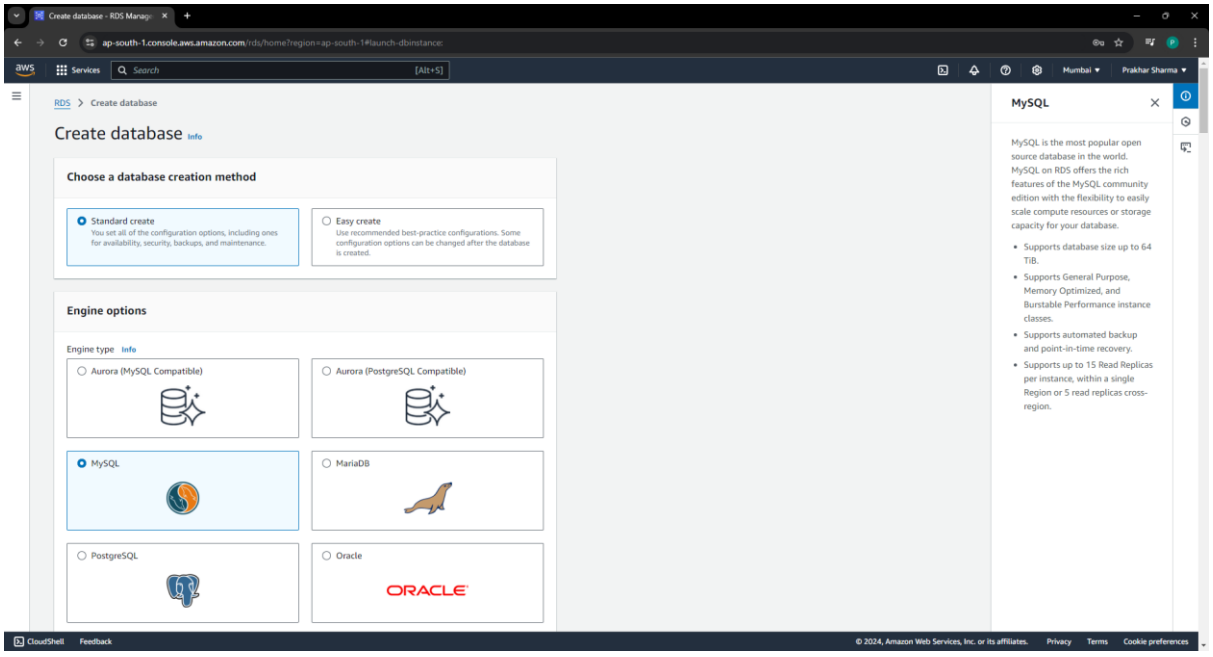
D Y PATIL INTERNATIONAL UNIVERSITY
AKURDI PUNE

School of Computer Science, Engineering and Applications(SCSEA)
B.C.A. TY (CCSA)
Subject : Advanced Cloud Computing (P)

Name of the Student: **Prakhar Anil Sharma** **PRN: 20220801121**

Title of Practical : **Encrypt an Unencrypted RDS DB Instance**

Step-1] Sign in to AWS Management Console.
Step-2] Go to RDS.
Step-3] Click on create database.
Step-4] Choose a database creation method
- Standard create.
Step-5] Engine options , MySQL.



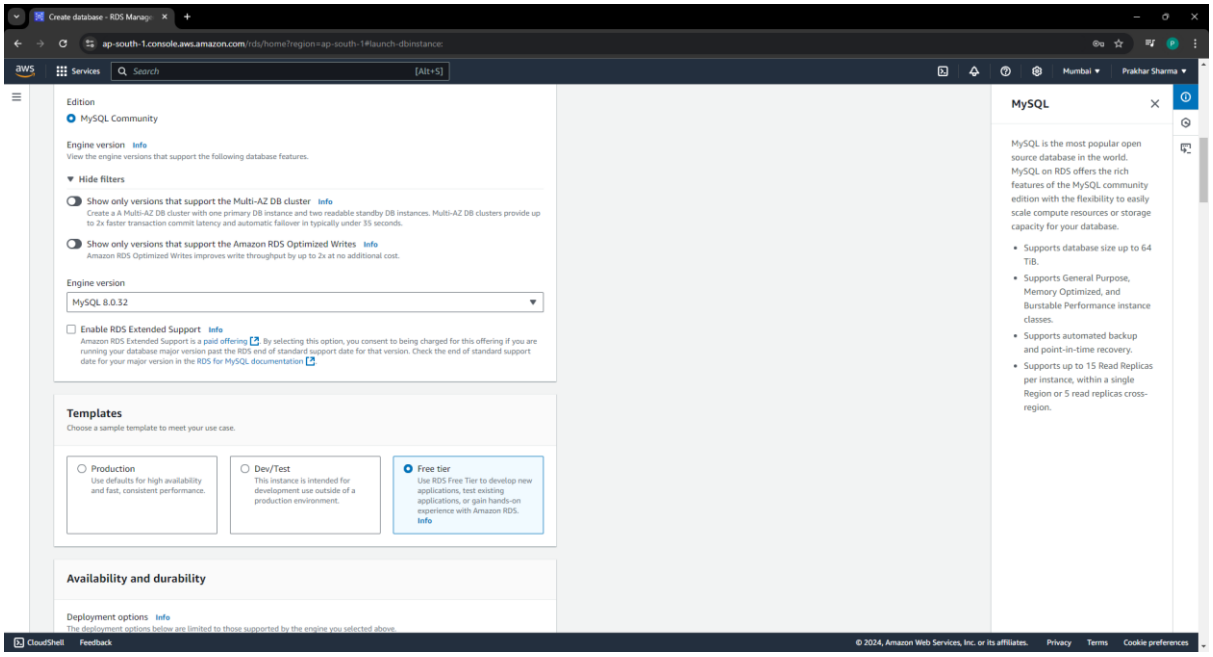
Step-6]Select engine version MySQL 8.0.32 .
Step-7]Select Templates as Free Tier.

D Y PATIL INTERNATIONAL UNIVERSITY
AKURDI PUNE

School of Computer Science, Engineering and Applications(SCSEA)
B.C.A. TY (CCSA)
Subject : Advanced Cloud Computing (P)

Name of the Student: **Prakhar Anil Sharma** **PRN: 20220801121**

Title of Practical : **Encrypt an Unencrypted RDS DB Instance**



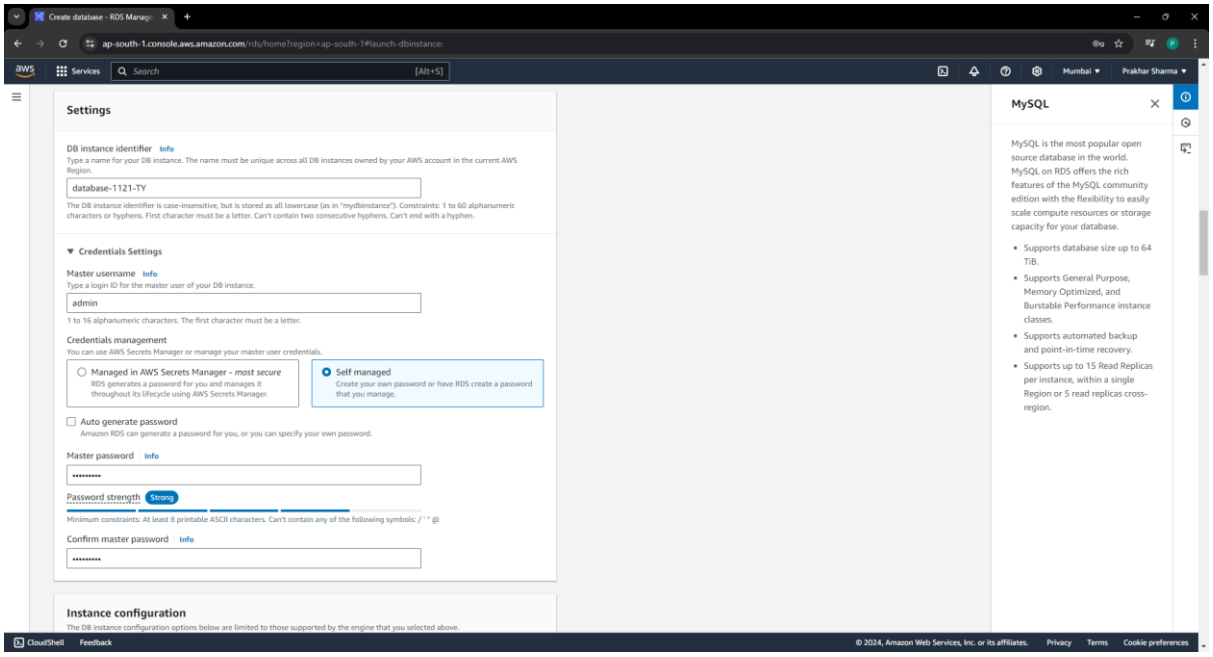
Step-8]In Settings, Name your DB Instance Identifier.
Step-9] In Credential Settings, Name Master Username
Step-10]Select Credential management as Self Managed.
Step-11] Set Your Master Password.

