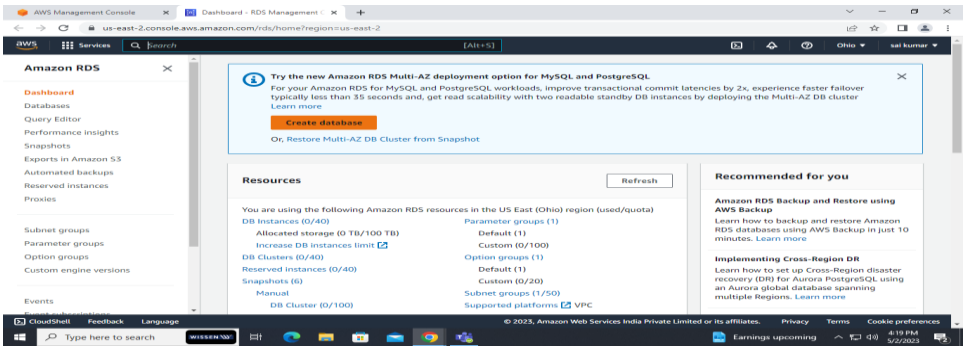
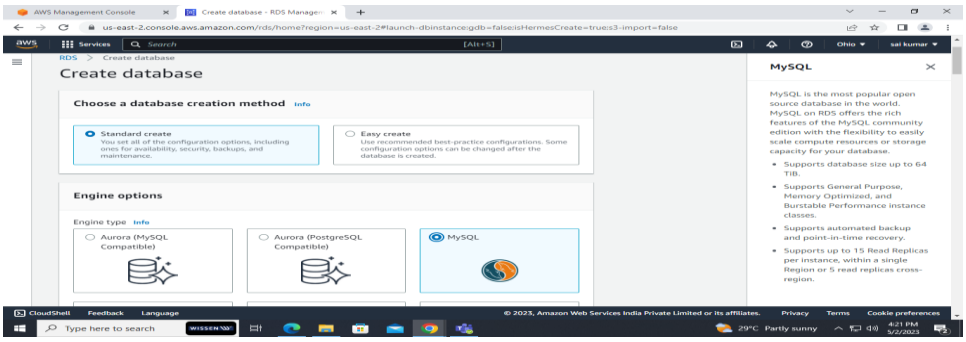
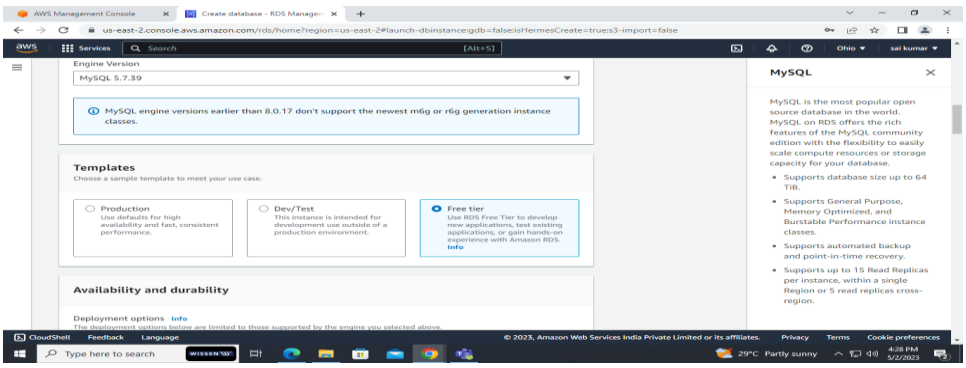
Emp name:Sai Kumar Vemula Blue/green deployment of RDS Emp id:6778

Open the AWS Management Console, when the console opens, select Database from the left navigation pane and choose RDS to open the Amazon RDS console. Click on create database.

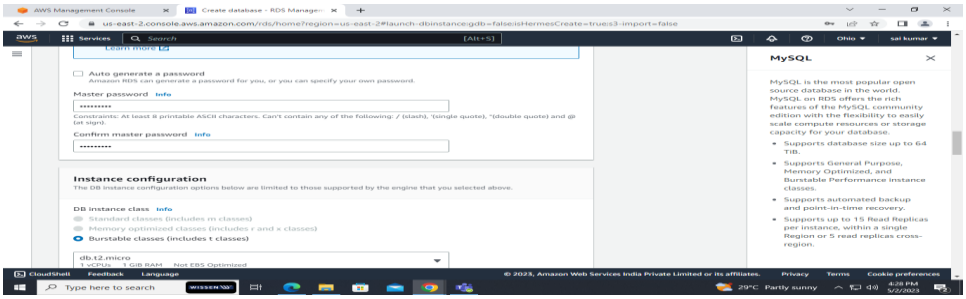


You now have options to select your engine. Choose the MySQL icon, leave the default value of edition and engine version, and select the Free Tier template





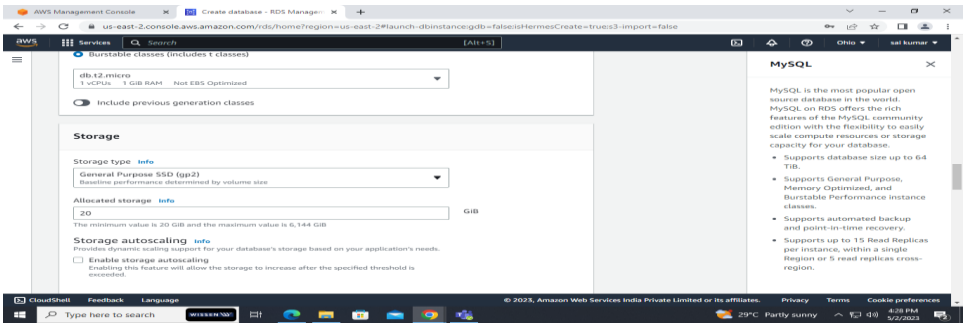
You will now configure your DB instance. DB instance identifier: Type a name for the DB instance that is unique for your account in the Region that you selected. We will name as **mydb1**



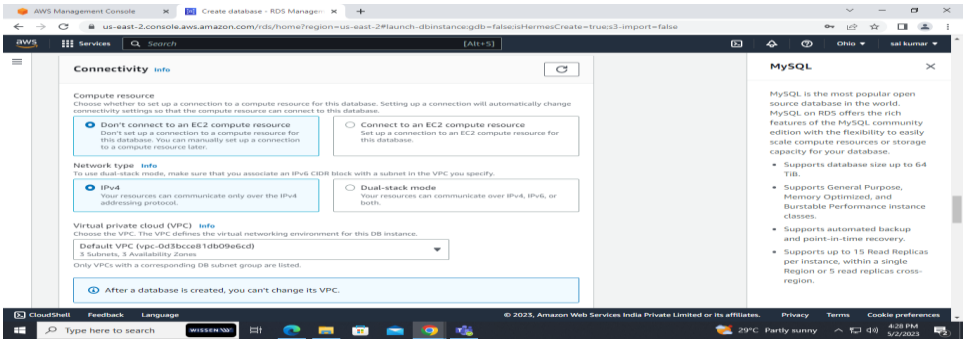
Master username: Type a username that you will use to log in to your DB instance. We will give as “admin” Master password: Type a password.

We will give a password “********”.

Confirm password: Retype your password

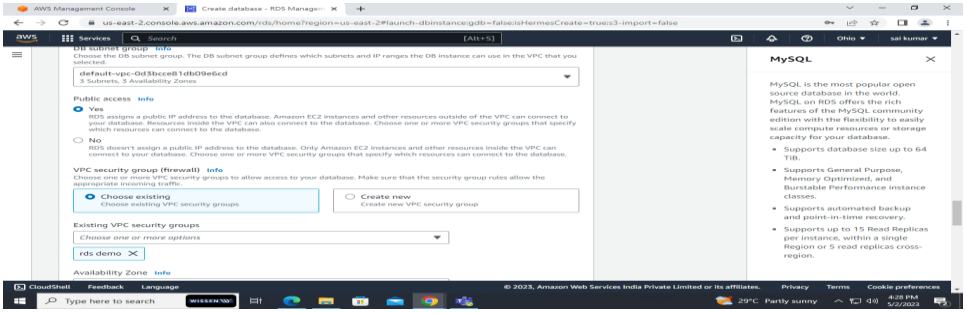


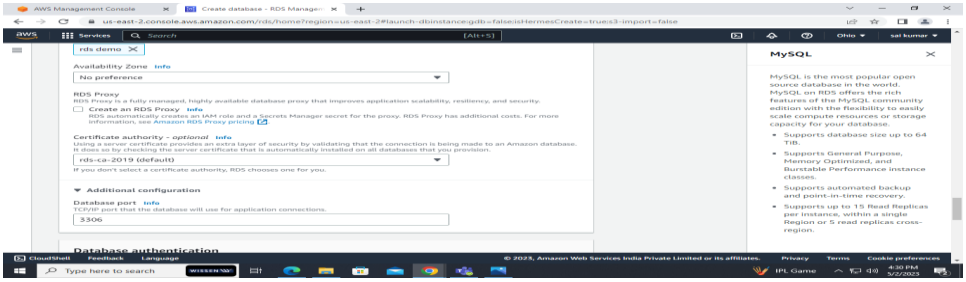
DB instance class: Select db.t2.micro and Storage type: Select General Purpose SSD(gp2) and storage with 20GB. Choose Don’t connect to an EC2 compute resource. Select Default VPC Public accessibility: Choose Yes. Select Create new VPC security group



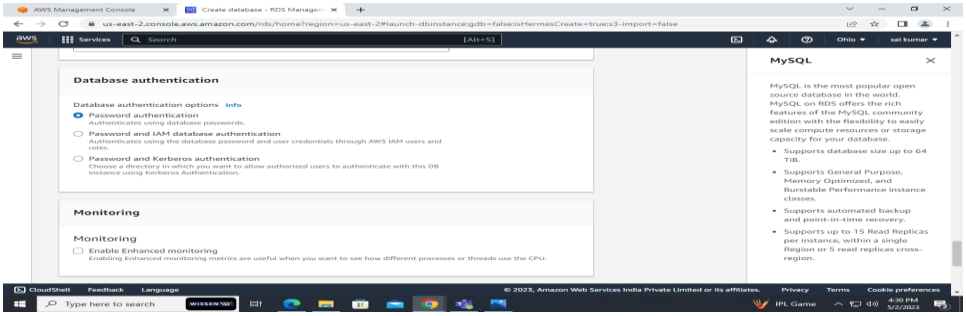
Public accessibility: Choose Yes.

