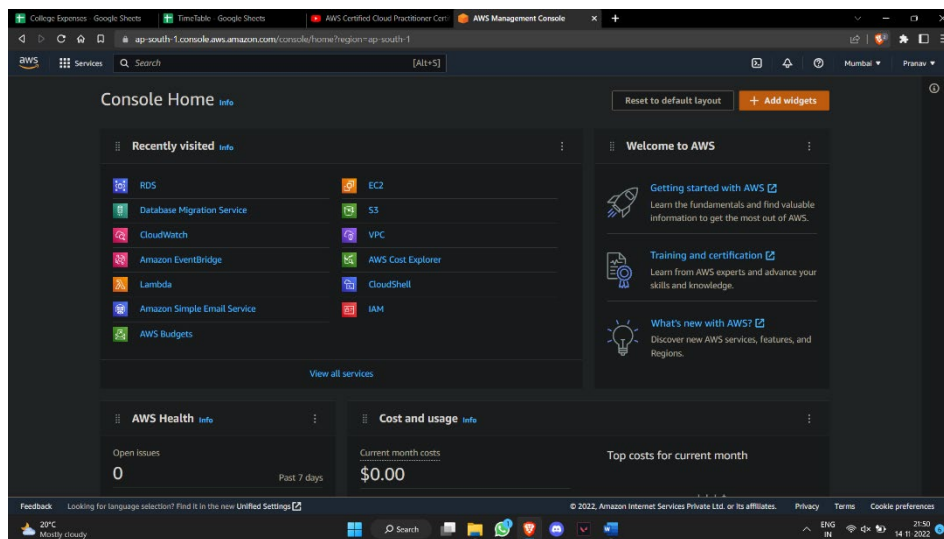


Experiment 8–Migrate to Amazon RDS

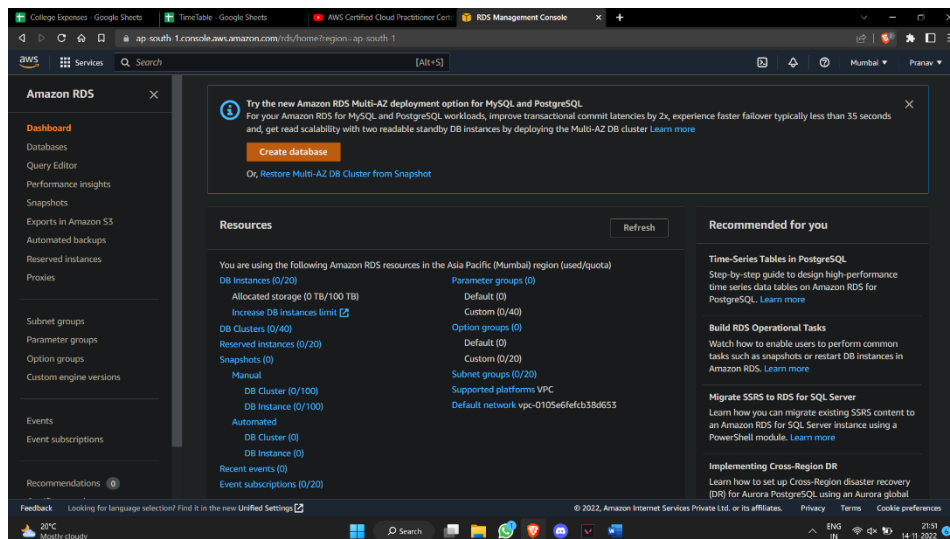
AIM:To migrate from MySQL to Amazon RDS with AWS DMS.