D Y PATIL INTERNATIONAL UNIVERSITY
AKURDI PUNE

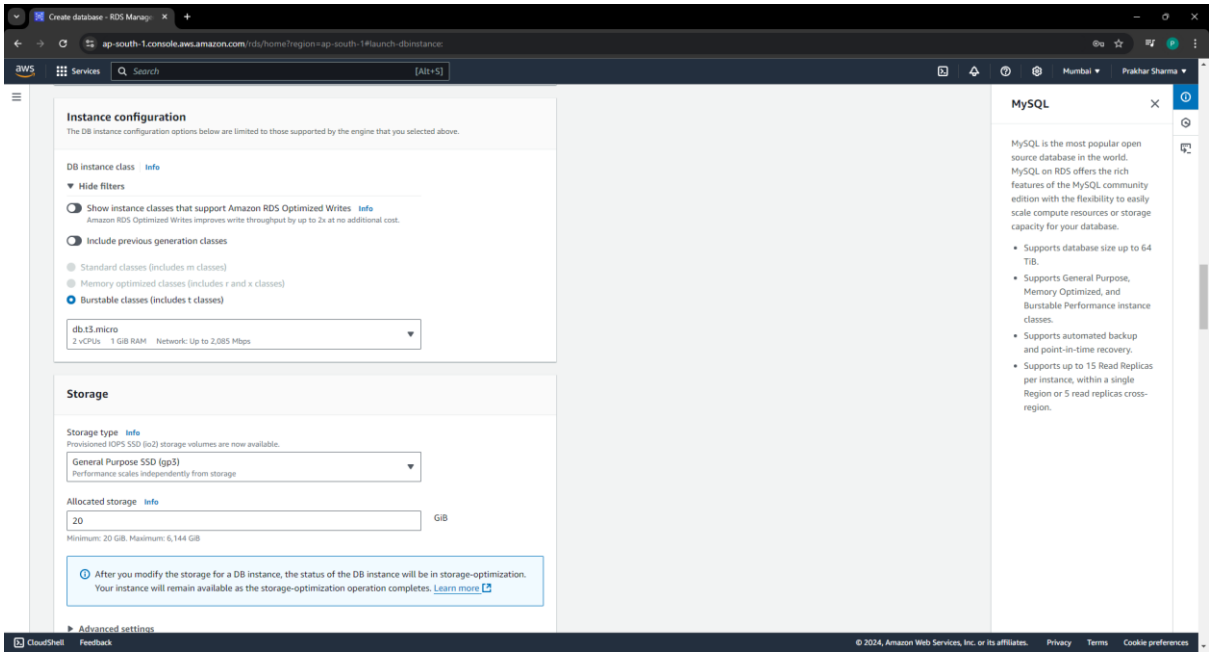
School of Computer Science, Engineering and Applications(SCSEA)
B.C.A. TY (CCSA)
Subject : Advanced Cloud Computing (P)

Name of the Student: Prakhar Anil Sharma **PRN:** 20220801121

Title of Practical : Encrypt an Unencrypted RDS DB Instance



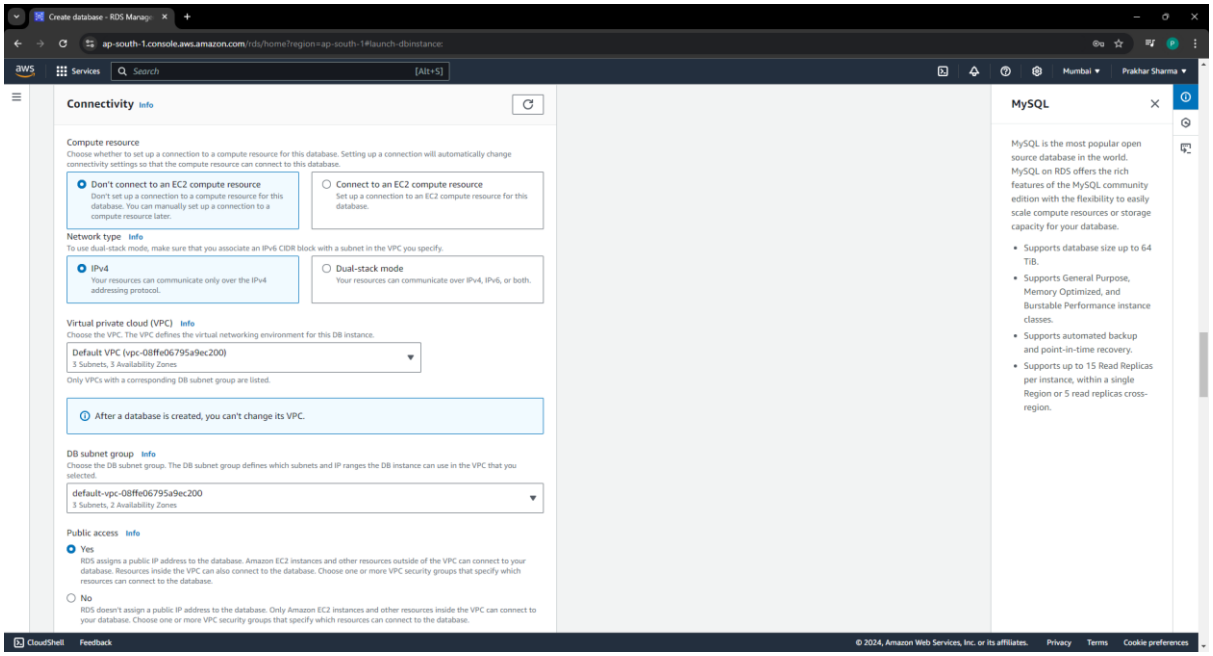
Step-12] In Instance configuration, Select db.t3.micro.