Select existing VPC security group as **rds demo** Availability Zone: Choose No preference

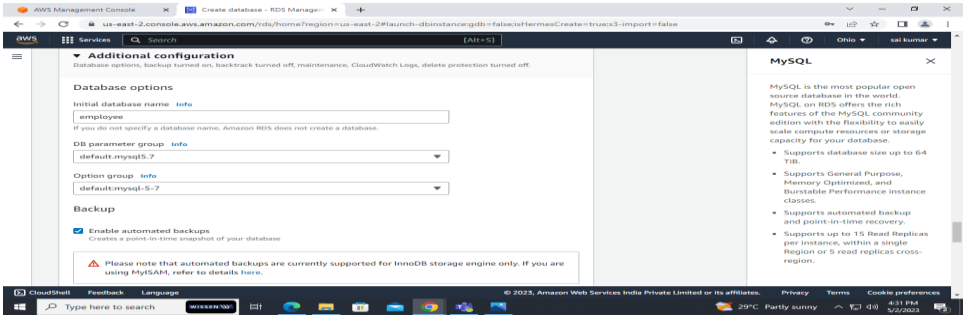




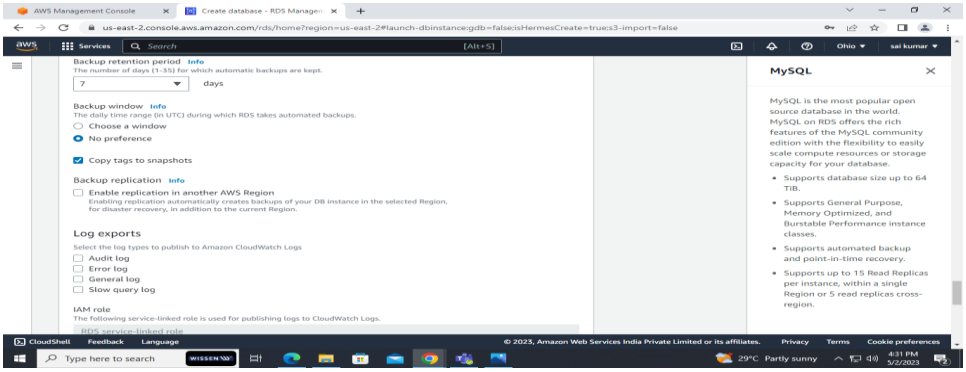
Choose Password authentication from the list



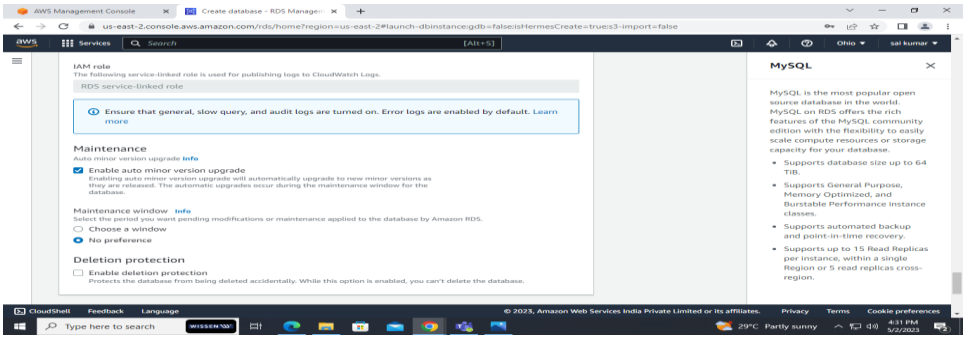
Leave Enable enhanced monitoring unchecked to stay within the Free Tier. Enter a database name as employee



Backup retention period: choose 7-day Backup window: Use the default of No preference

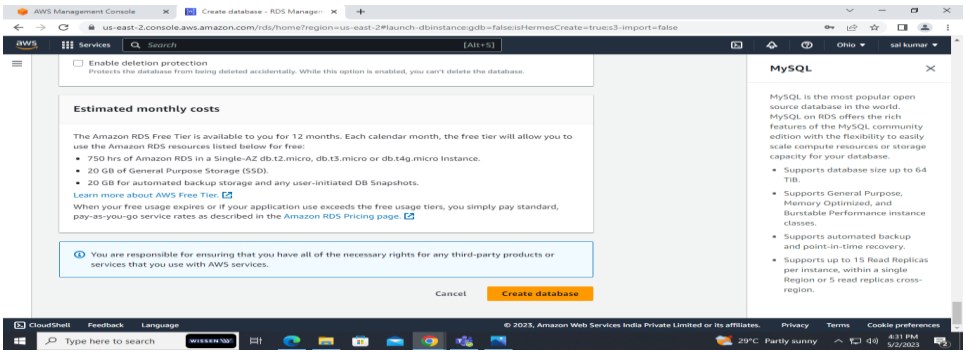


Select Enable auto minor version upgrade to receive automatic updates when they become available.

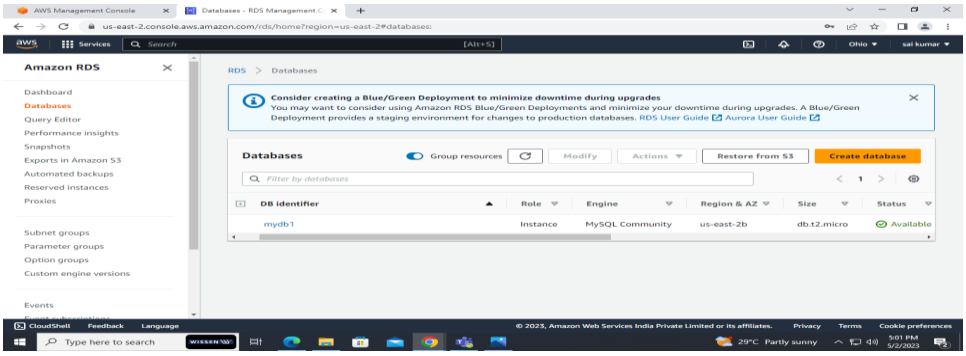


Emp name:Sai Kumar Vemula Blue/green deployment of RDS Emp id:6778

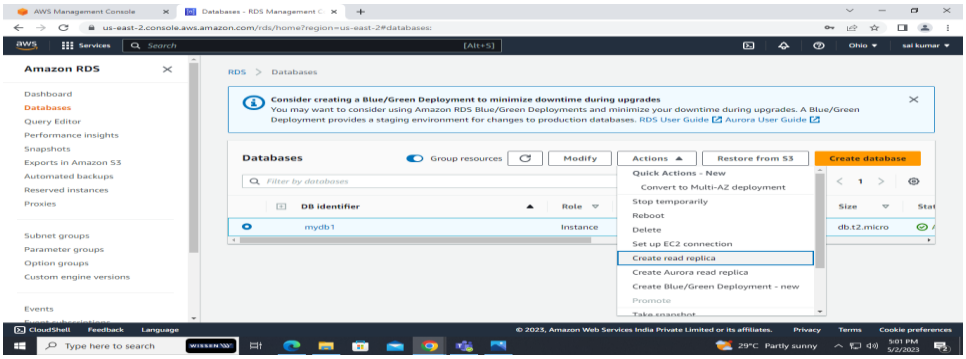
Click on create database



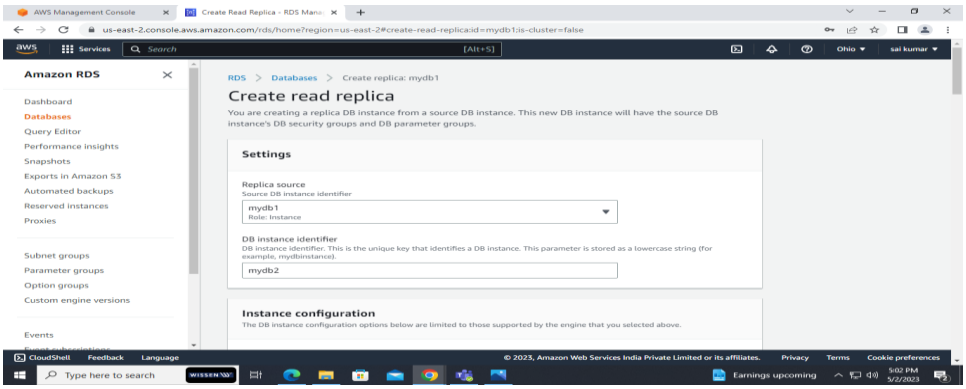
After creating database the database state is first provisiong state after few minutes database is in available state

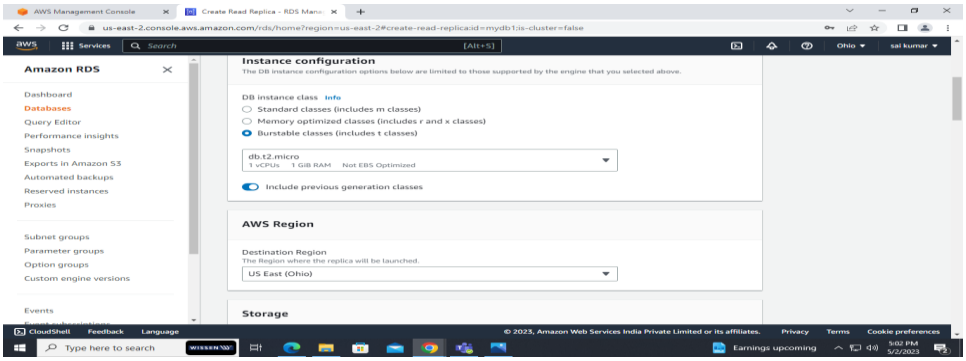


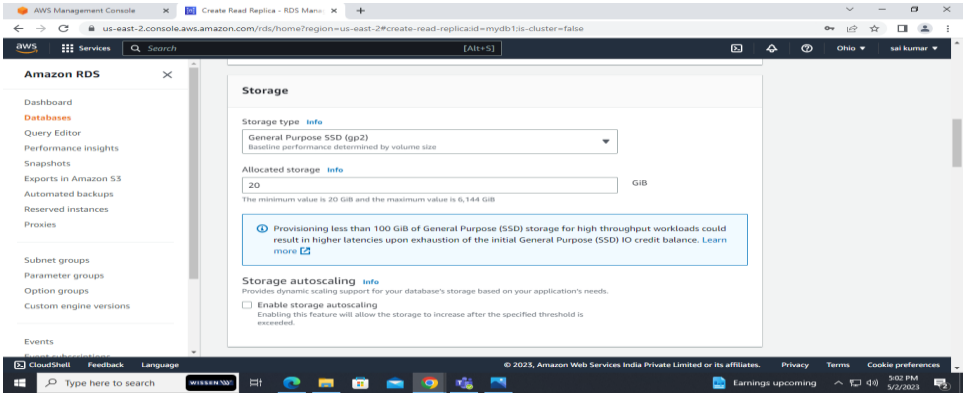
After database is in available state then we must have to create one read replica for the my rds database instance



