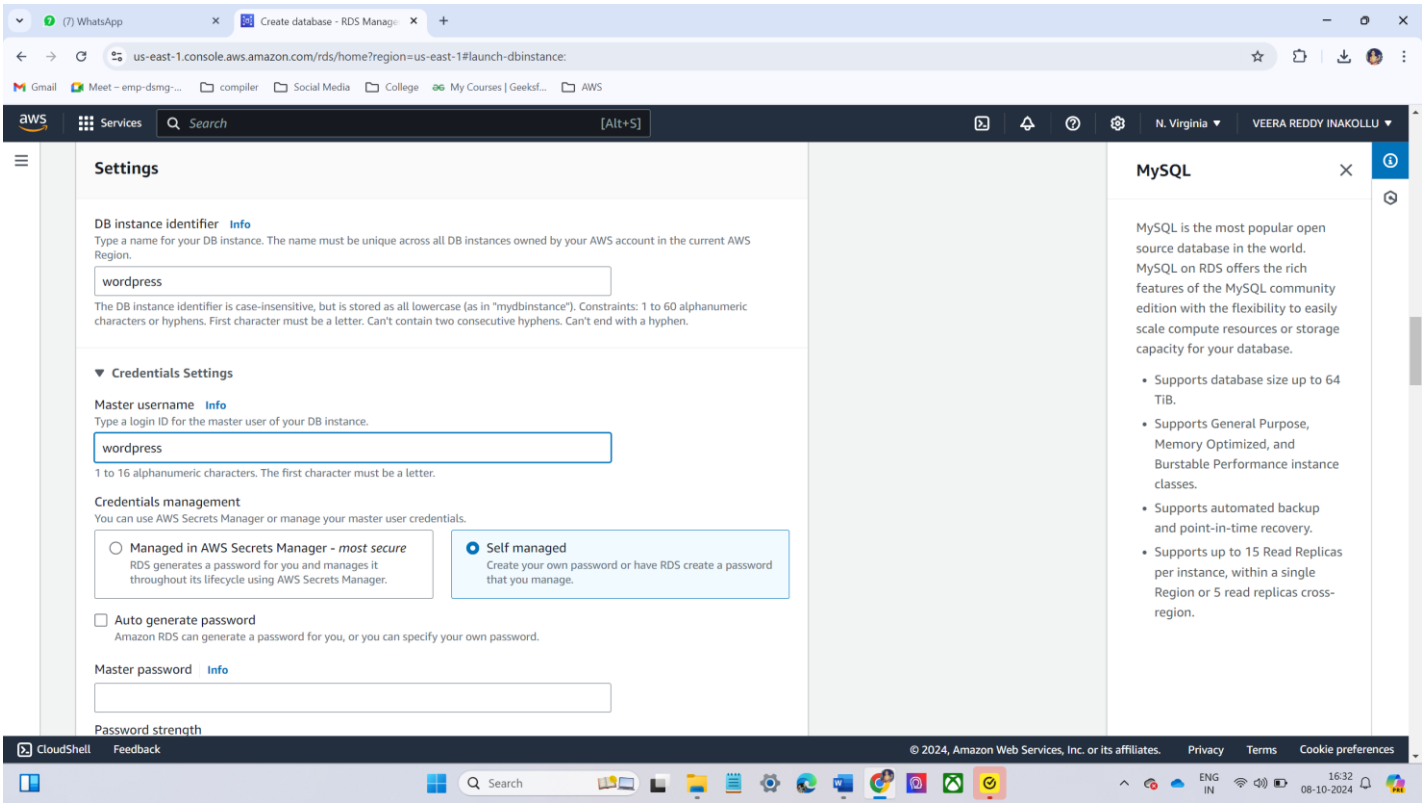
- Now select the database engine with version but I select the mysql database engine because it's a huge usage in real time organizations.



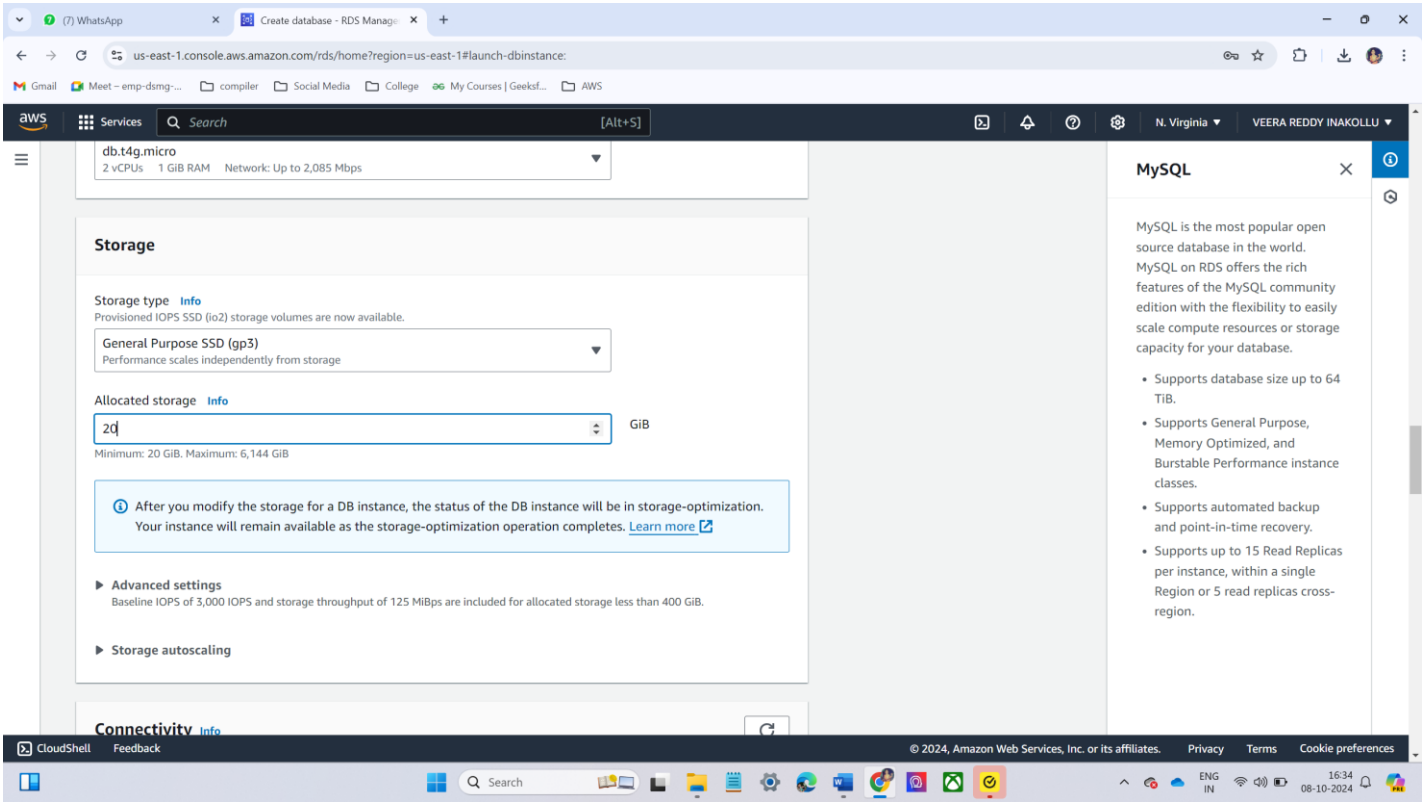
- Now select the template as free tier and by selecting the free tier it disable the availability zone section options.