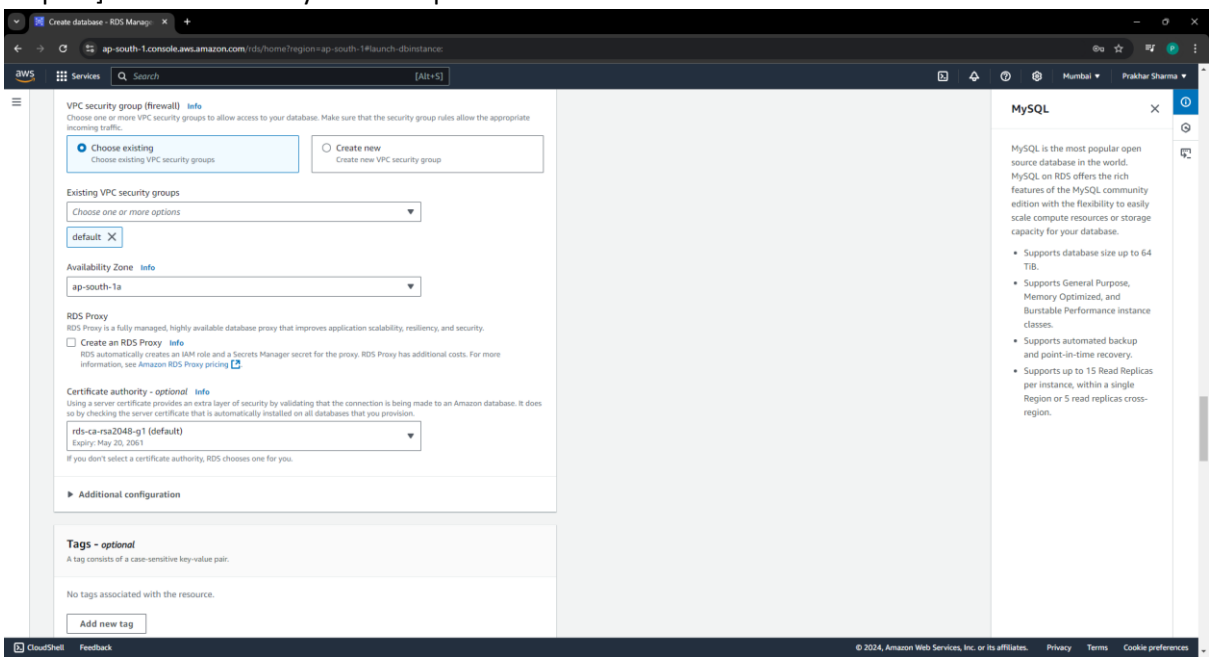
Name of the Student: Prakhar Anil Sharma **PRN:** 20220801121

Title of Practical : Encrypt an Unencrypted RDS DB Instance

Step-13] In Connectivity keep other setting as it is, Only Select Public Access-Yes .



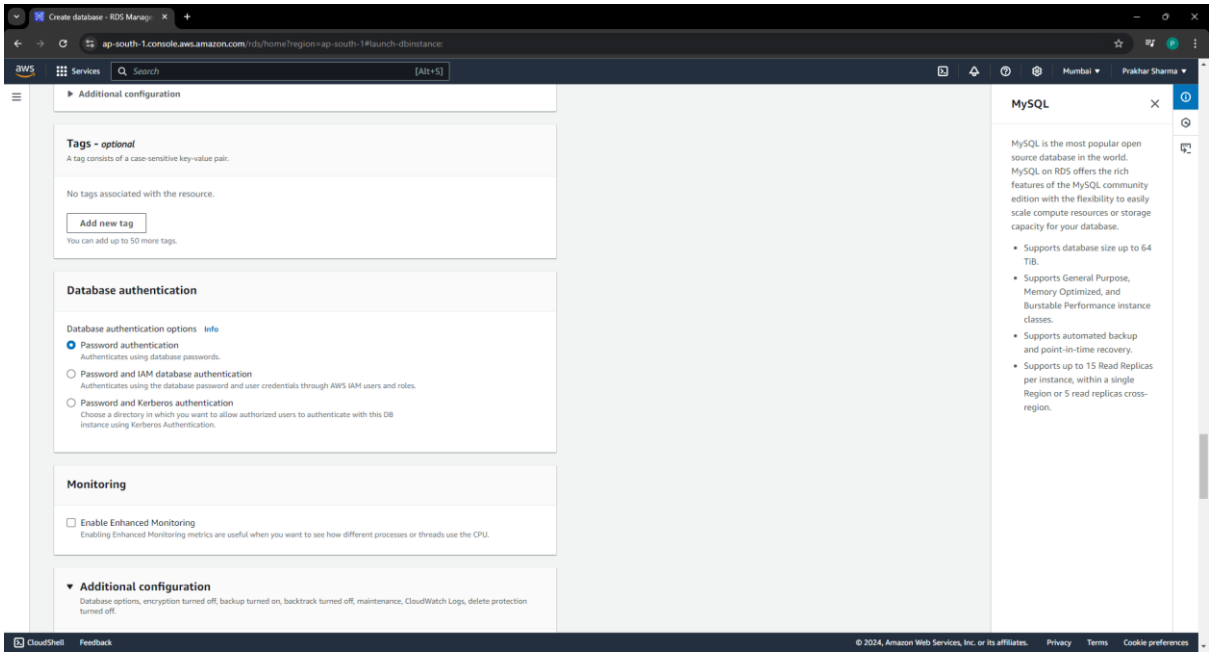
Step-14] Select Availablity Zone as ap-south-1a.



Name of the Student: Prakhar Anil Sharma **PRN:** 20220801121

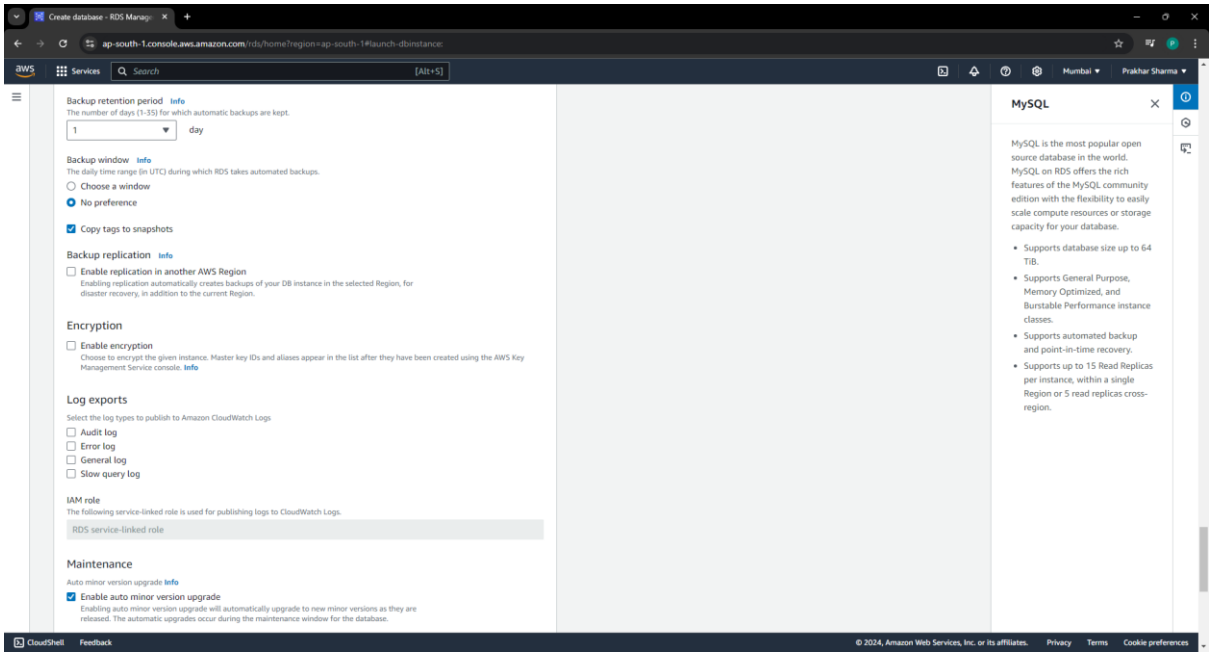
Title of Practical : Encrypt an Unencrypted RDS DB Instance

Step-15]Select Database authentication as Password authentication.



Step-16] In Additional Configuration, uncheck the the enable encryption.