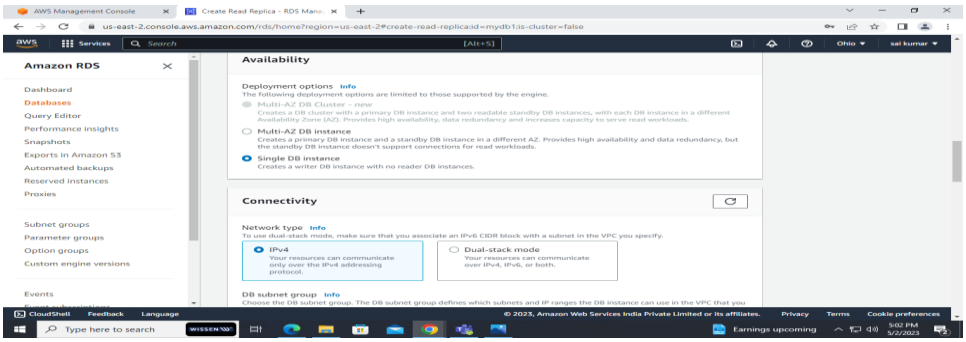
Emp name:Sai Kumar Vemula Blue/green deployment of RDS Emp id:6778

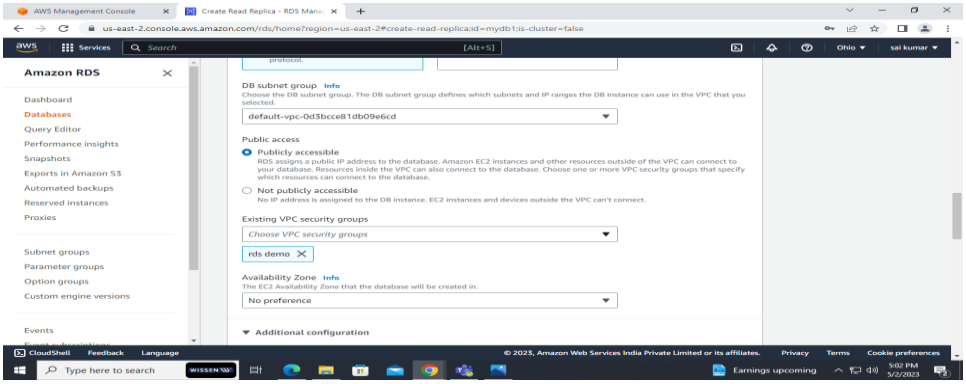


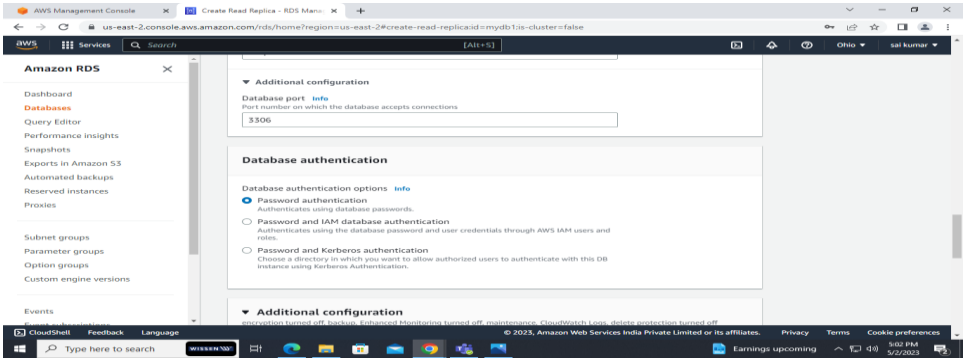




Emp name:Sai Kumar Vemula Blue/green deployment of RDS Emp id:6778

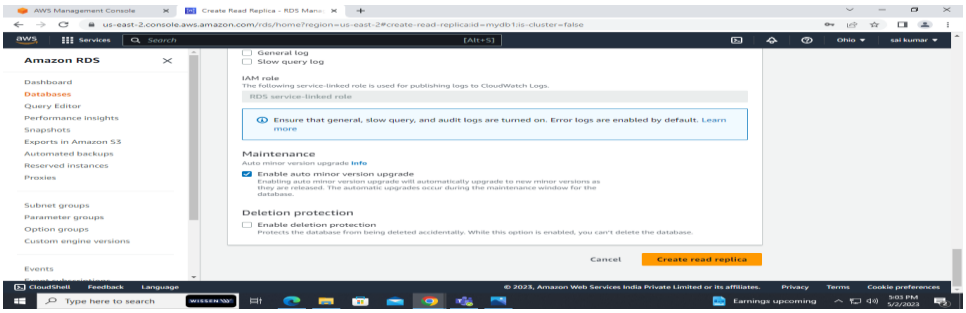




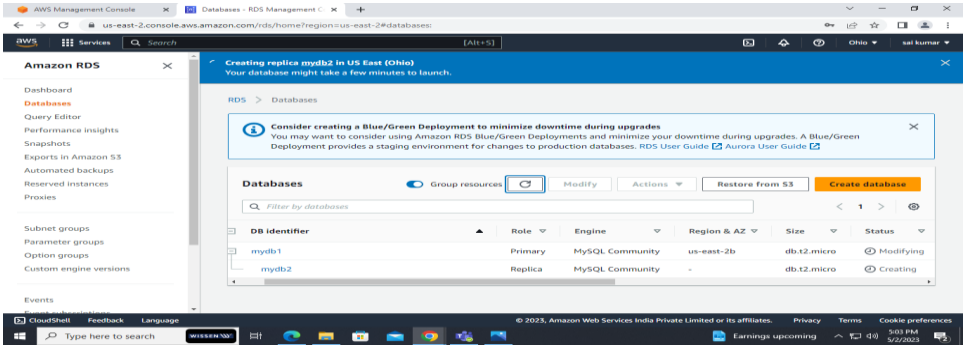


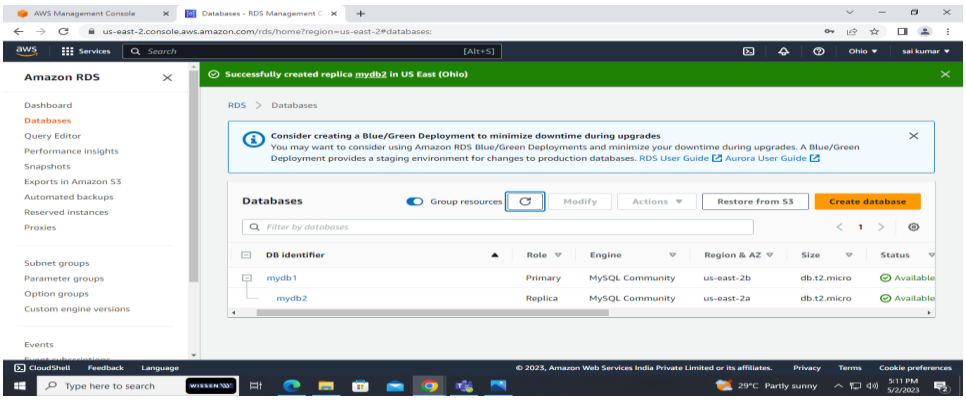
Emp name:Sai Kumar Vemula Blue/green deployment of RDS Emp id:6778

Click on create read replica

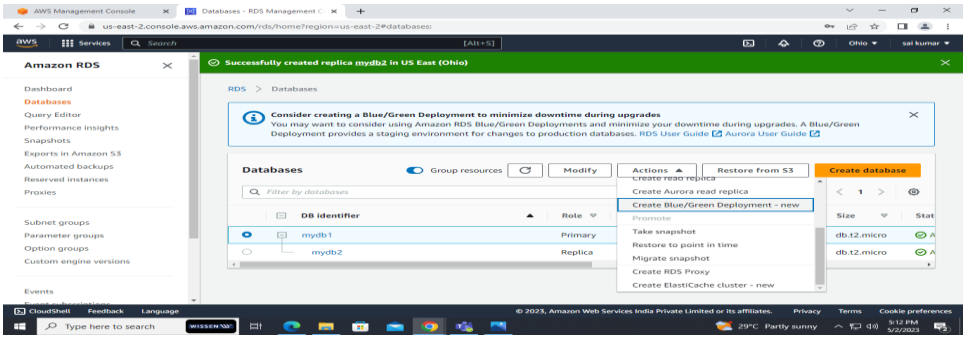


After click on read replica, it is in creating state then after few minutes it goes into available state

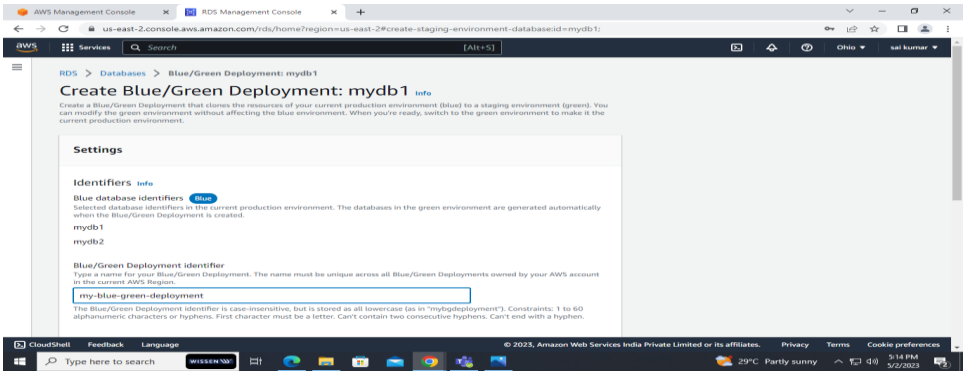




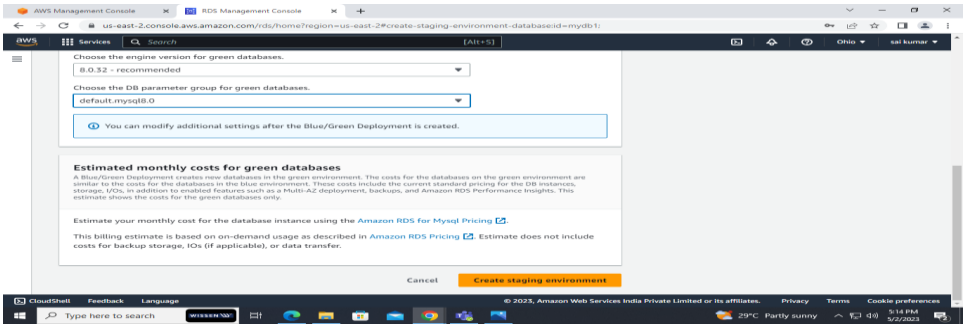
First, we must select the mydb1 rds database instance and navigate through actions select the create blue/green deployment -new