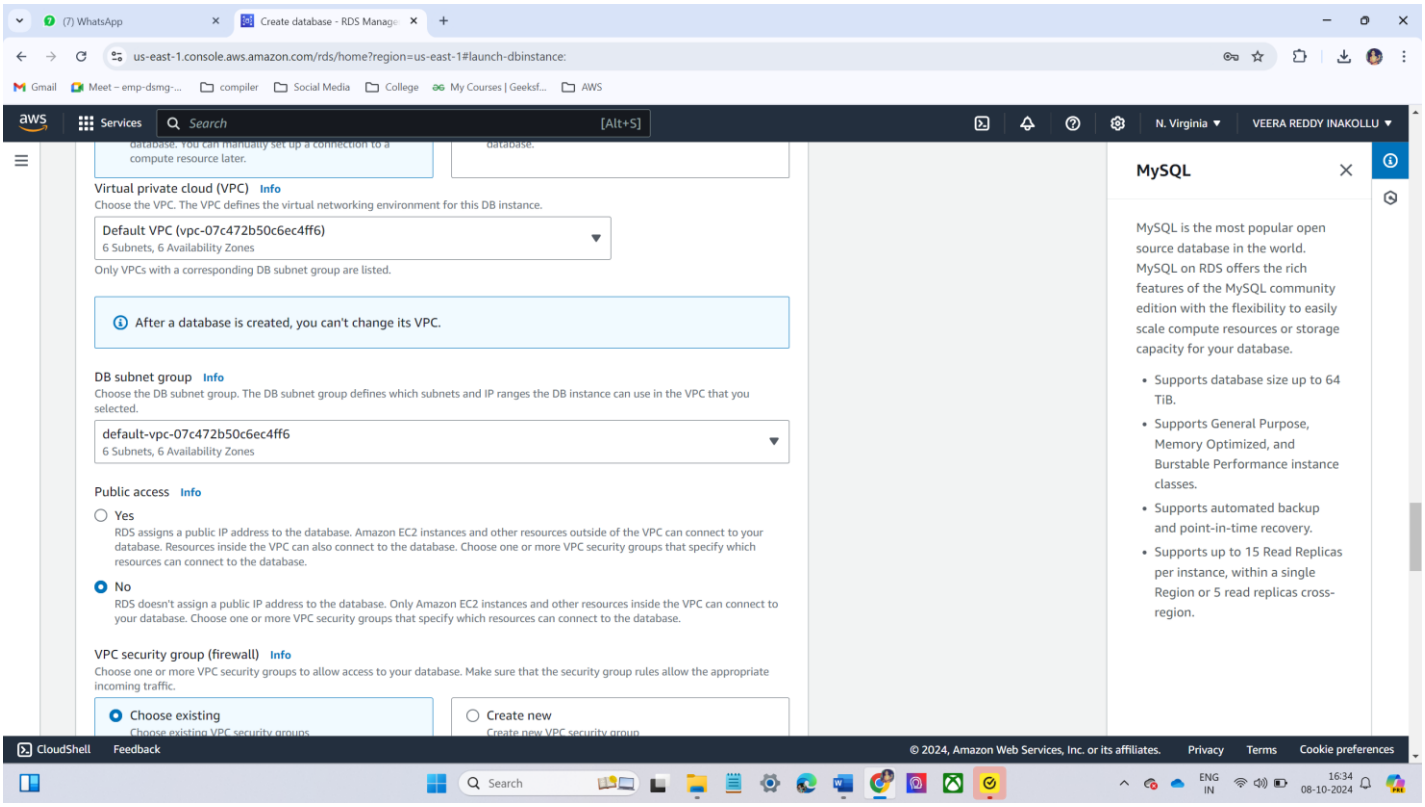
- Now give some name to your database and give username and password as credentials for your databases.



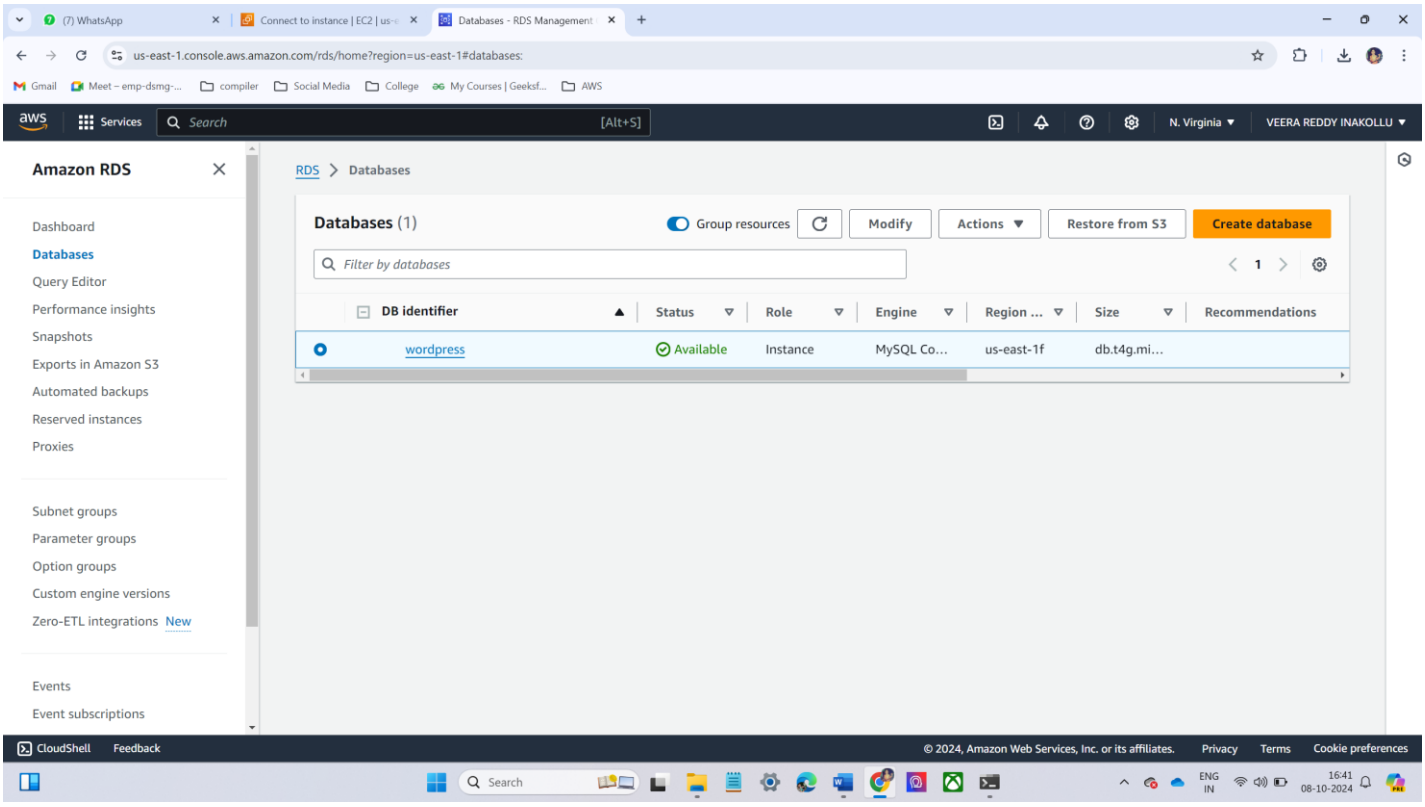
- Now select the storage type as general purpose (SSD (gp2)) and enter the storage values as maximum (1000gb) and minimum (20gb).