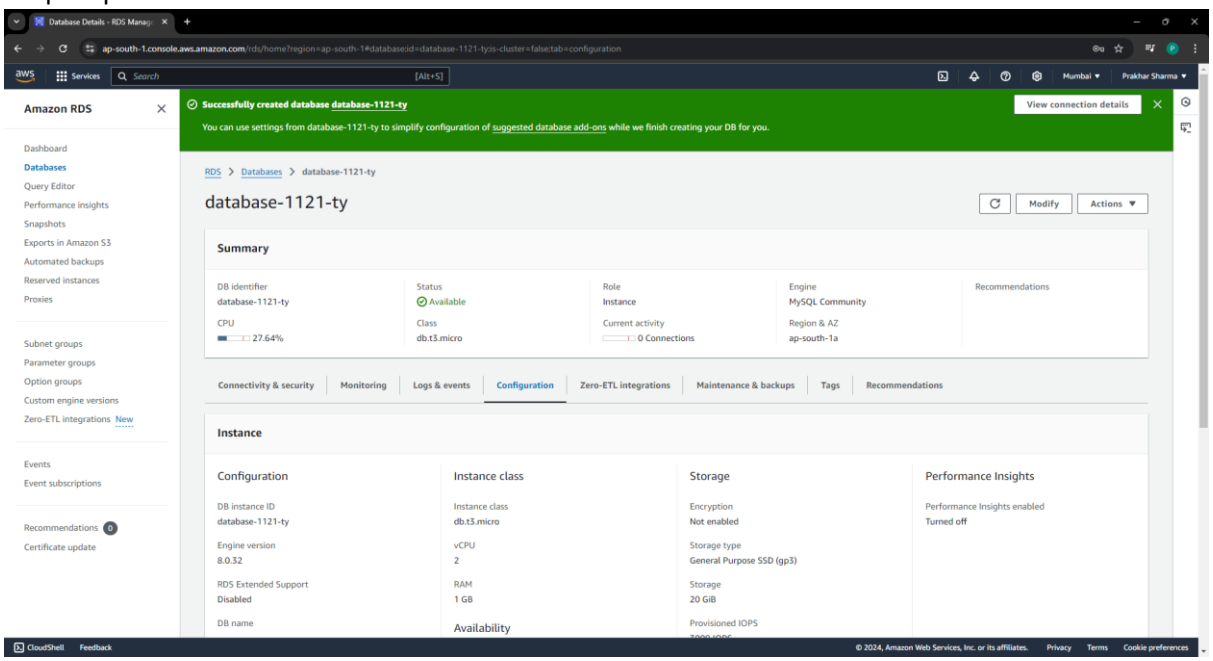
Step-17]Click create database.



Name of the Student: Prakhar Anil Sharma **PRN:** 20220801121

Title of Practical : Encrypt an Unencrypted RDS DB Instance

You can check in the created database configuration tab the encryption in not enabled.
Now,To make it encrypted we have to make its unencrypted snapshot and restore it as encrypted snapshopt



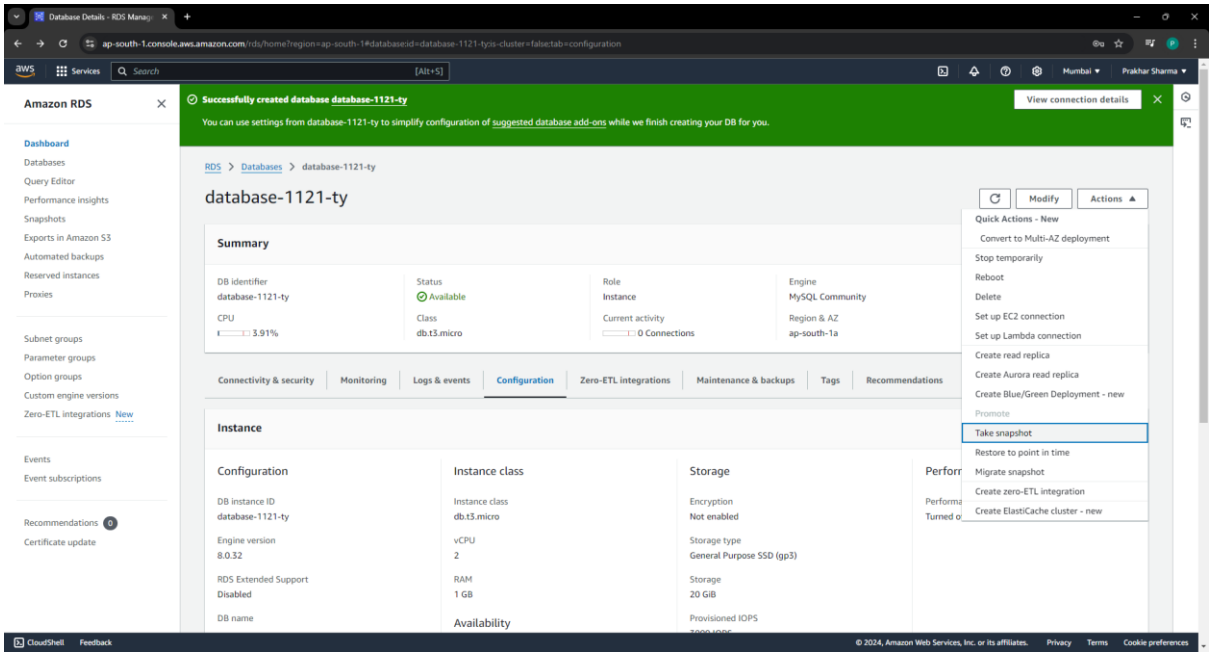
Step-18] Go to Actions, Select and click on Take Snapshot option.

D Y PATIL INTERNATIONAL UNIVERSITY
AKURDI PUNE

School of Computer Science, Engineering and Applications(SCSEA)
B.C.A. TY (CCSA)
Subject : Advanced Cloud Computing (P)

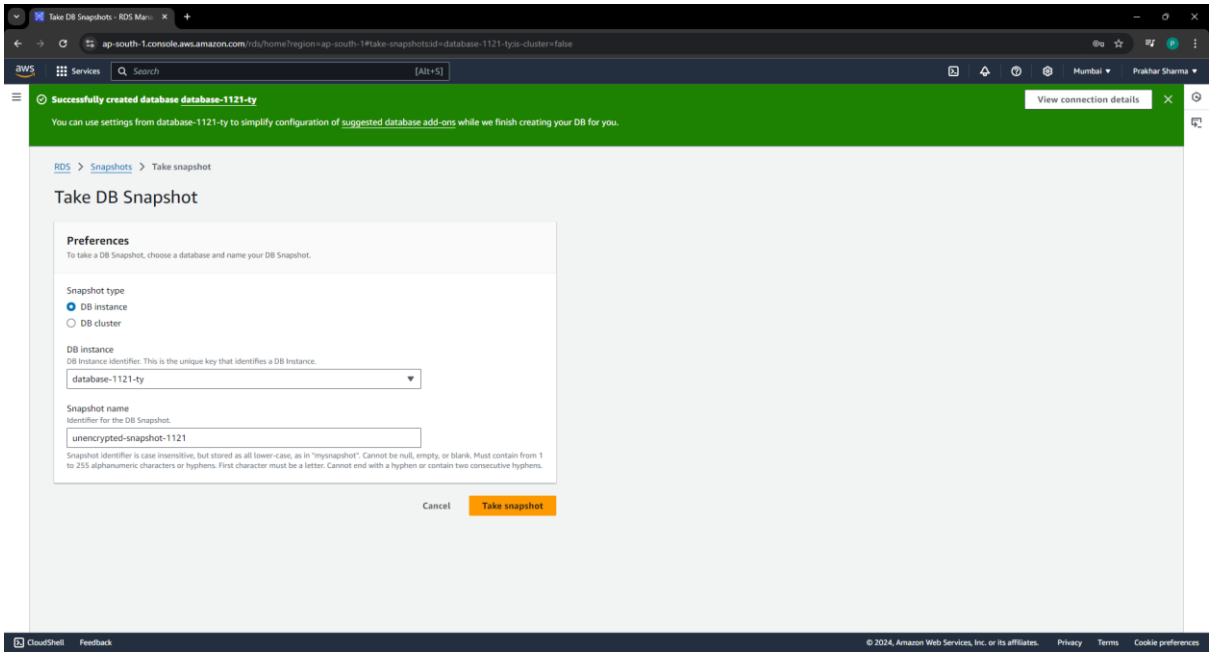
Name of the Student: **Prakhar Anil Sharma** **PRN: 20220801121**

Title of Practical : **Encrypt an Unencrypted RDS DB Instance**



Step-19]Select Snapshot type as DB instance
Step-20]In DB instance , select the database you just created from the dropdown option.
Step-21]Name the snapshot as Unencrypted snapshopt-PRN No.