Giving the blue/green deployment identifier name as my-blue-green-deployment remaining all are default

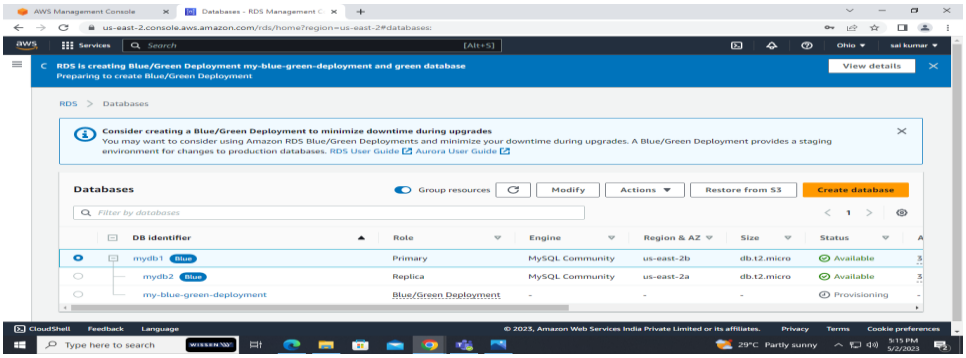


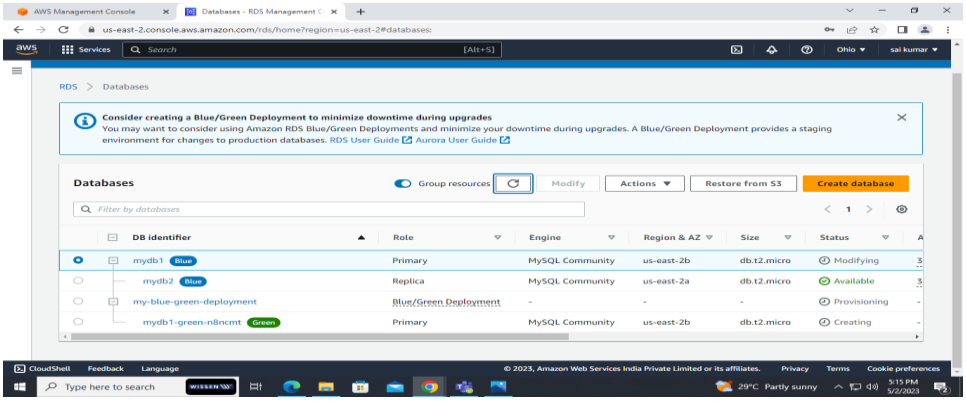
Click on staging environment



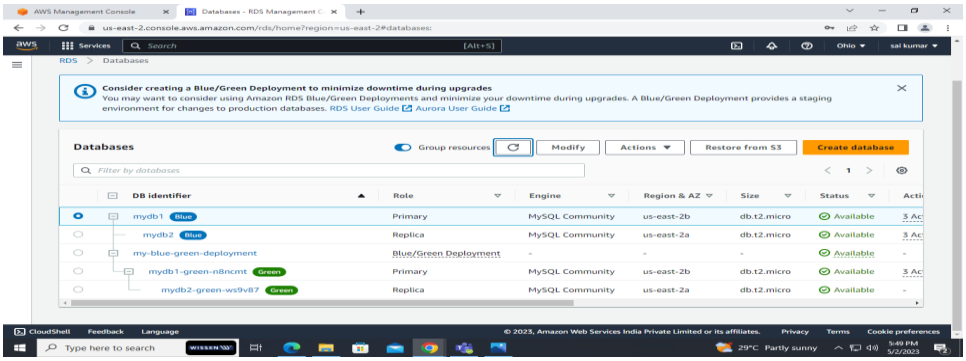
Emp name:Sai Kumar Vemula Blue/green deployment of RDS Emp id:6778

My blue/green deployment status is provisioning state then goes into available state. Two environments, one is blue and other one is green environment.



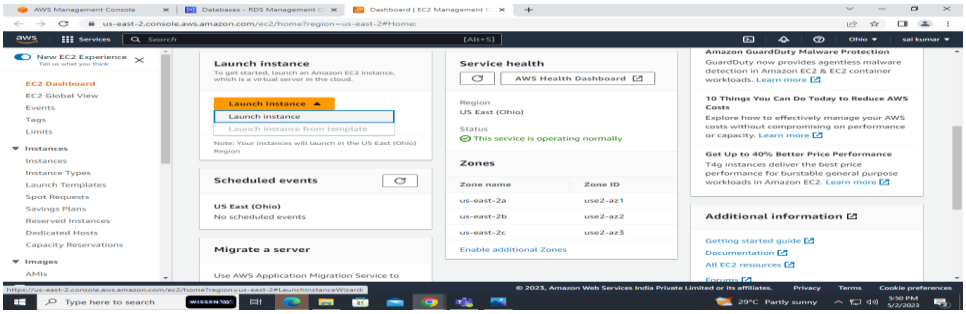


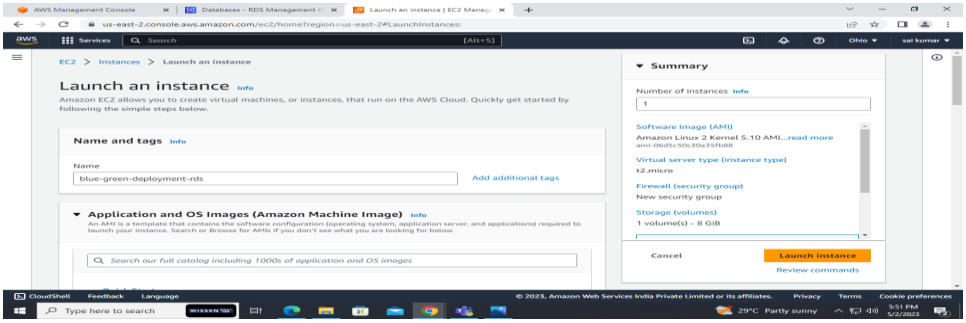
Once the blue/green environments available state after that automatically created one read replica for the green environment