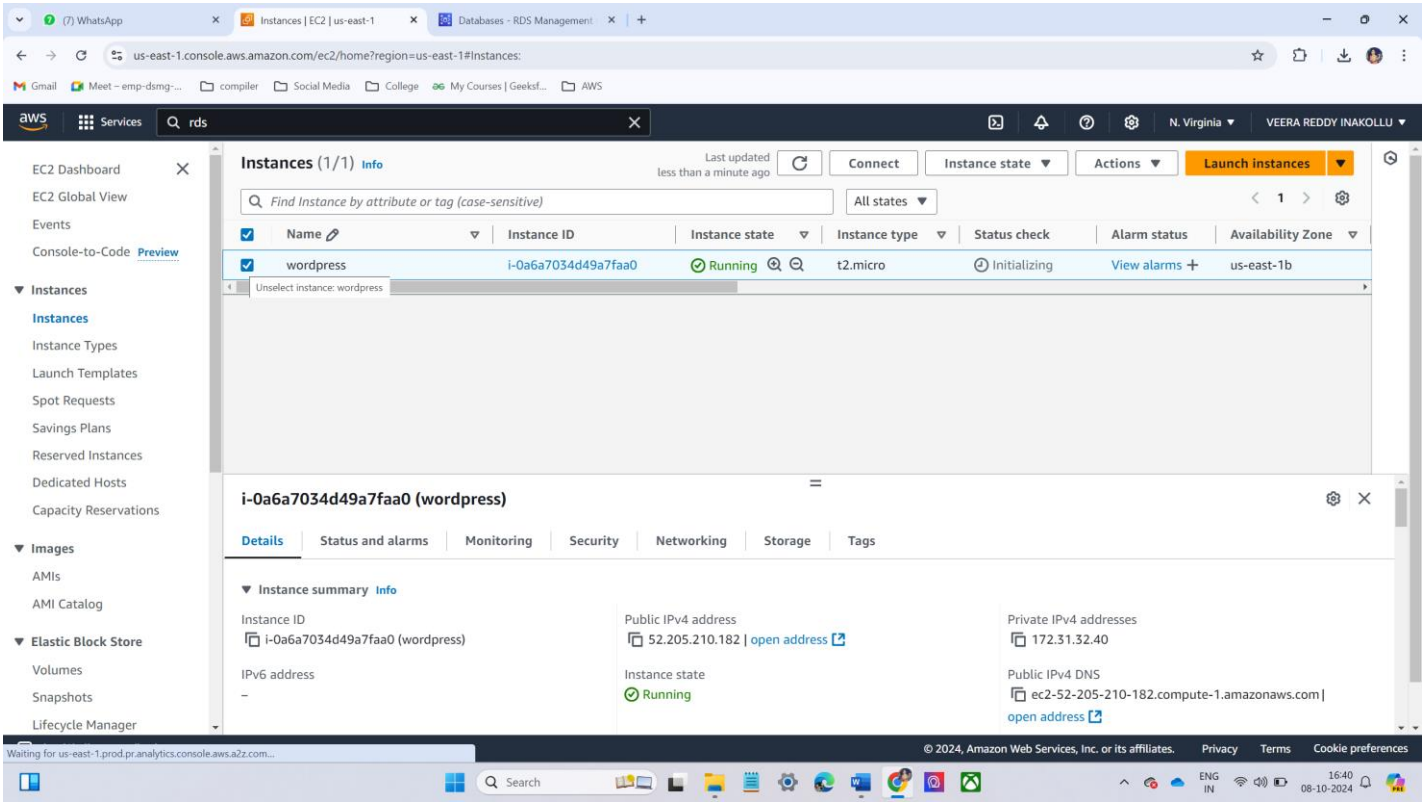
- Now select your created vpc or select default vpc and it automatically select the database subnet group.