PROCEDURE:

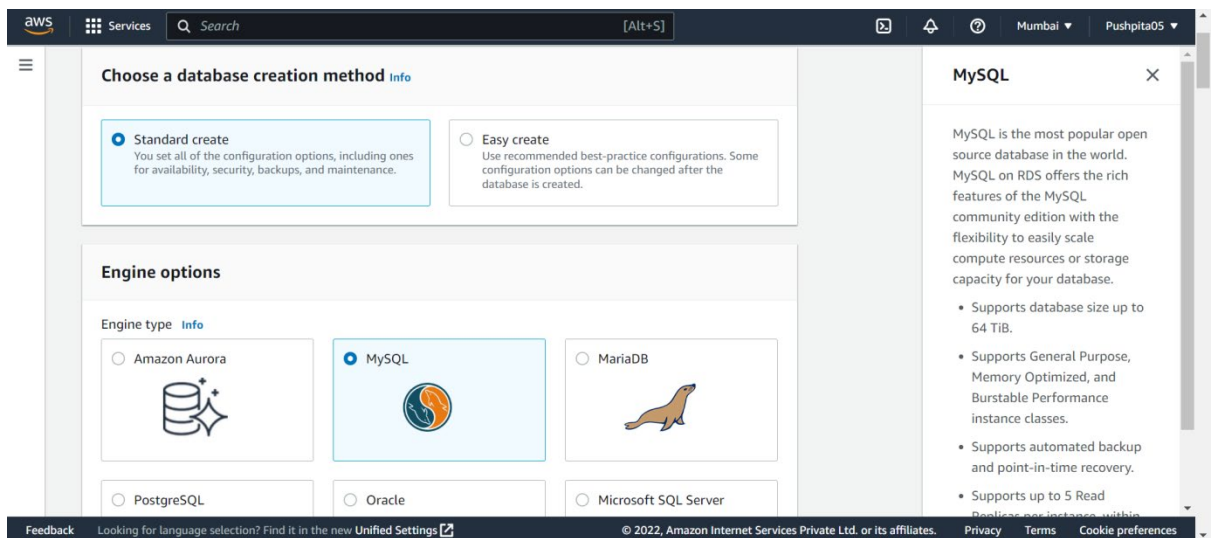
1. Firstly, open the AWS console homepage on browser (<https://aws.amazon.com/console/>).



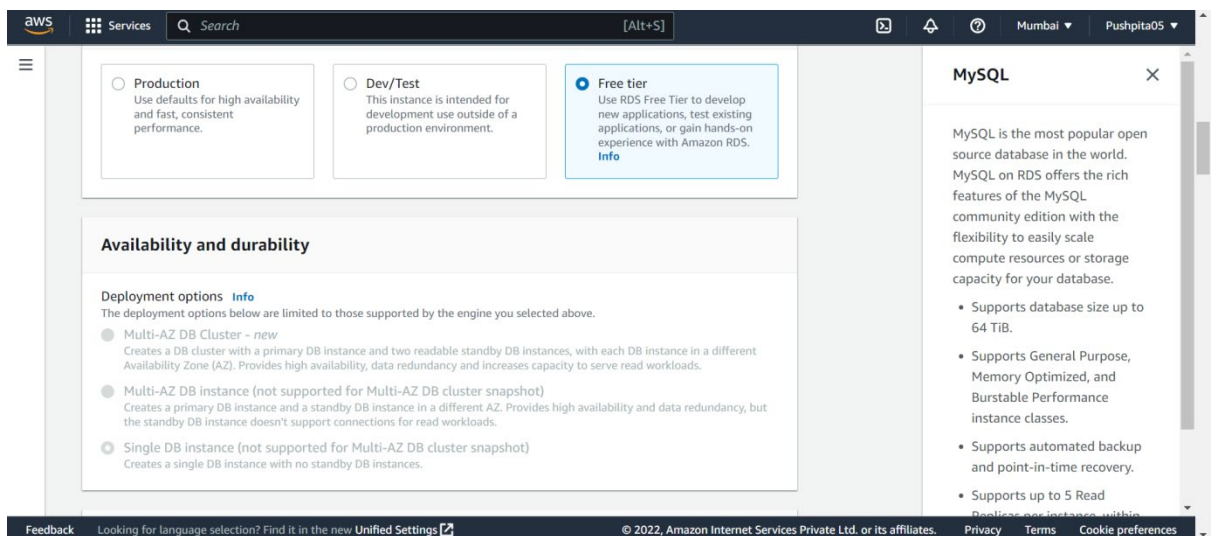
2. Go to Amazon RDS console and select “Create database”.