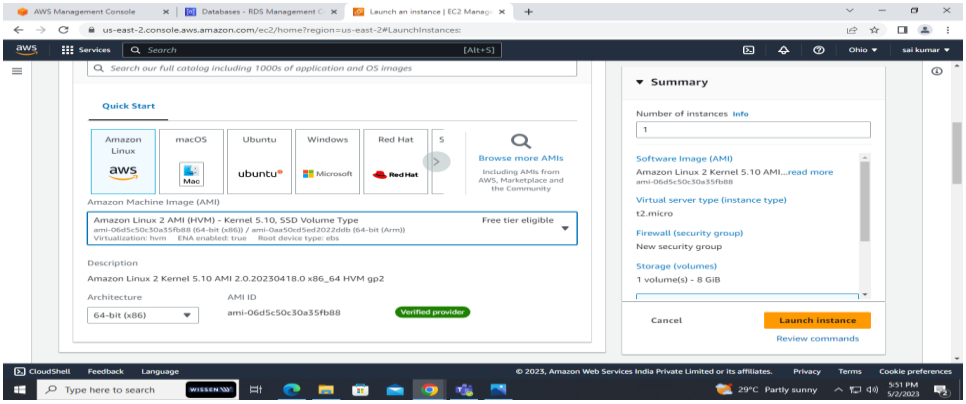


Creating EC2 instance

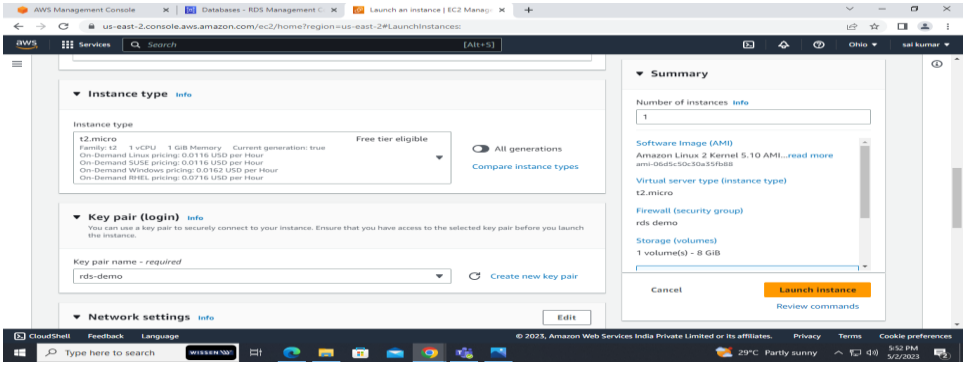
Create a ec2 instance



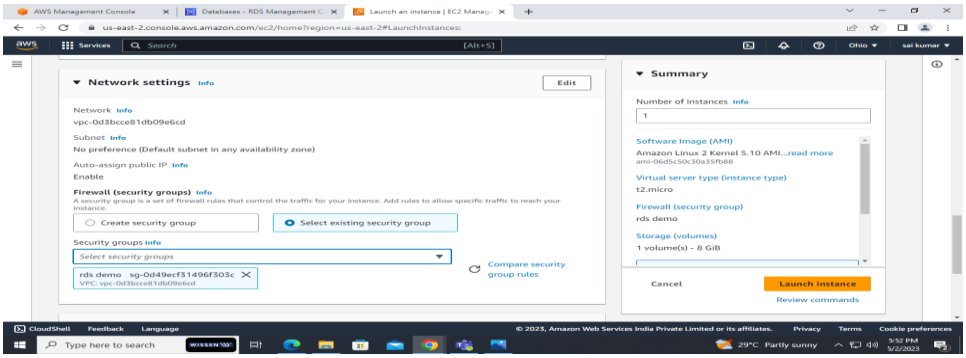


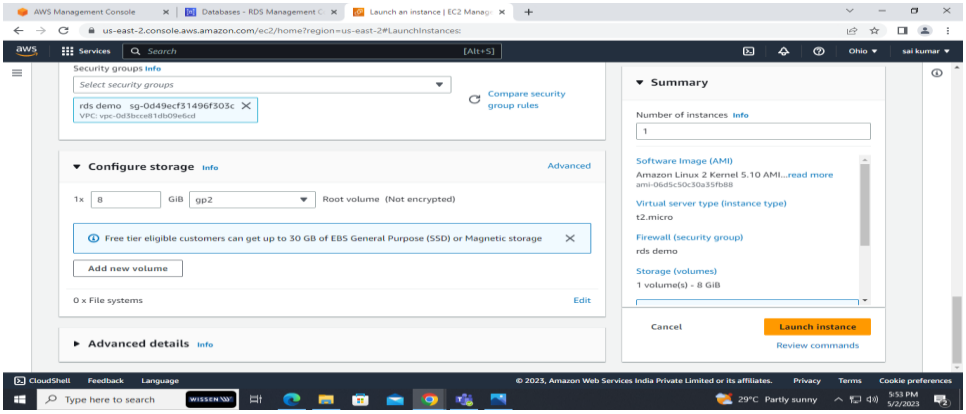


Create a key pair

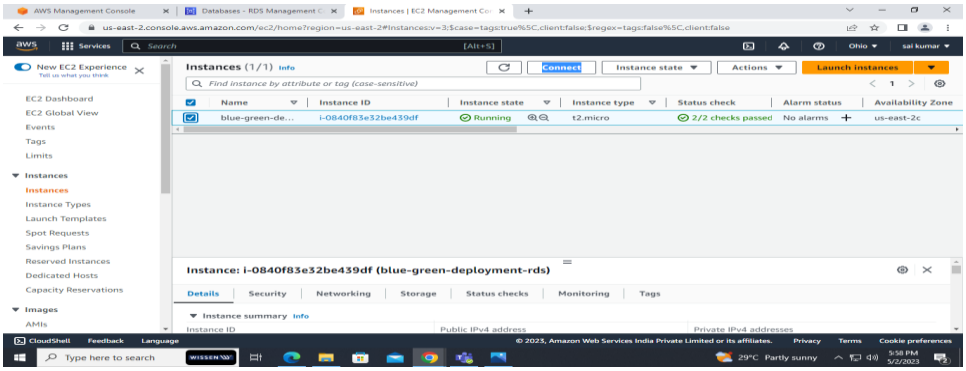


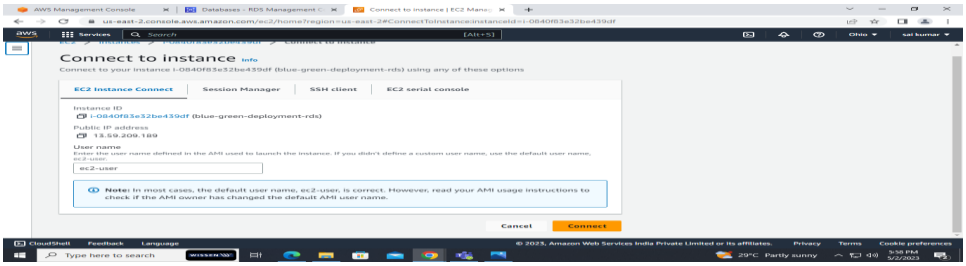
Select a security group that suits for the 3306 port and create instance



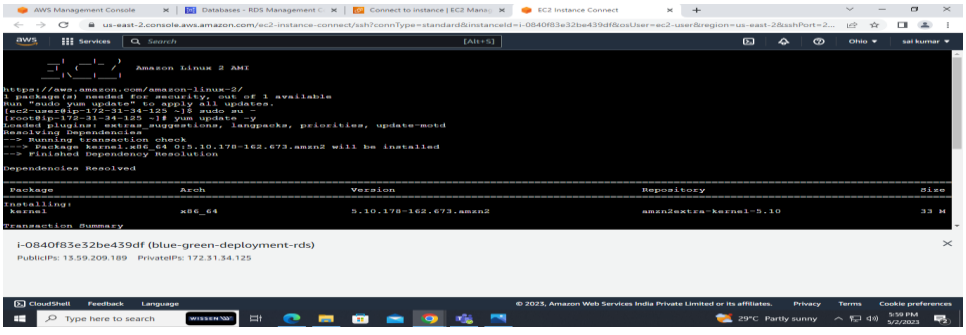


Connect the instance

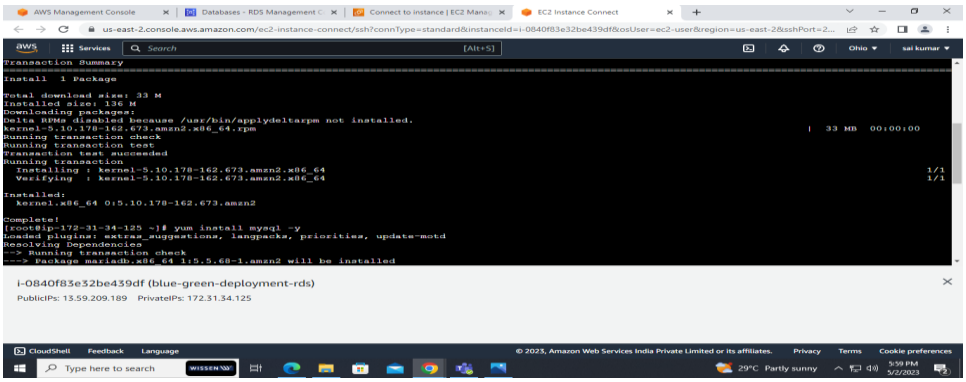


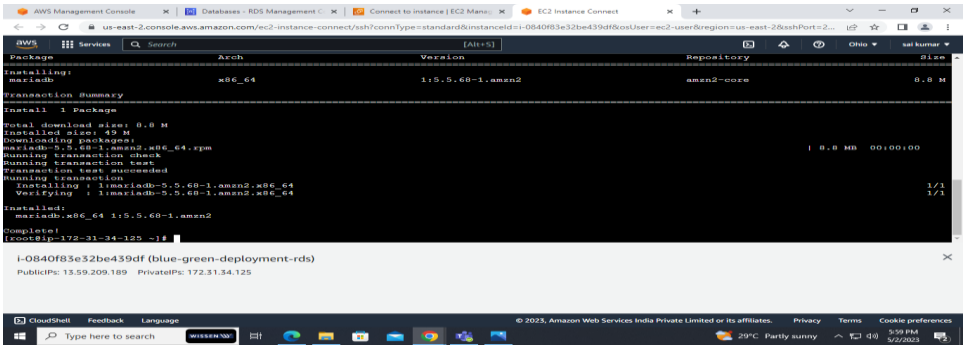


Go to root user Install SQL server to the queries

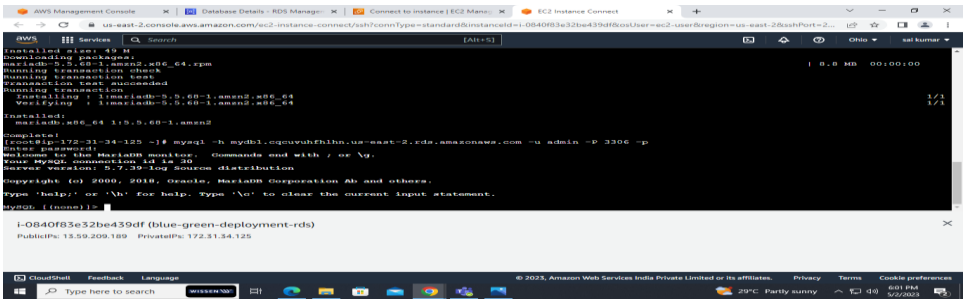


Create a user and password for the SQL to connect with workbench



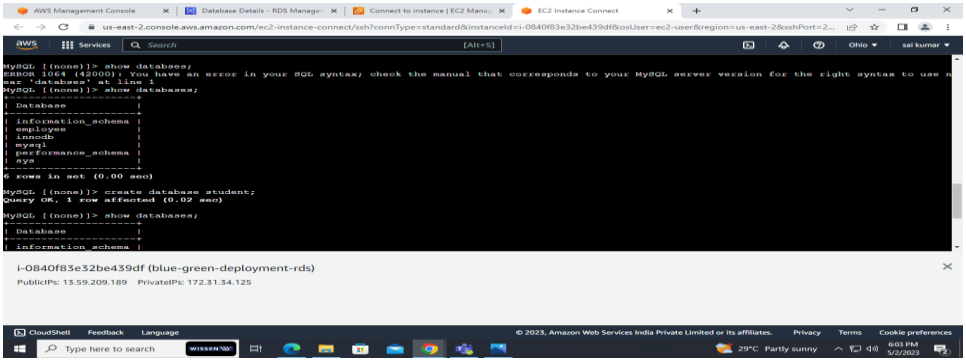


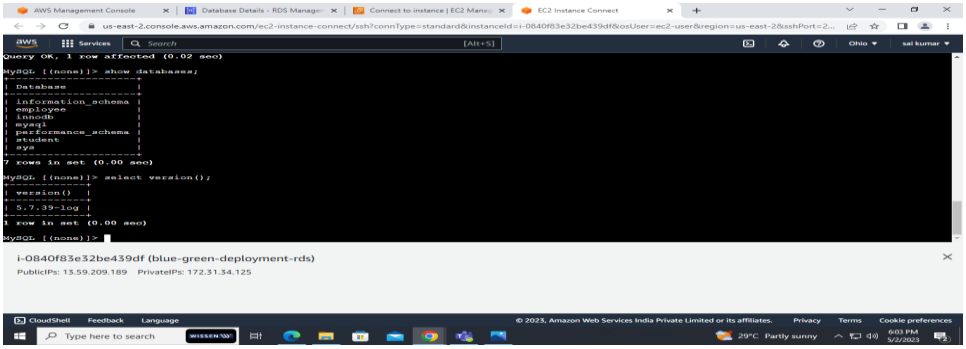
mysql -h end point address of the rds database instance -u admin -P 3306 –p Use this command to connect rds and ec2



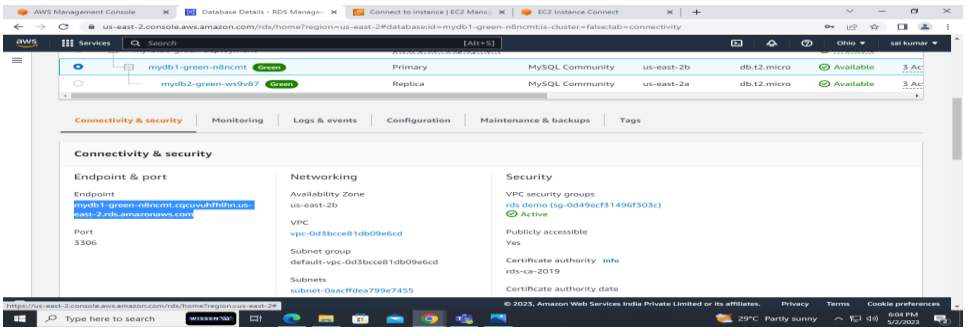
Emp name:Sai Kumar Vemula Blue/green deployment of RDS Emp id:6778

After connecting the rds database mydb1 then creating the one database in blue environment nothing but production environment.in this environment having both read/write permissions