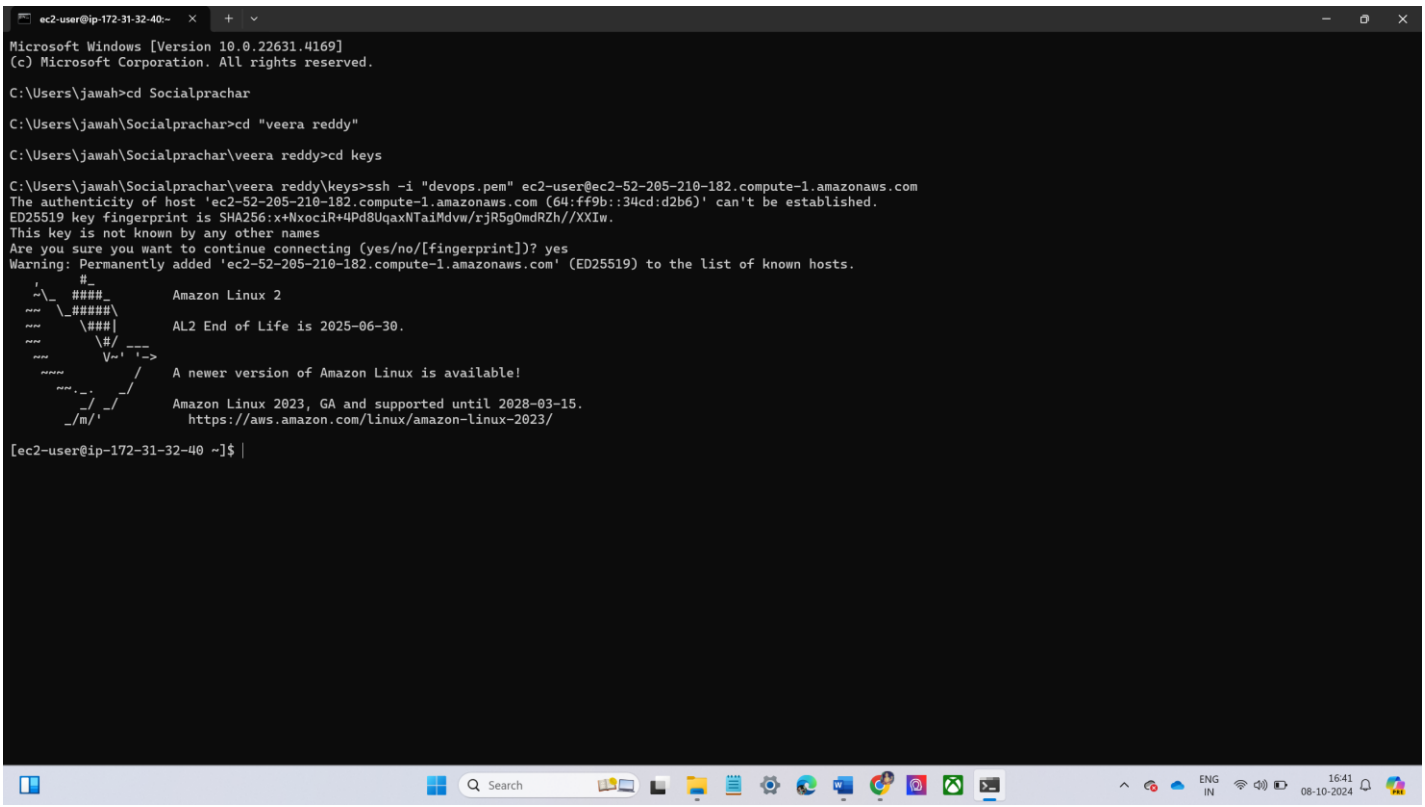
- Now give the name of the database which you give at the stage of DB instance identifier enter same name here.
- Now click on create database button and will create the MYSQL database.



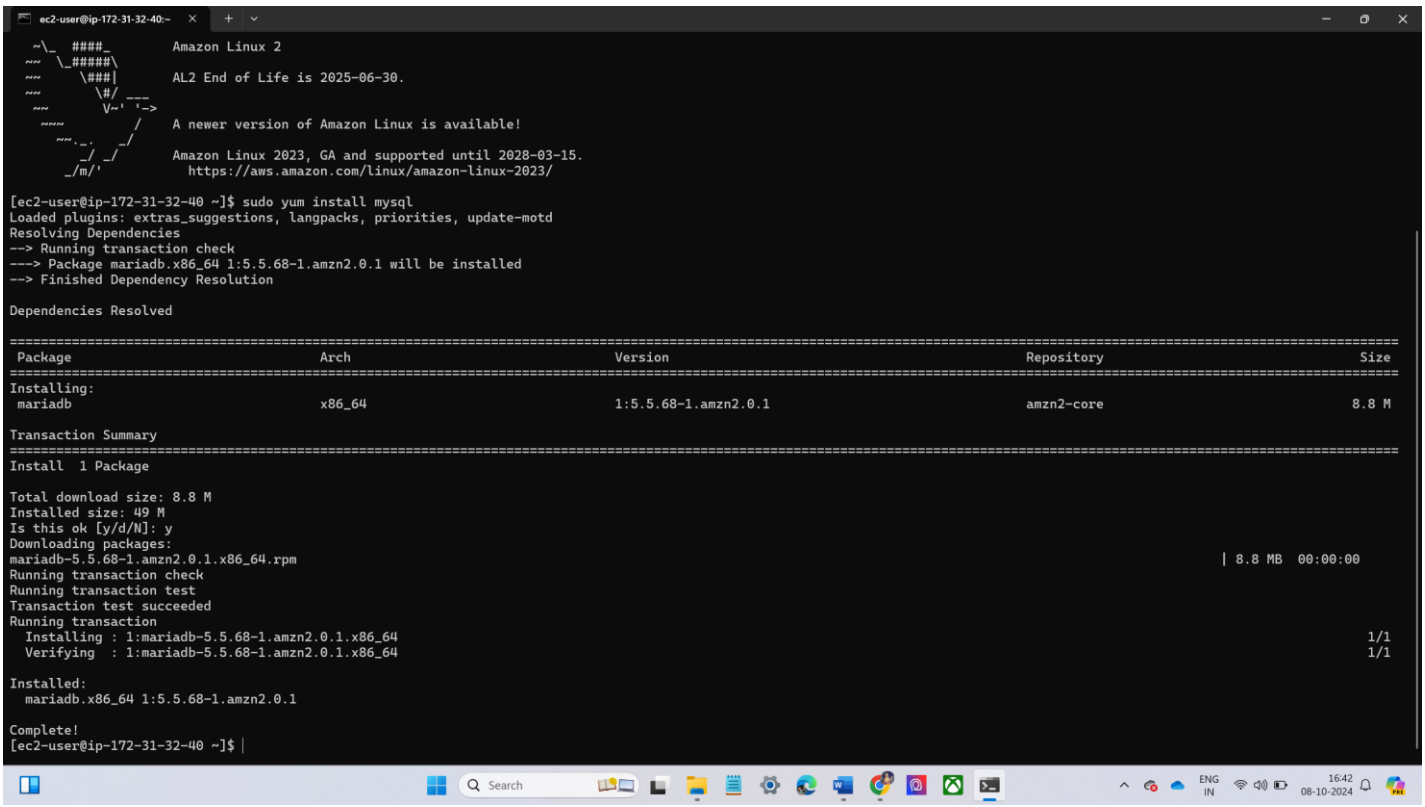
- Now create the ec2 instance by selecting ec2 instance and launch the instance by selecting Amazon Linux -2 version and giving security group with ssh(22) and http(80).