Step-22] Click on take snapshot.

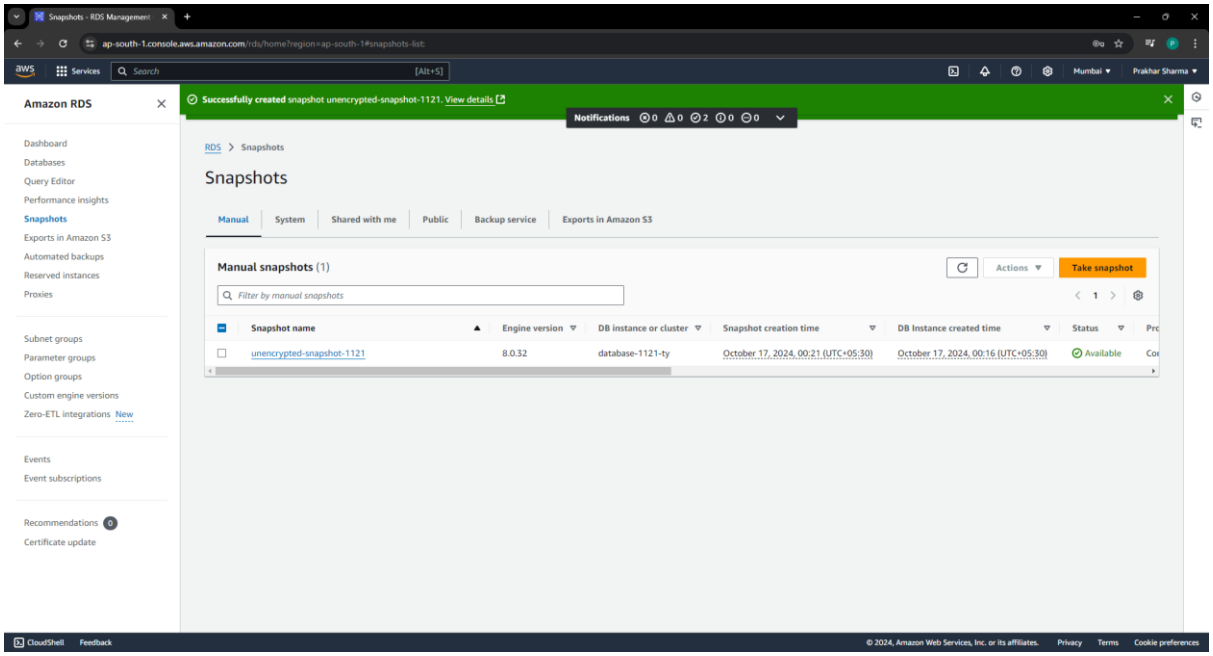


You can see the snapshot os created successfully.
Now to make its encrypted snapshot to restore the encrypted db instance we have to copy this

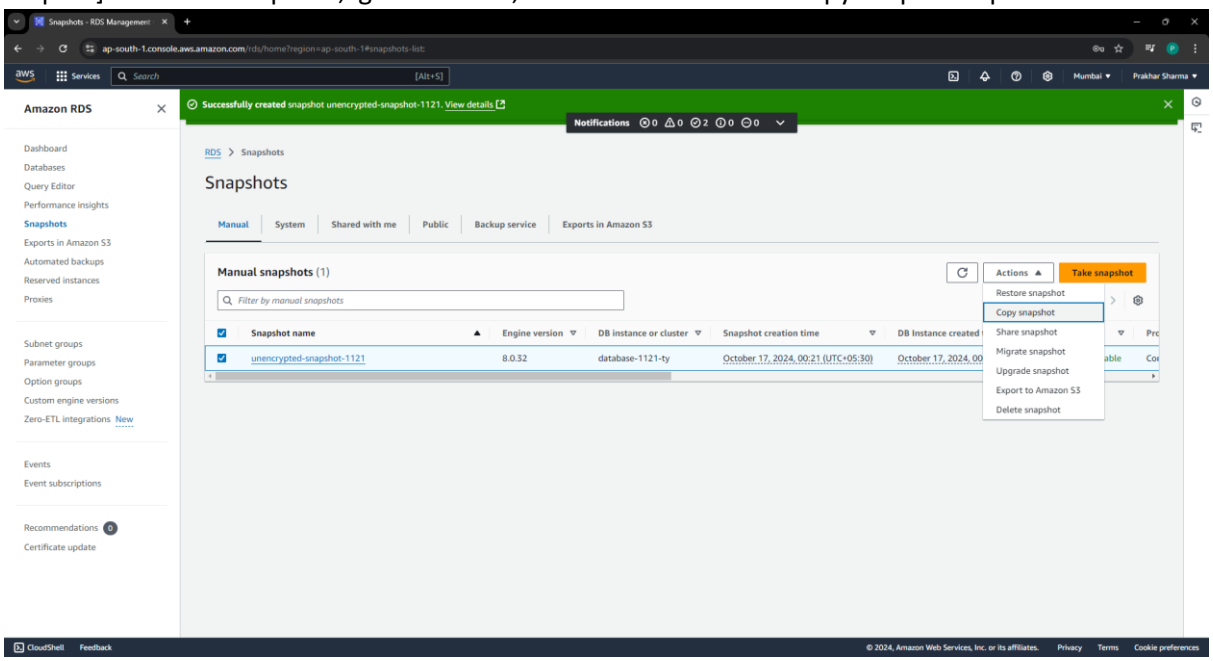
Name of the Student: Prakhar Anil Sharma **PRN:** 20220801121

Title of Practical : Encrypt an Unencrypted RDS DB Instance

snapshot.



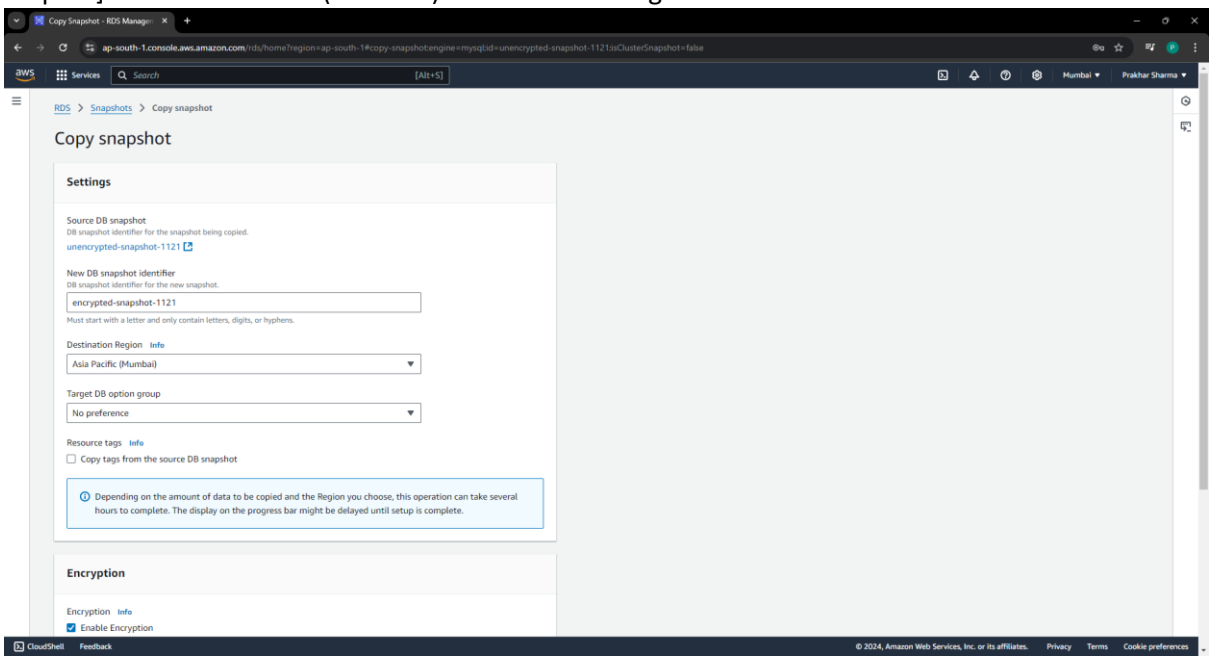
Step-23]Select the snapshot, go to actions, select and click on the copy snapshot option.