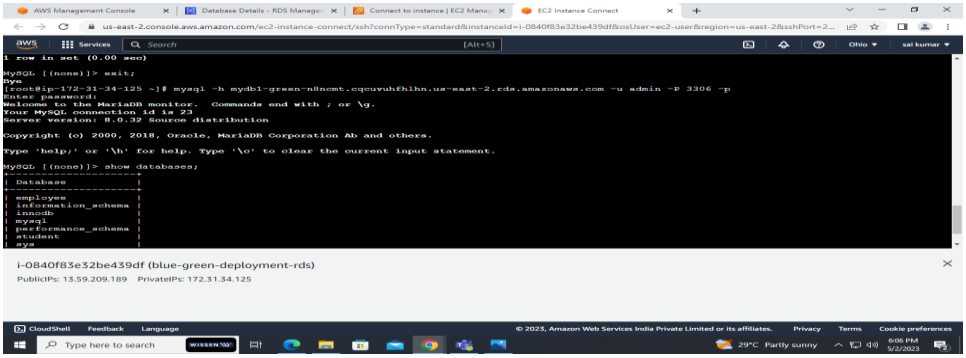




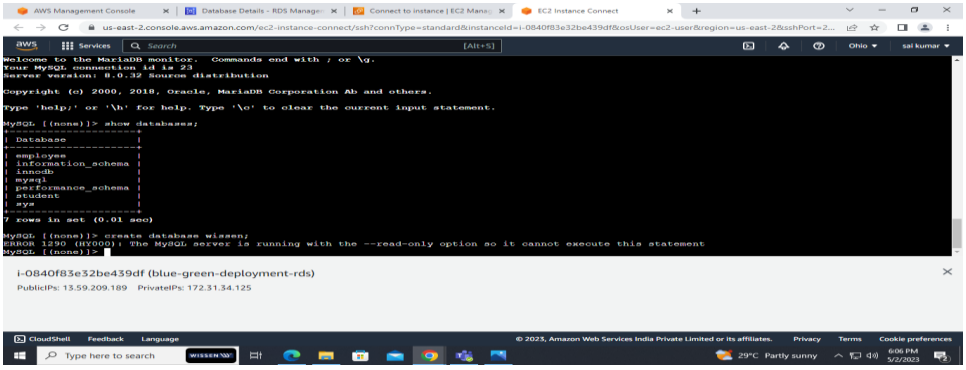
Copying the green environment end point

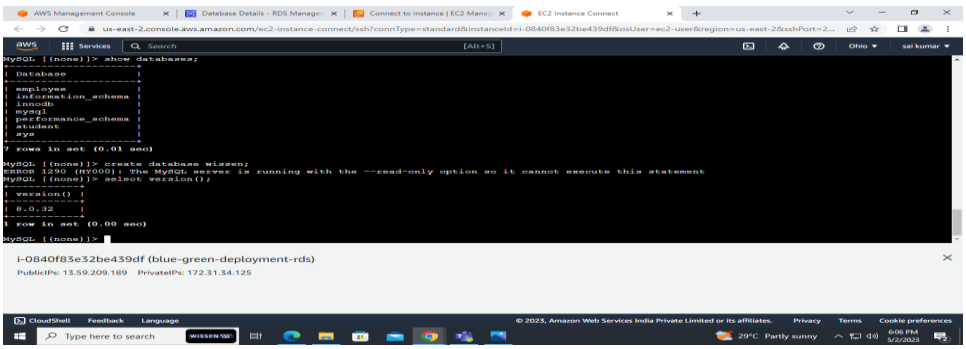


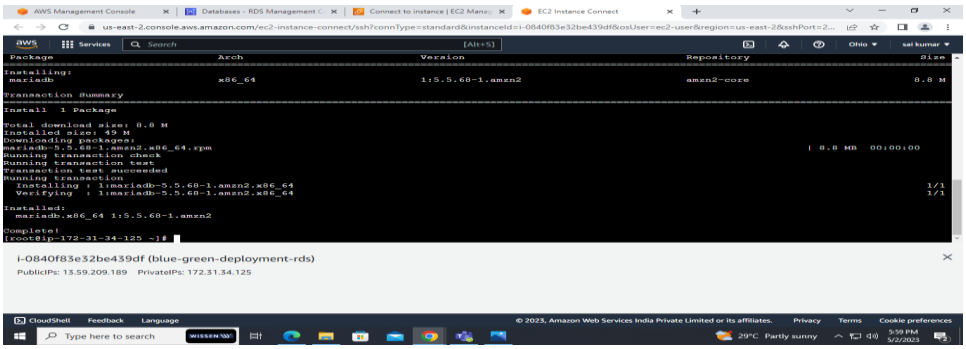
Then connecting to the green environment. Previously we created one database in blue environment that database is also reflected in green environment also



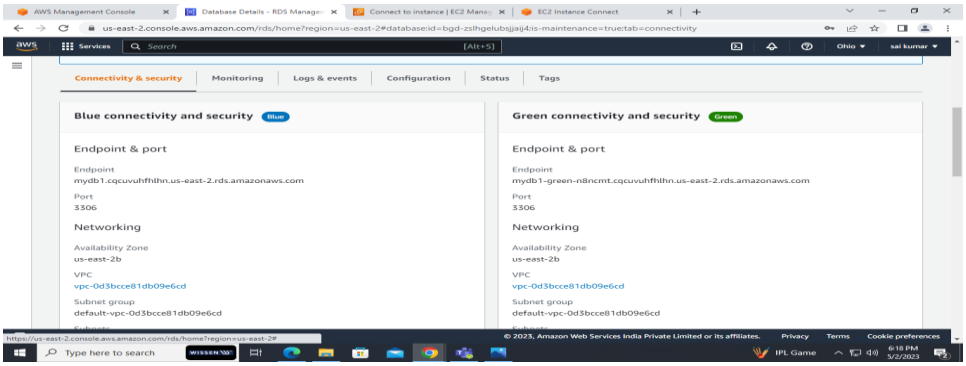
In this green environment only having the read-only permission and it's don't have the any write permission in this environment. Green environment is also called as staging environment



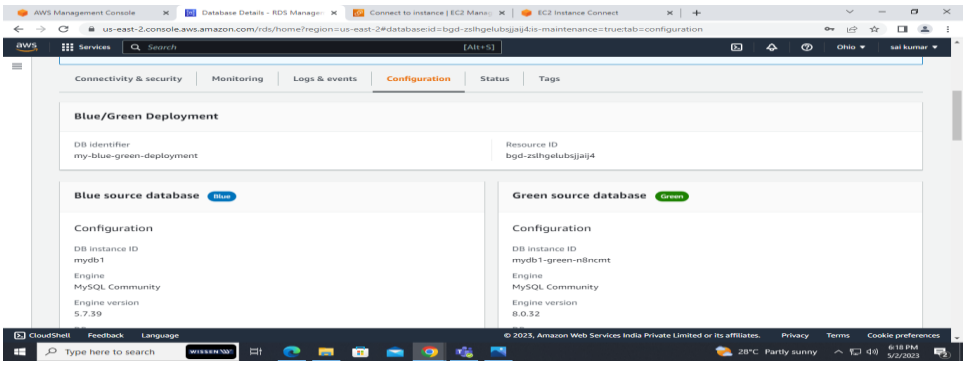




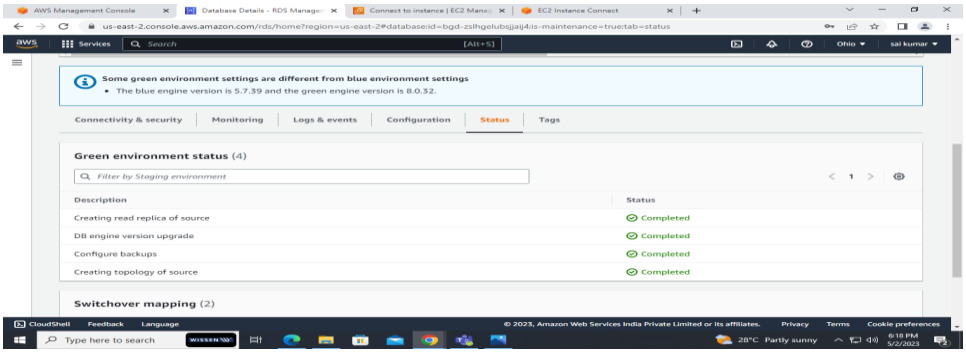
Here we can see both environments connectivity and security and also see the difference between both endpoints.



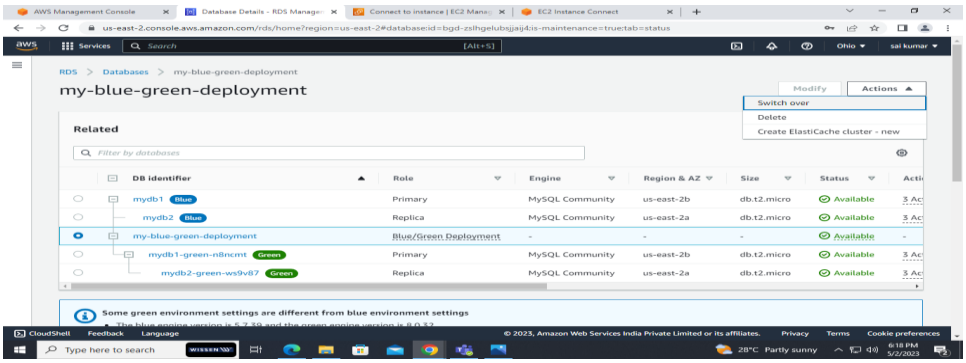
These are both environment configuration details