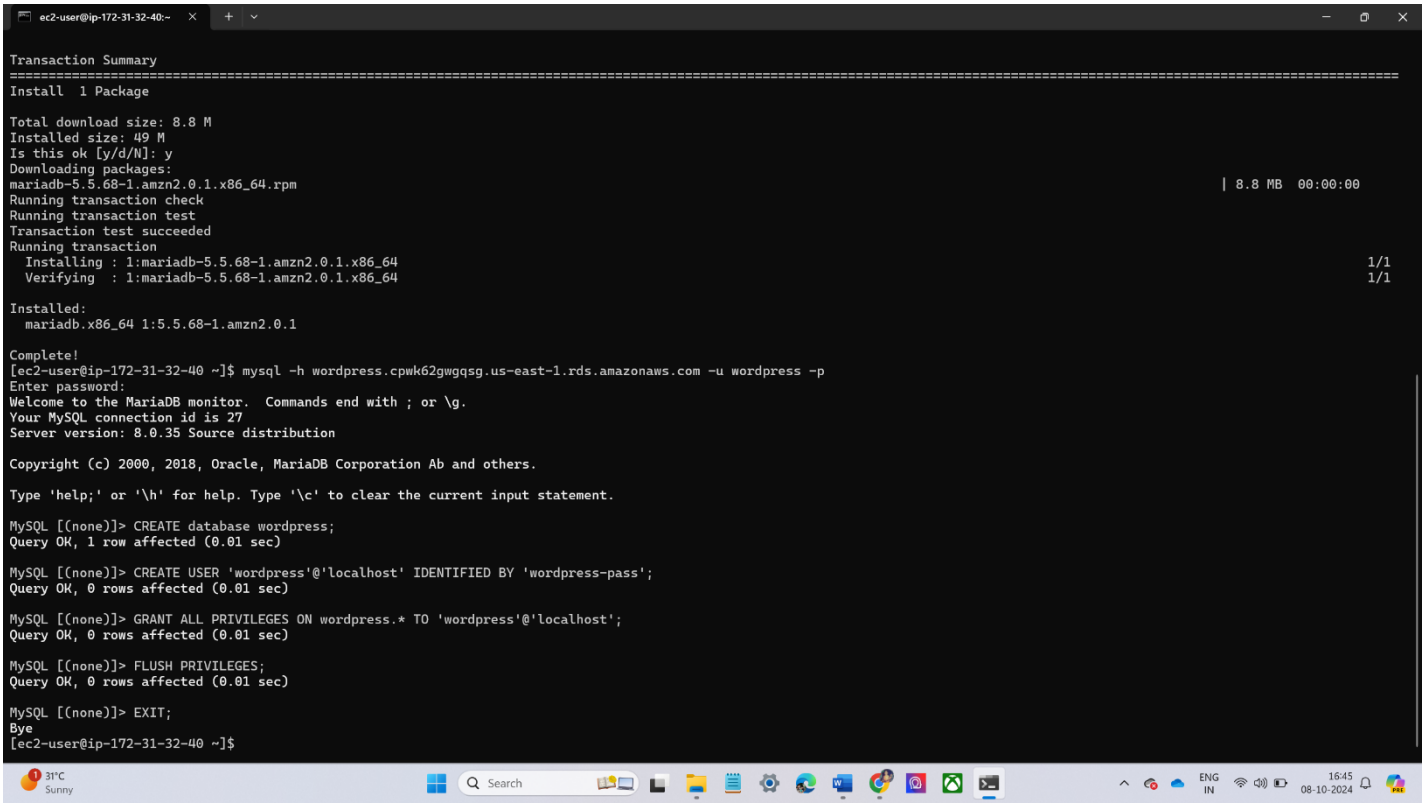
- Now connect the virtual server through the git bash as shown in fig.



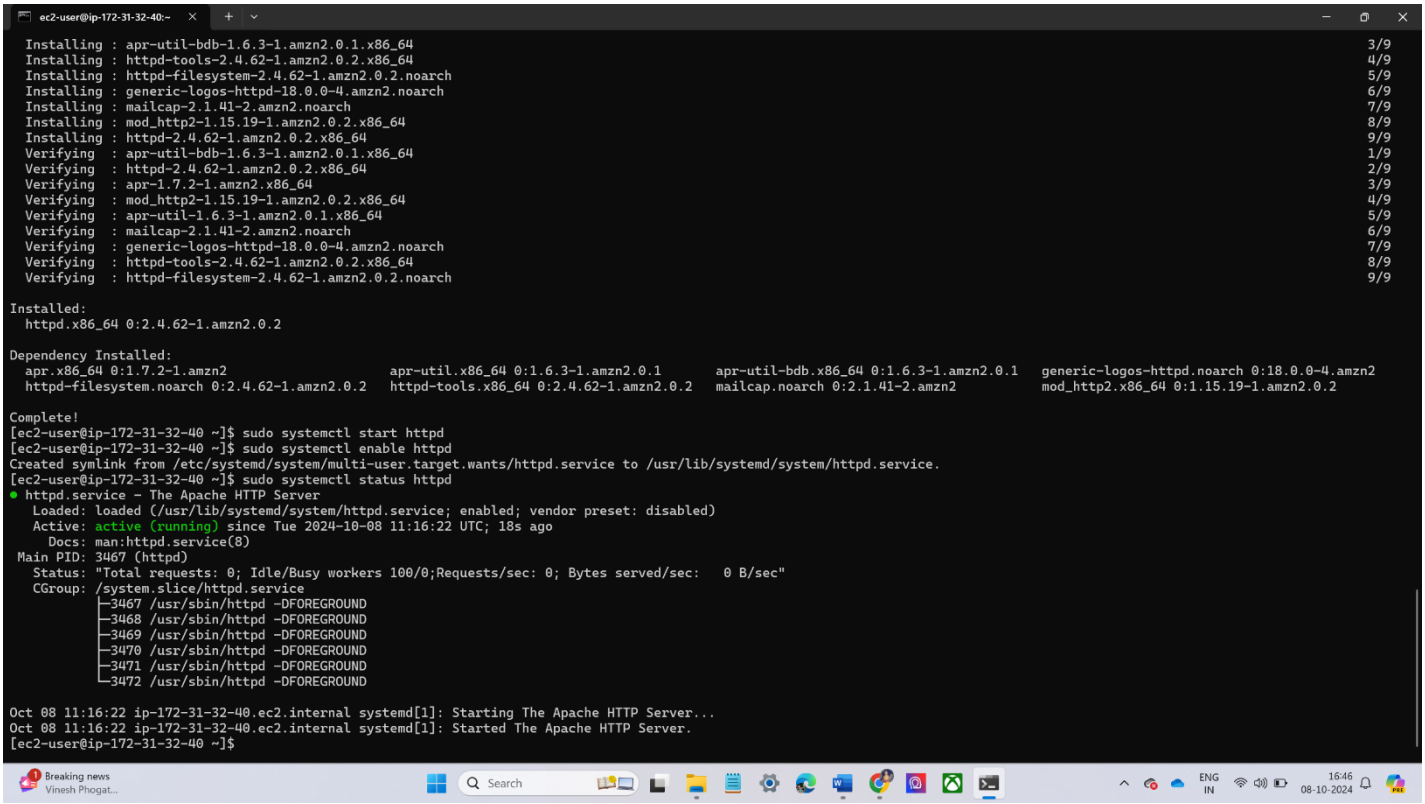
- Now update the Linux version by using command <sudo yum update -y> and install MySQL by using the command sudo yum install -y mysql2.