Name of the Student: Prakhar Anil Sharma **PRN:** 20220801121

Title of Practical : Encrypt an Unencrypted RDS DB Instance

Step-24]Name the Snapshot as Encrypted Snapshot-PRN No.
Step-25]Select Asia Pacific (Mumbai) as Destination region.



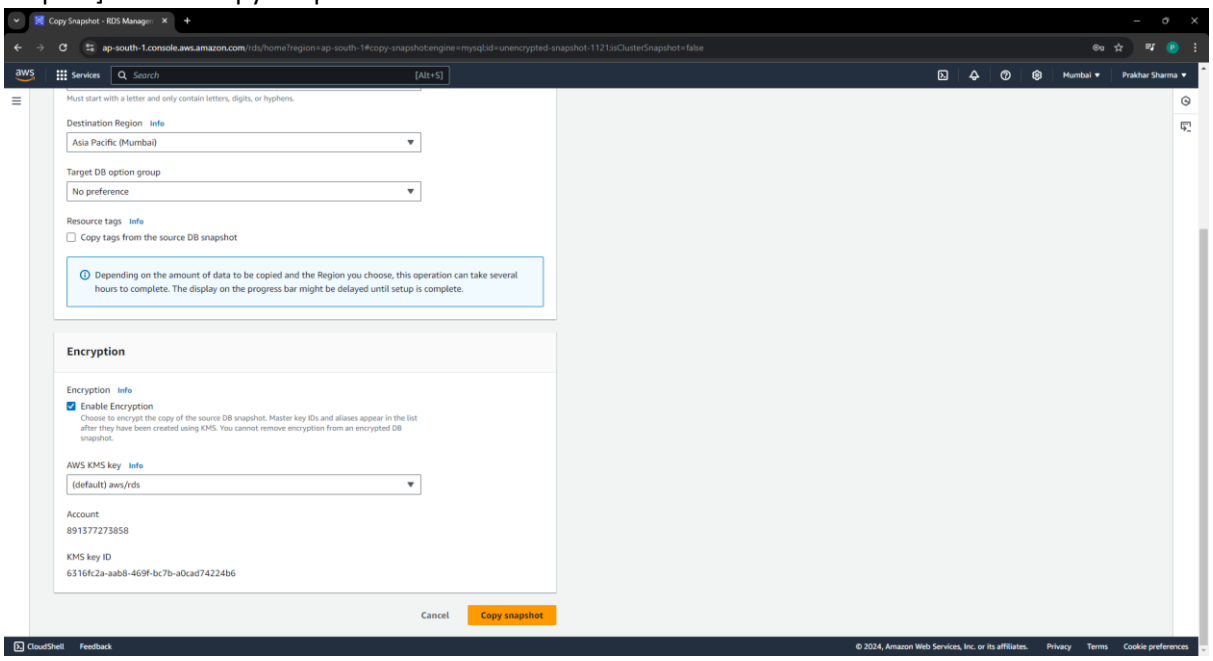
D Y PATIL INTERNATIONAL UNIVERSITY
AKURDI PUNE

School of Computer Science, Engineering and Applications(SCSEA)
B.C.A. TY (CCSA)
Subject : Advanced Cloud Computing (P)

Name of the Student: **Prakhar Anil Sharma** **PRN: 20220801121**

Title of Practical : **Encrypt an Unencrypted RDS DB Instance**

Step-26]In Encryption , Select the Enable Encryption Checkbox.
Step-27]Click on Copy Snapshot.



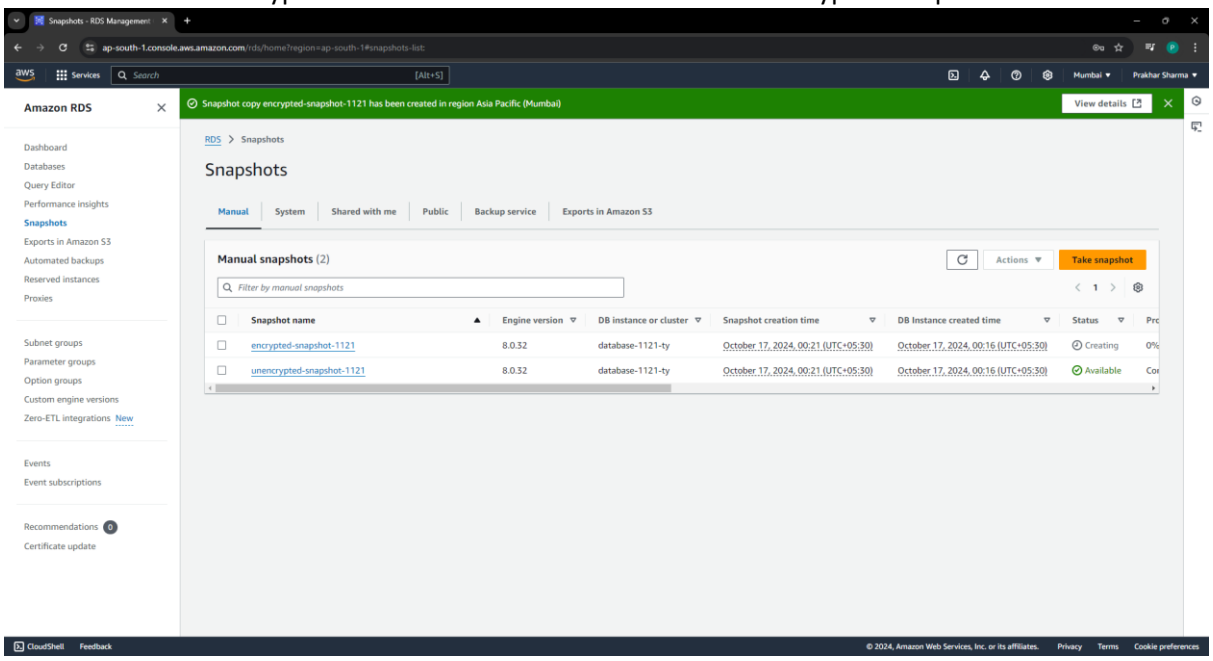
D Y PATIL INTERNATIONAL UNIVERSITY
AKURDI PUNE

School of Computer Science, Engineering and Applications(SCSEA)
B.C.A. TY (CCSA)
Subject : Advanced Cloud Computing (P)