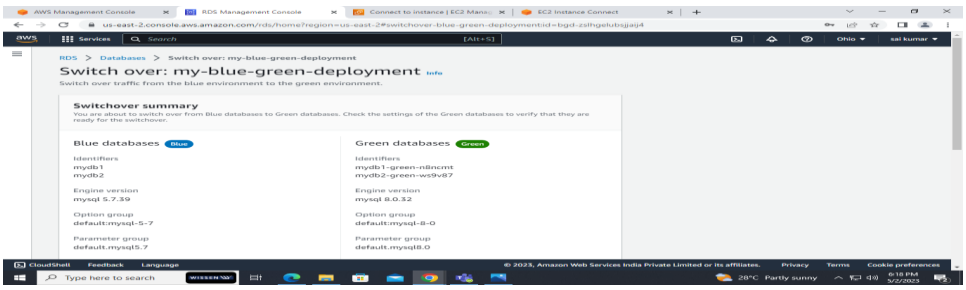


Emp name:Sai Kumar Vemula Blue/green deployment of RDS Emp id:6778

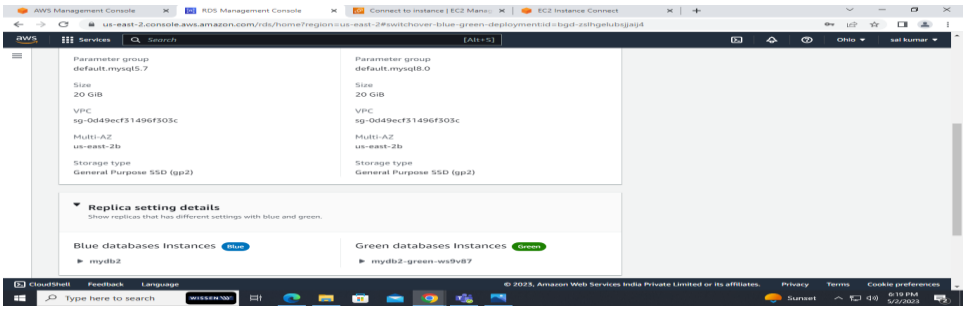


After that select my blue/green deployment navigate through the actions and select the switch over option

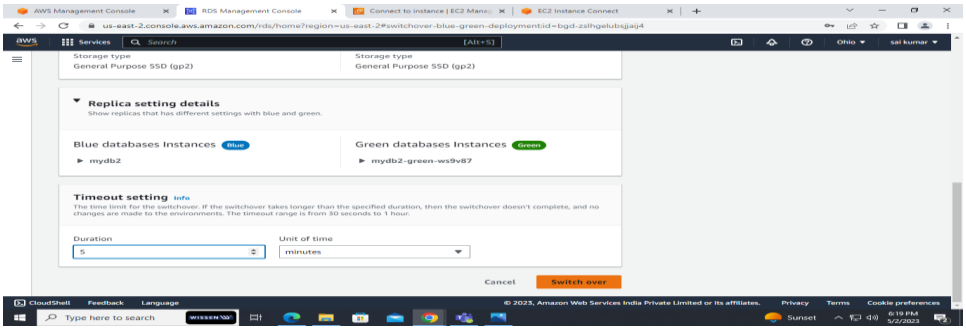


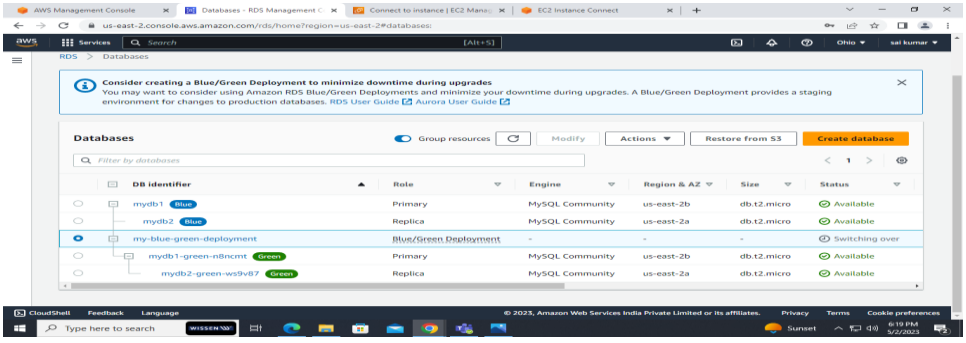


Emp name:Sai Kumar Vemula Blue/green deployment of RDS Emp id:6778

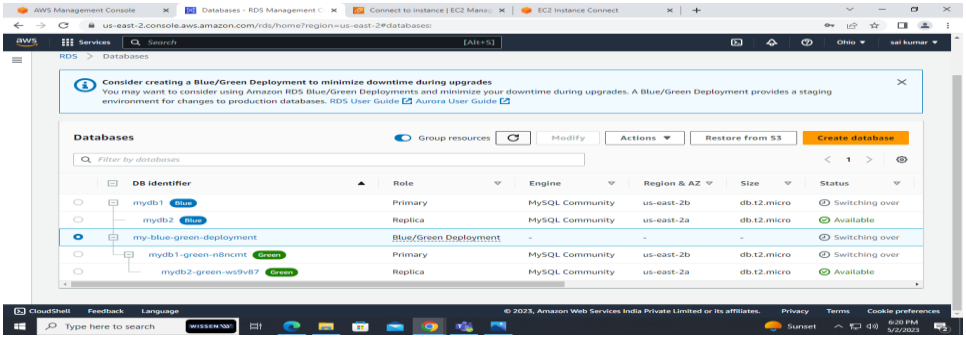


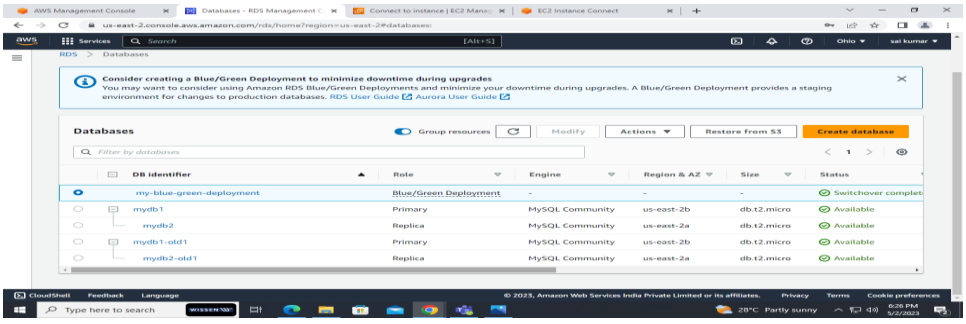
Switch over default time is 5 minutes and remaining all are default then click on switch over

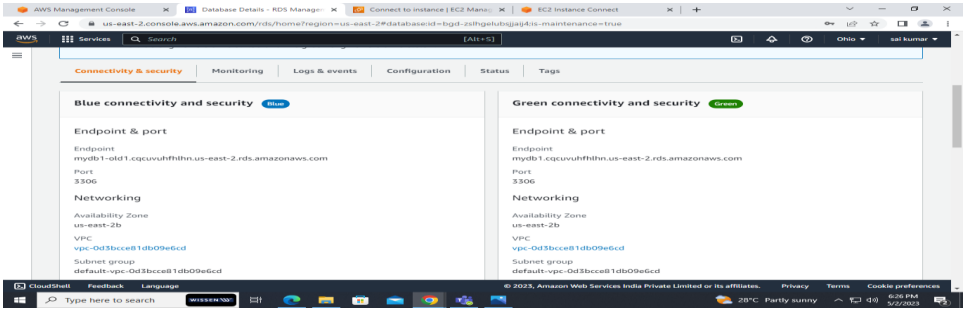




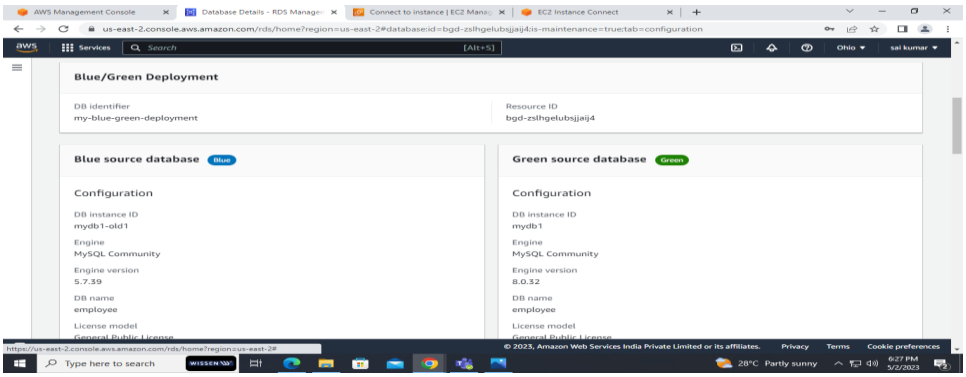
After clicking on switch over the blue environment traffic is routed to green environment. Now blue environment is an old environment and green environment is present environment.