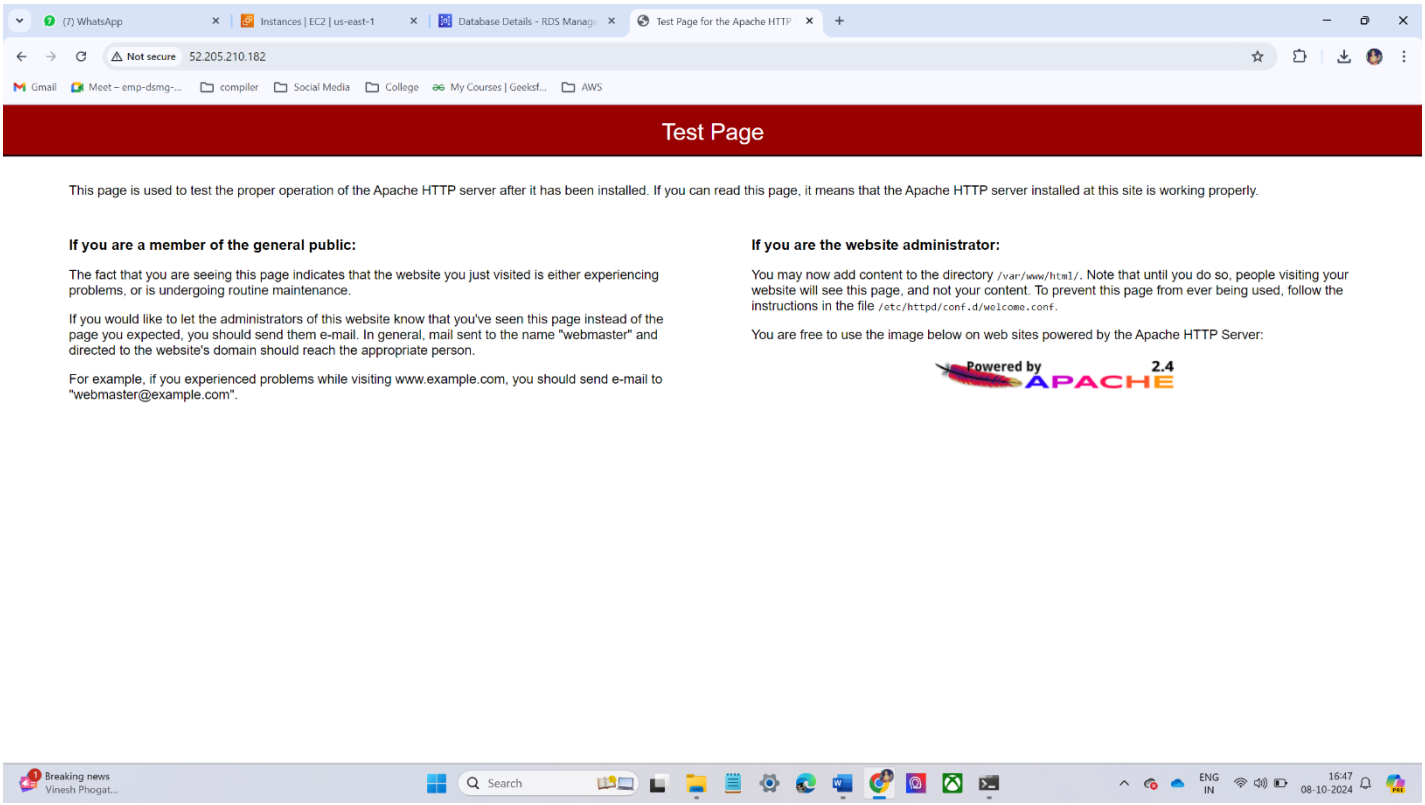
- Now to allow create traffic from ec2 instance into rds database for that go to rds service and select your database.
- Now go inside the created database and go to the security under this option these is security group id click on that.
- Now access the MySQL database by using the command as “export MYSQL_HOST <endpoint address>” for that go inside the created database and go to the endpoint address and select and copy the endpoint address
- Now give the credentials of database by giving the command as “MySQL –user=<username> --password=<password> database=”name”
- There is another method command to access your database as “mysql -h <endpoint address> -u <user> -p” press enter button it asks the password to enter it, and press enter button
- Now create a database user for your WordPress application and give it permission to access the WordPress database. By using these commands as
  a. CREATE USER wordpress IDENTIFIED BY ‘wordpress-pass’
  b. GRANT ALL PRIVILEGE ON wordpress. * TO wordpress
  c. FLUSH PRIVILEGES
  d. EXIT



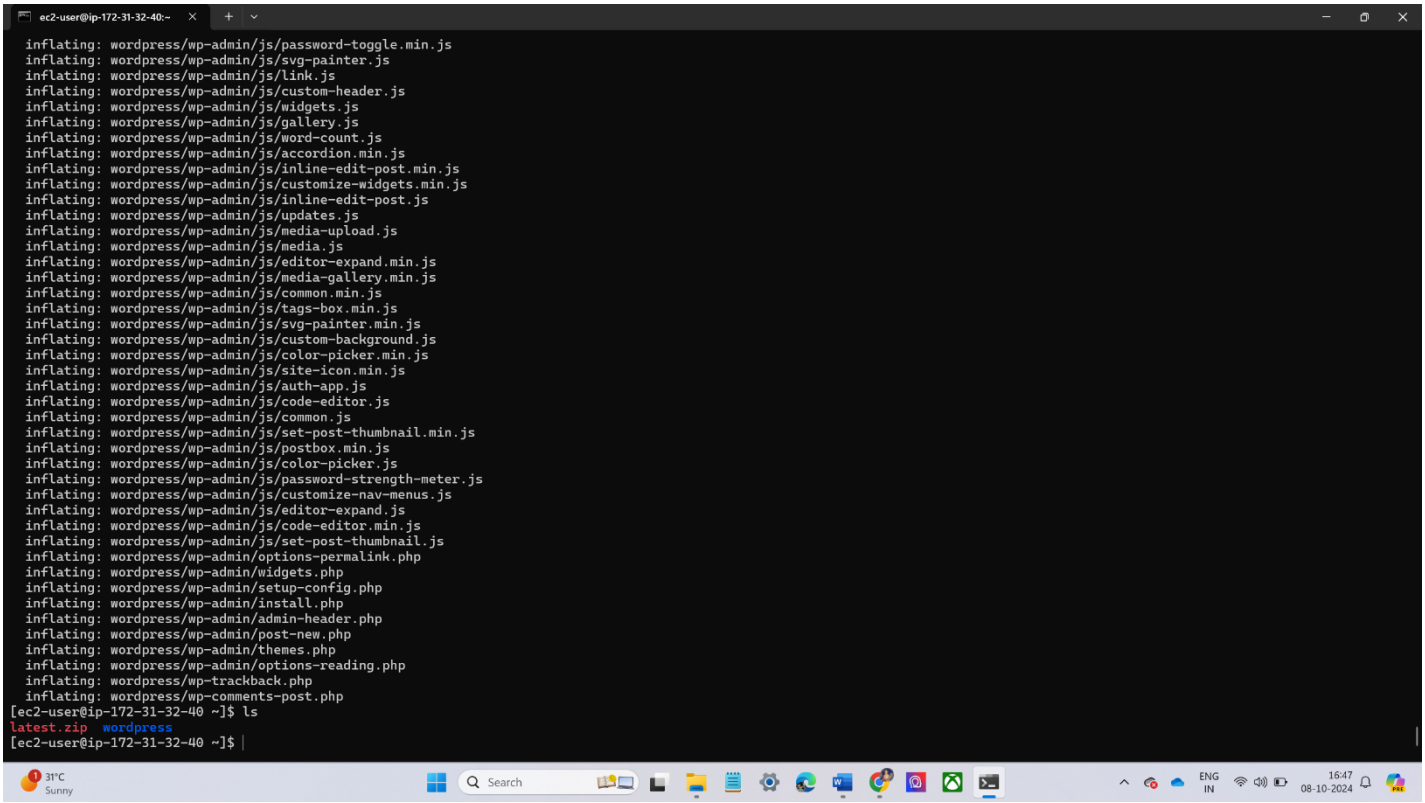
- To host WordPress application need a Apache web server httpd install that by giving command as <sudo yum install httpd -y> and start and enable the httpd service by giving the command as
  a. “sudo service httpd start (or) sudo systemctl start httpd
  b. Sudo chkconfig httpd on (or) sudo systemctl enable httpd