Name of the Student: **Prakhar Anil Sharma** **PRN: 20220801121**

Title of Practical : **Encrypt an Unencrypted RDS DB Instance**

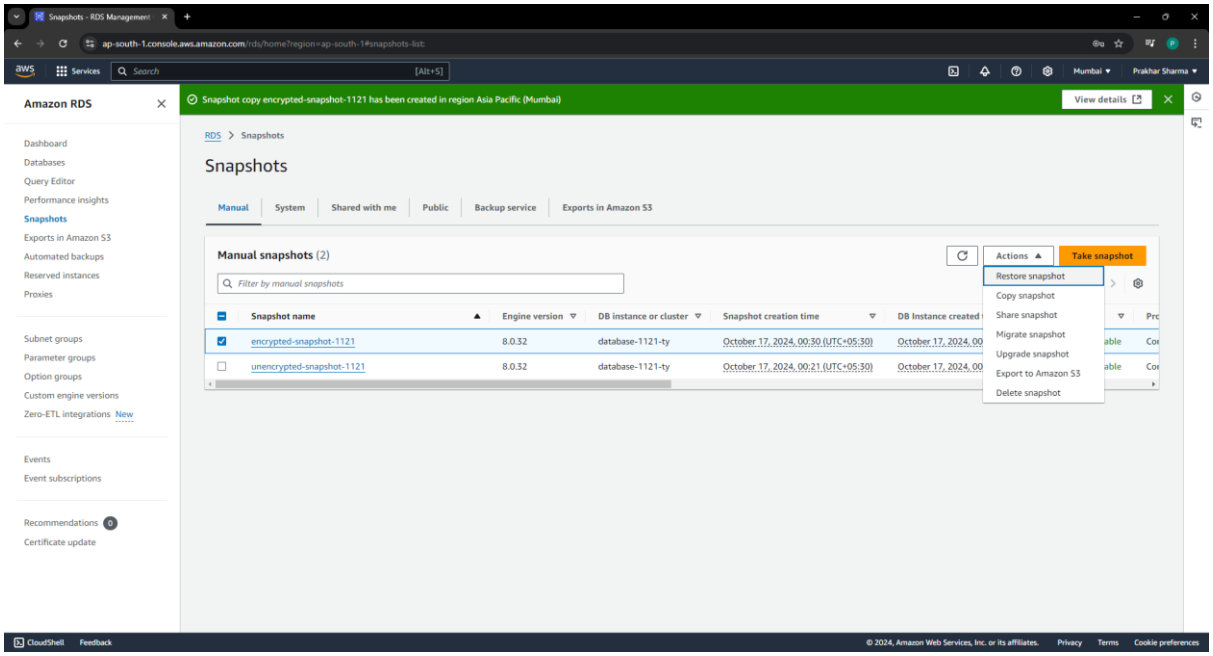
You can see now the encrypted snapshot is created successfully.
Now to make the encrypted db instance we have to restore the encrypted snapshot .



Name of the Student: Prakhar Anil Sharma **PRN:** 20220801121

Title of Practical : Encrypt an Unencrypted RDS DB Instance

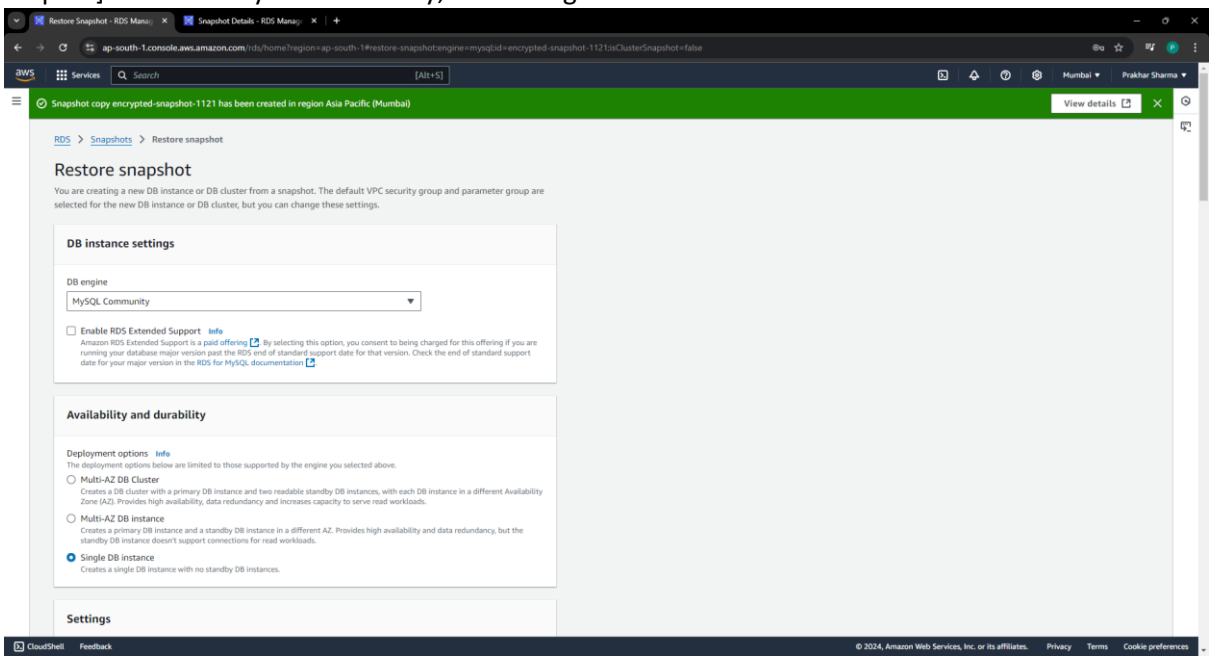
Step-28] Select the encrypted snapshot, go to actions, click on restore snapshot.



Name of the Student: Prakhar Anil Sharma **PRN:** 20220801121

Title of Practical : Encrypt an Unencrypted RDS DB Instance

Step-29]Select DB engine as MySQL Community from dropdown.
Step-30]In Availability and durability, select Single DB instance.

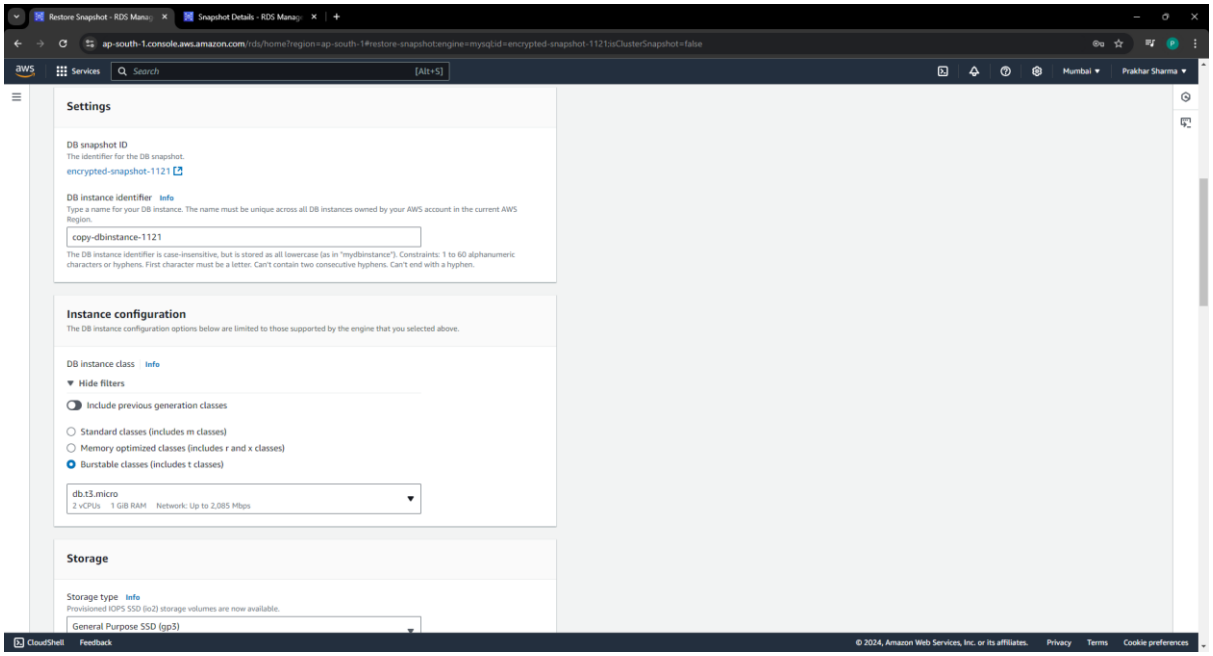


Step-31]Name the db instance identifier.
Step-32]In Instance configuration,
-select Burstable classes.