3. Select MySQL engine as engine type in the “Create database page”.



4. Click on "Free Tier" as templates and leave other configurations as it is.



5. Create a Master username and password and remember that for future use.

The screenshot shows the 'Settings' page for a new MySQL database instance in the AWS Management Console. The page is divided into two main sections: 'DB instance identifier' and 'Credentials Settings'.

DB instance identifier: A text input field contains 'database-1'. Below it, a note states: 'The DB instance identifier is case-insensitive, but is stored as all lowercase (as in "mydbinstance"). Constraints: 1 to 60 alphanumeric characters or hyphens. First character must be a letter. Can't contain two consecutive hyphens. Can't end with a hyphen.'

Credentials Settings: This section includes a 'Master username' field with 'admin' entered. Below it, a checkbox for 'Auto generate a password' is unchecked. A 'Master password' field is shown with masked characters. Constraints for the password are listed: 'At least 8 printable ASCII characters. Can't contain any of the following: / (slash), ' (single quote), " (double quote) and @ (at sign).'

On the right side, a 'MySQL' sidebar provides information about the database engine, including its popularity and supported features like database size up to 64 TiB, General Purpose, Memory Optimized, and Burstable Performance instance classes, automated backup and point-in-time recovery, and up to 5 Read Replicas per instance.

6. Select on create database and wait for the RDS database to be created.

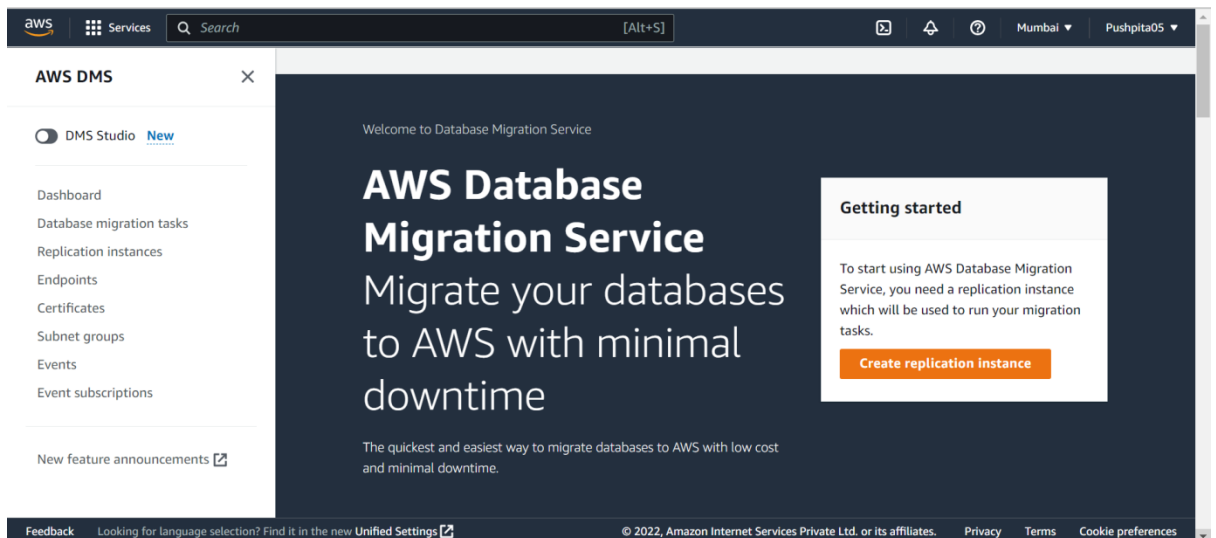
The screenshot shows the 'Estimated monthly costs' page for a new MySQL database instance. The page displays the Amazon RDS Free Tier details, which allow for 750 hours of Amazon RDS in a Single-AZ db.t2.micro, db.t3.micro or db.t4g.micro Instance, 20 GB of General Purpose Storage (SSD), and 20 GB for automated backup storage and any user-initiated DB Snapshots. A 'Create database' button is visible at the bottom right.