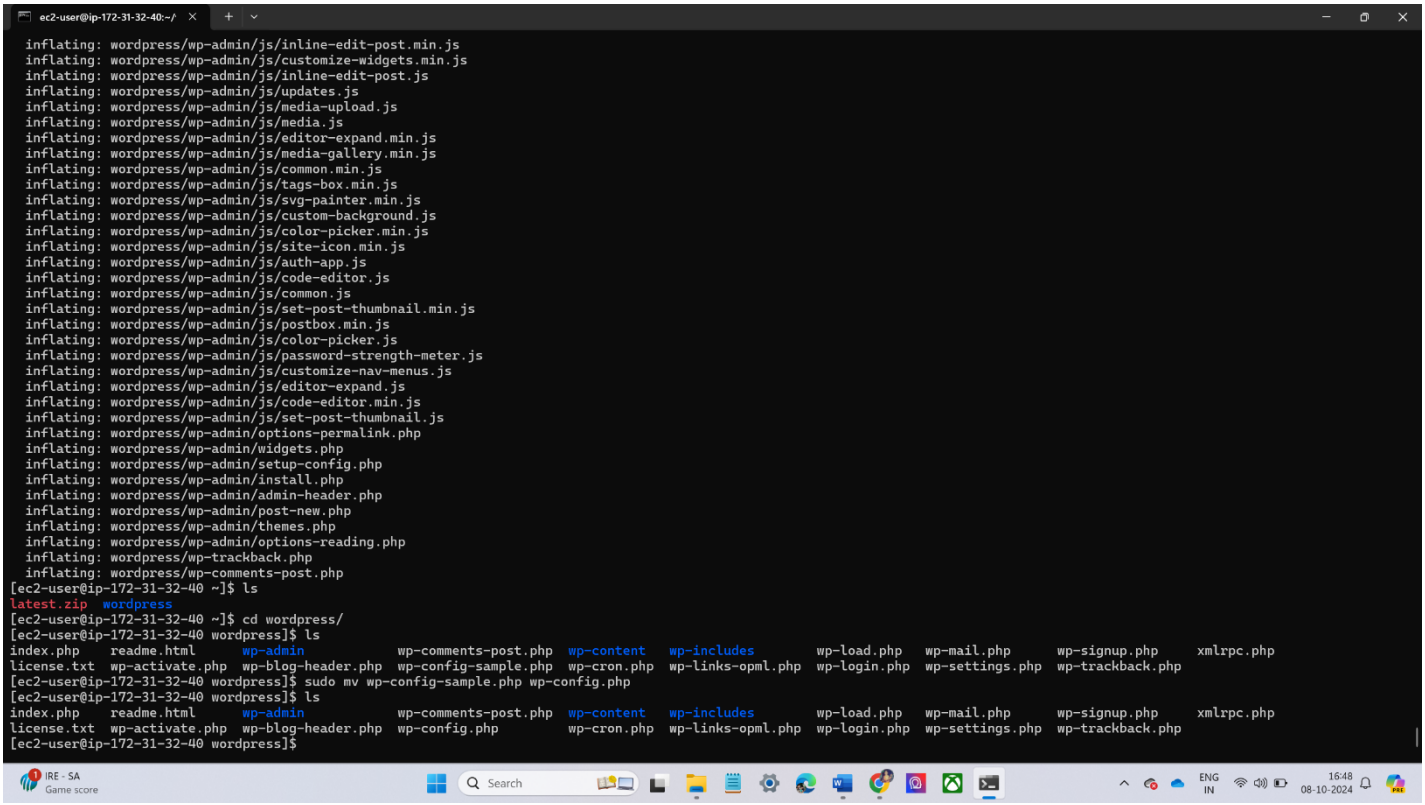
- Now go to ec2 instance and copy the public ipv4 it on Google. Browse it and check the official page of httpd is displayed