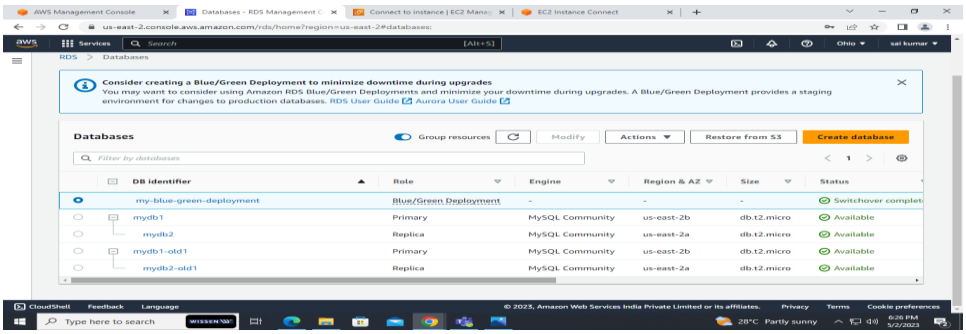




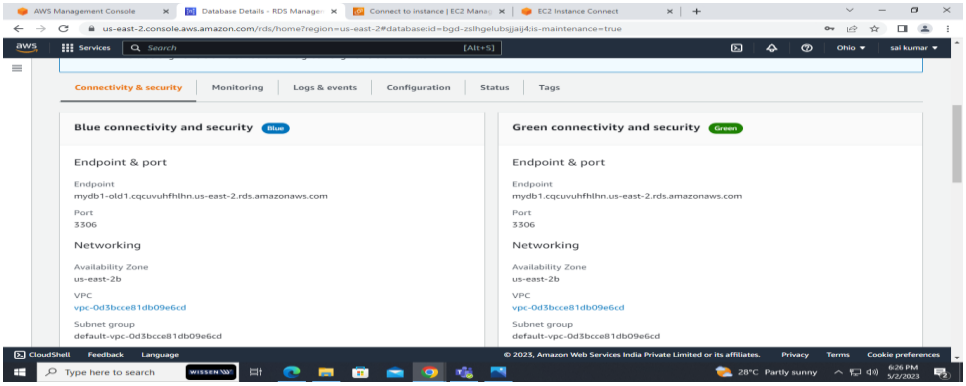


Emp name:Sai Kumar Vemula Blue/green deployment of RDS Emp id:6778

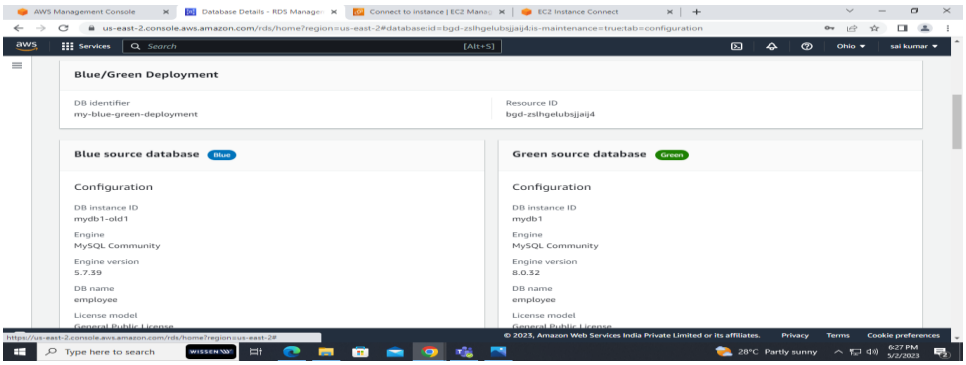




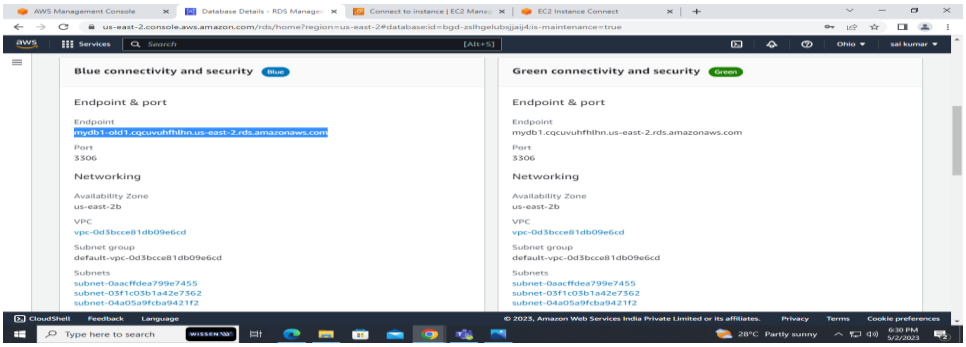
old environment is the blue environment and other one is green environment

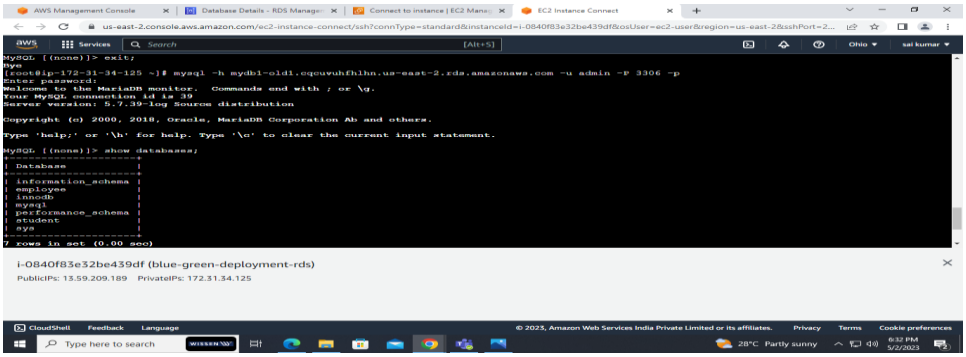


Emp name:Sai Kumar Vemula Blue/green deployment of RDS Emp id:6778



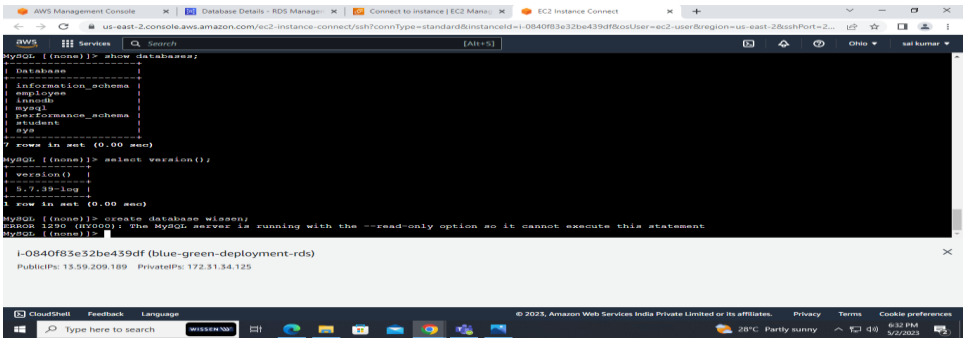
Copy the old environment end point address



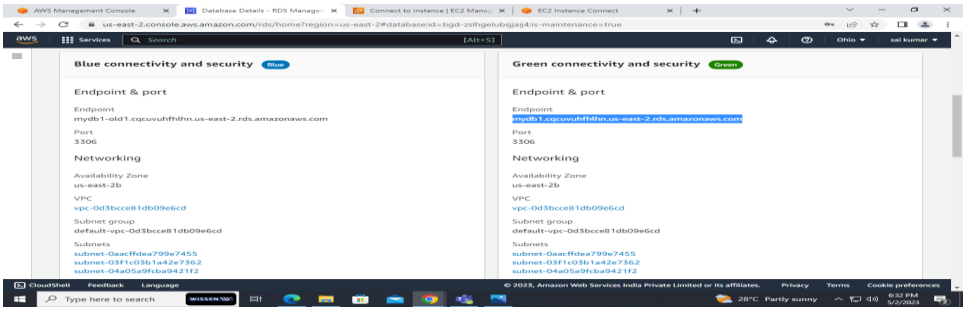


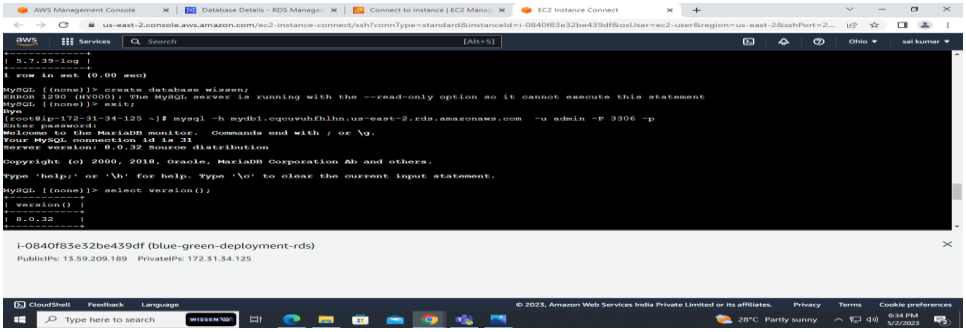
Emp name:Sai Kumar Vemula Blue/green deployment of RDS Emp id:6778

Old environment have the read-only permissions

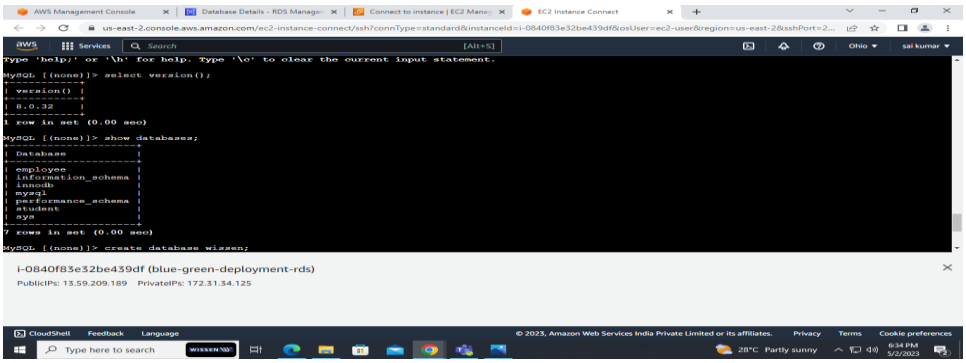


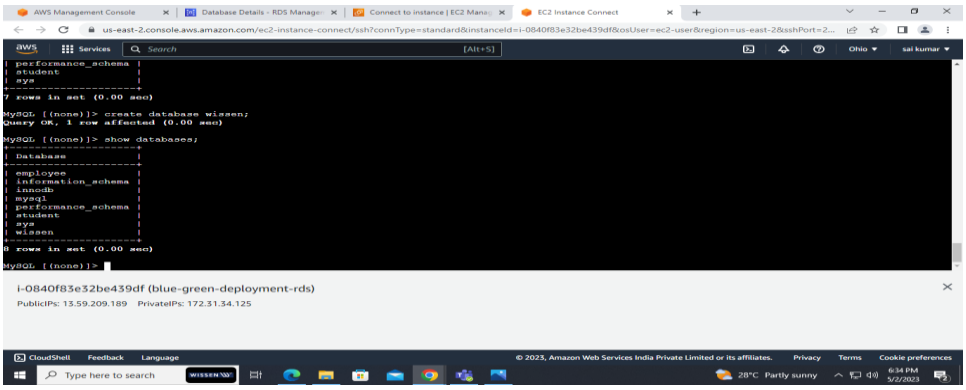
Copy the green environment end point address



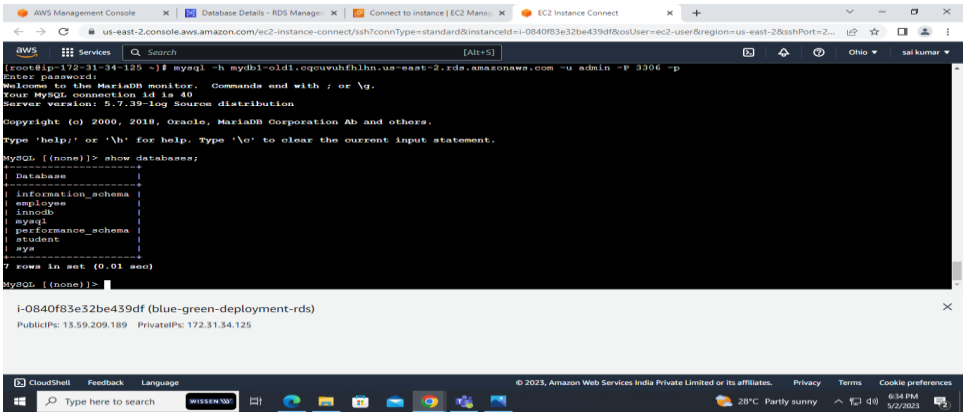


Now this green environment having both read/write permissions





After switching over we made any changes in green environment (production environment) that changes are not reflected in other environment nothing but a blue environment (staging environment)



In summary, we use the switch over in blue-green deployment in RDS to minimize downtime, reduce risk, provide a seamless transition, and ensure that the old environment is ready for rollback if needed. By using this approach, we can deploy new versions of our application with confidence, knowing that they have been fully tested and verified before releasing them to end-users.