Name of the Student: Prakhar Anil Sharma **PRN:** 20220801121

Title of Practical : Encrypt an Unencrypted RDS DB Instance

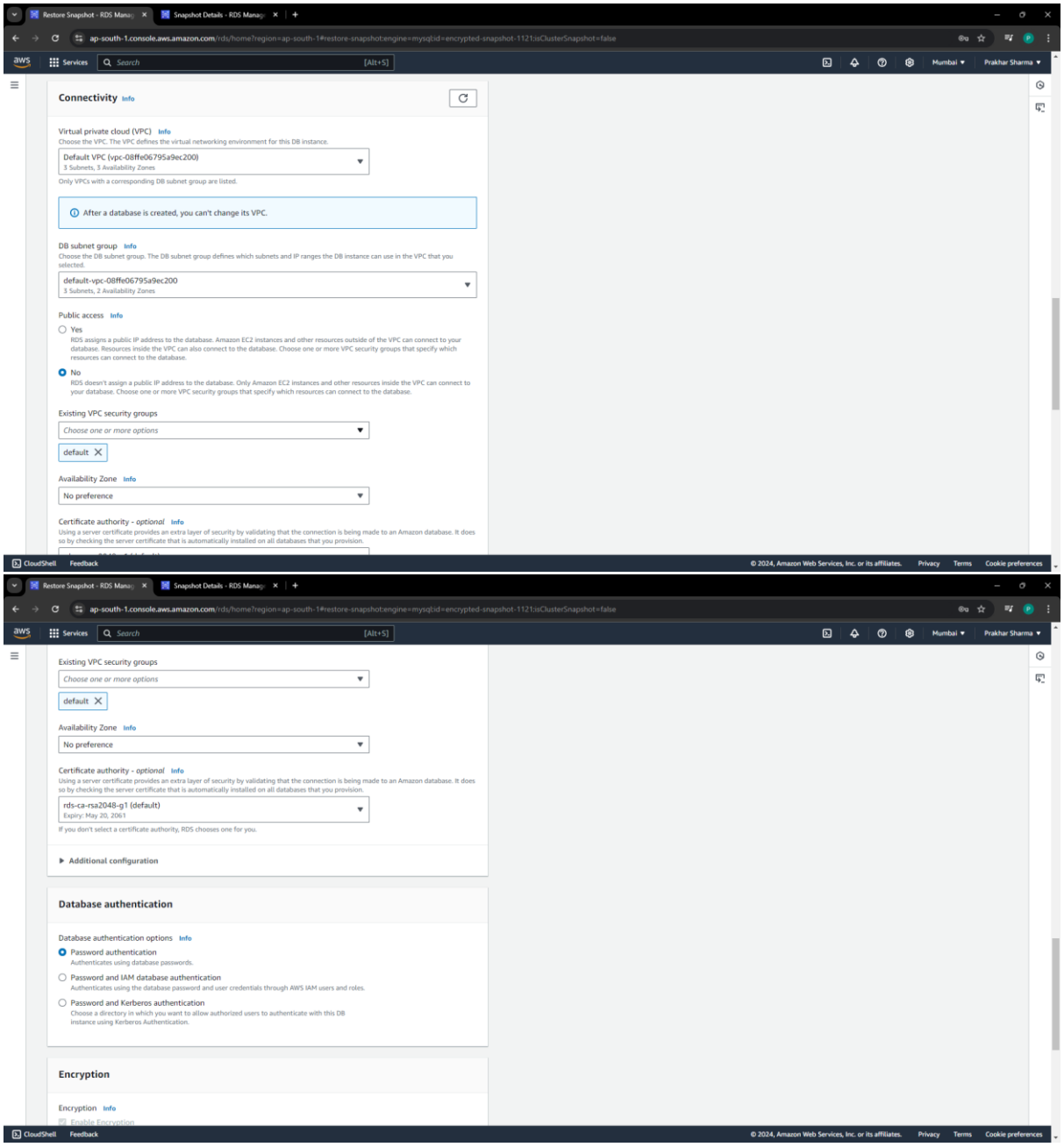
-select db.t3.micro.



Name of the Student: Prakhar Anil Sharma **PRN:** 20220801121

Title of Practical : Encrypt an Unencrypted RDS DB Instance

Step-33]In Connectivity ,Select Public Access as No.

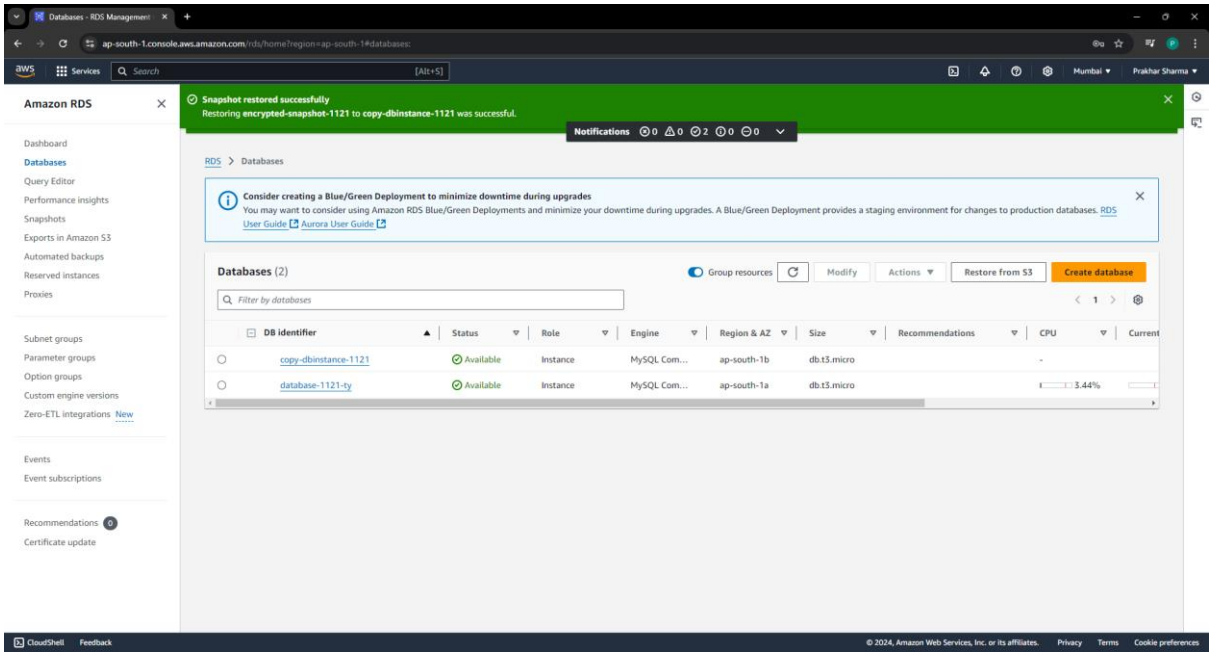


Keep other setting as it is.

Name of the Student: Prakhar Anil Sharma **PRN:** 20220801121

Title of Practical : Encrypt an Unencrypted RDS DB Instance

Step-34]Click on restore db instance.



D Y PATIL INTERNATIONAL UNIVERSITY
AKURDI PUNE

School of Computer Science, Engineering and Applications(SCSEA)
B.C.A. TY (CCSA)
Subject : Advanced Cloud Computing (P)

Name of the Student: **Prakhar Anil Sharma** **PRN: 20220801121**

Title of Practical : **Encrypt an Unencrypted RDS DB Instance**

After successfully restored ,you can check in the configuration of copy db instance that the encryption is enabled.