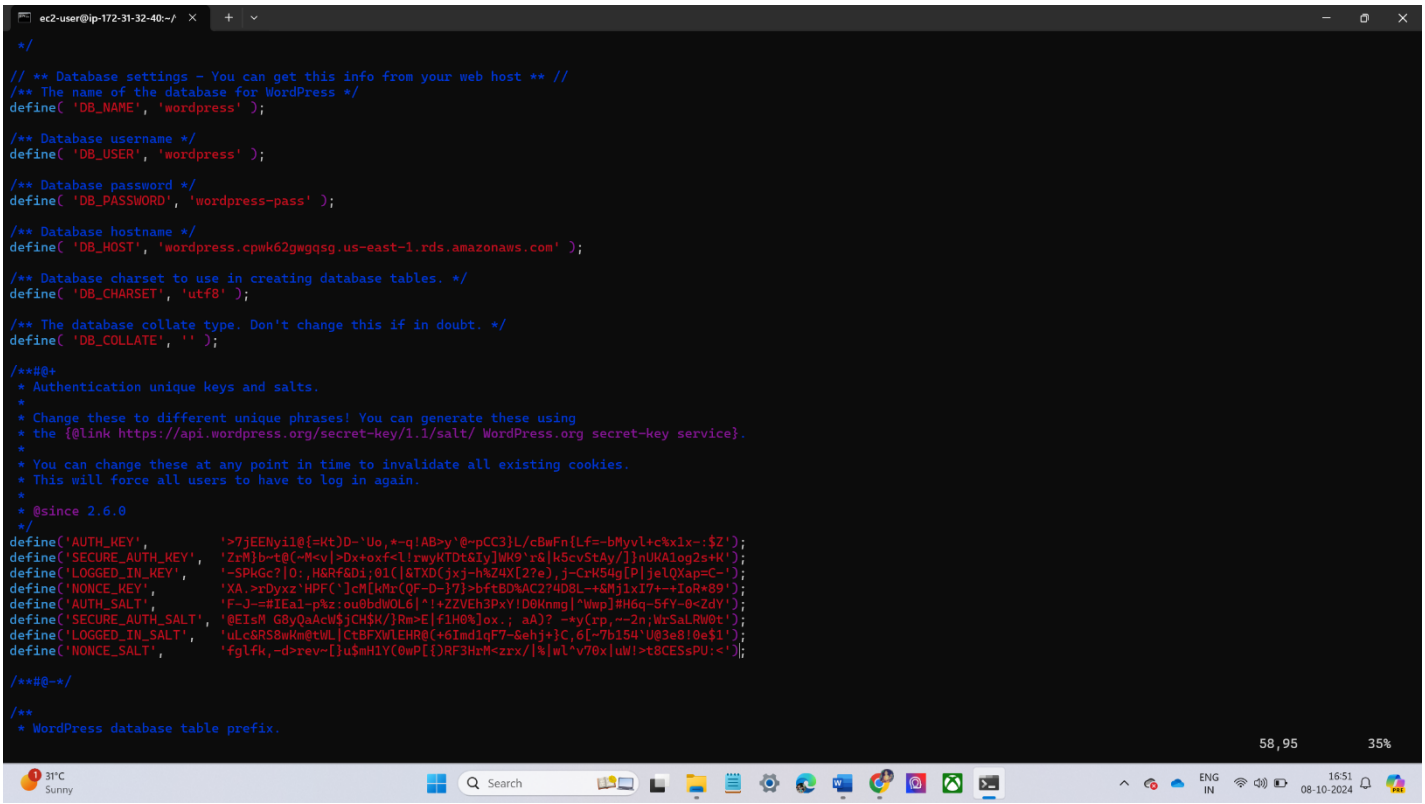
- Now go to browse and select an download WordPress and click on proper link and select and copy the address link of WordPress. Download file and past that along with wget command in gitbash as “wget <address. Link>”
- It gives the zip file to unzip that file by using a command as “unzip <zip file>”



- To run WordPress web application, you must install of WordPress web application as php language with the following commands <sudo Amazon-linux-extras install -y lamp-mariadb10.2-php7.2.php7.2> otherwise update ec2 instance with the following commands <sudo yum update -y>
- Now go inside the unzip directory by using command as “cd <unzip directory> and change the WordPress configuration file by giving command as “sudo mv wp-config-sample.php wp-config.php”



- Now do some configurations in the WordPress configuration file as by giving database name, username, password and hostname for that execute as sudo vi wp-config.php" .along with these change the WordPress secret key. To get the secret key browse the Google generate WordPress secret key.



- Now copy the WordPress directory to the document root directory to host the web application of WordPress by giving as command as

  Sudo cp -I <unzip file>/* /var/www/html/

- To restart the httpd server by using command sudo systemctl restart the httpd

```
  inflating: wordpress/wp-admin/js/auth-app.js
  inflating: wordpress/wp-admin/js/code-editor.js
  inflating: wordpress/wp-admin/js/common.js
  inflating: wordpress/wp-admin/js/set-post-thumbnail.min.js
  inflating: wordpress/wp-admin/js/postbox.min.js
  inflating: wordpress/wp-admin/js/color-picker.js
  inflating: wordpress/wp-admin/js/password-strength-meter.js
  inflating: wordpress/wp-admin/js/customize-nav-menus.js
  inflating: wordpress/wp-admin/js/editor-expand.js
  inflating: wordpress/wp-admin/js/code-editor.min.js
  inflating: wordpress/wp-admin/js/set-post-thumbnail.js
  inflating: wordpress/wp-admin/options-permalink.php
  inflating: wordpress/wp-admin/widgets.php
  inflating: wordpress/wp-admin/setup-config.php
  inflating: wordpress/wp-admin/install.php
  inflating: wordpress/wp-admin/admin-header.php
  inflating: wordpress/wp-admin/post-new.php
  inflating: wordpress/wp-admin/themes.php
  inflating: wordpress/wp-admin/options-reading.php
  inflating: wordpress/wp-trackback.php
  inflating: wordpress/wp-comments-post.php
[ec2-user@ip-172-31-32-40 ~]$ ls
latest.zip  wordpress
[ec2-user@ip-172-31-32-40 ~]$ cd wordpress/
[ec2-user@ip-172-31-32-40 wordpress]$ ls
index.php    readme.html      wp-admin           wp-comments-post.php  wp-content   wp-includes        wp-load.php   wp-mail.php      wp-signup.php     xmlrpc.php
license.txt  wp-activate.php  wp-blog-header.php  wp-config-sample.php  wp-cron.php  wp-links-opml.php  wp-login.php  wp-settings.php  wp-trackback.php
[ec2-user@ip-172-31-32-40 wordpress]$ sudo mv wp-config-sample.php wp-config.php
[ec2-user@ip-172-31-32-40 wordpress]$ ls
index.php    readme.html      wp-admin           wp-comments-post.php  wp-content   wp-includes        wp-load.php   wp-mail.php      wp-signup.php     xmlrpc.php
license.txt  wp-activate.php  wp-blog-header.php  wp-config.php         wp-cron.php  wp-links-opml.php  wp-login.php  wp-settings.php  wp-trackback.php
[ec2-user@ip-172-31-32-40 wordpress]$
[ec2-user@ip-172-31-32-40 wordpress]$
[ec2-user@ip-172-31-32-40 wordpress]$
[ec2-user@ip-172-31-32-40 wordpress]$
[ec2-user@ip-172-31-32-40 wordpress]$
[ec2-user@ip-172-31-32-40 wordpress]$ sudo vi wp-config.php
"wp-config.php" [dos] 96L, 3342B written
[ec2-user@ip-172-31-32-40 wordpress]$ cd
[ec2-user@ip-172-31-32-40 ~]$ sudo cp -r wordpress/* /var/www/html/
[ec2-user@ip-172-31-32-40 ~]$ cd /var/www/html/
[ec2-user@ip-172-31-32-40 html]$ ls
index.php    readme.html      wp-admin           wp-comments-post.php  wp-content   wp-includes        wp-load.php   wp-mail.php      wp-signup.php     xmlrpc.php
license.txt  wp-activate.php  wp-blog-header.php  wp-config.php         wp-cron.php  wp-links-opml.php  wp-login.php  wp-settings.php  wp-trackback.php
[ec2-user@ip-172-31-32-40 html]$ sudo systemctl restart httpd
[ec2-user@ip-172-31-32-40 html]$
```

- Now go to ec2 instance and copy public ipv4 and paste it on google browse it and check the official page of WordPress it displays