Below the cost information, a blue box contains a warning: 'You are responsible for ensuring that you have all of the necessary rights for any third-party products or services that you use with AWS services.'

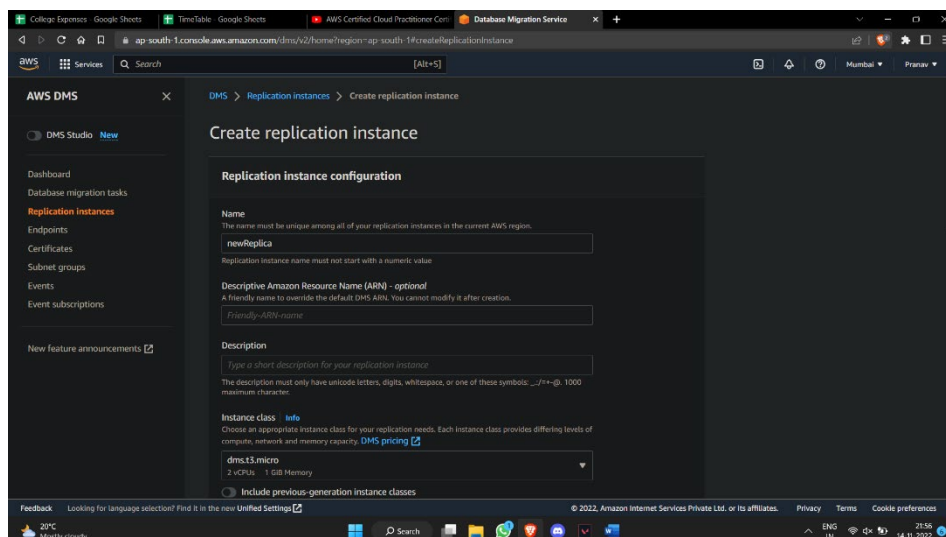
The screenshot shows the 'Amazon RDS' page in the AWS Management Console. The 'Databases' section is active, and a table lists the database instances. The table has columns for DB identifier, Role, Engine, Region & AZ, Size, Status, CPU, and Actions. The database 'database-1' is listed with a status of 'Creating'.

DB identifier	Role	Engine	Region & AZ	Size	Status	CPU	Actions
database-1	Instance	MySQL Community	-	db.t3.micro	Creating	-	View credential details

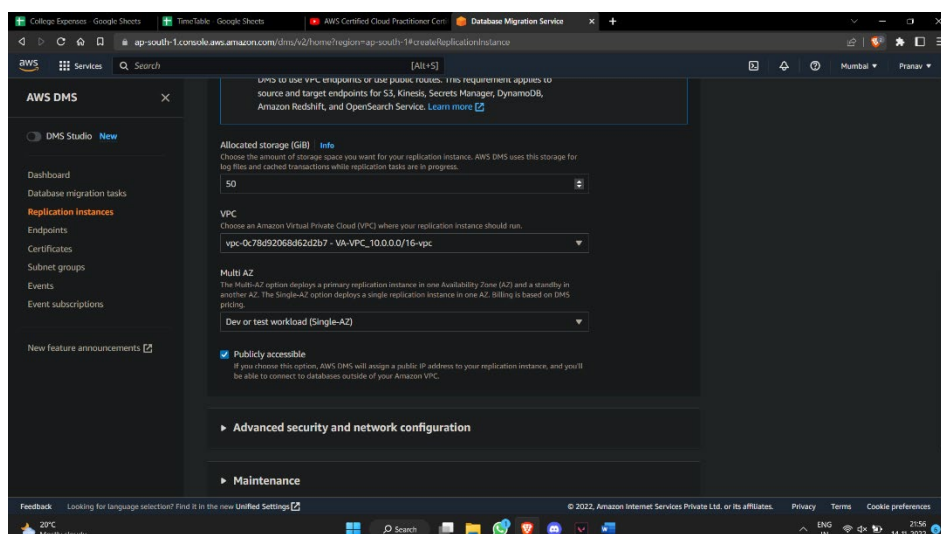
7. Go to AWS DMS console page and click on "Create Replication Instance".



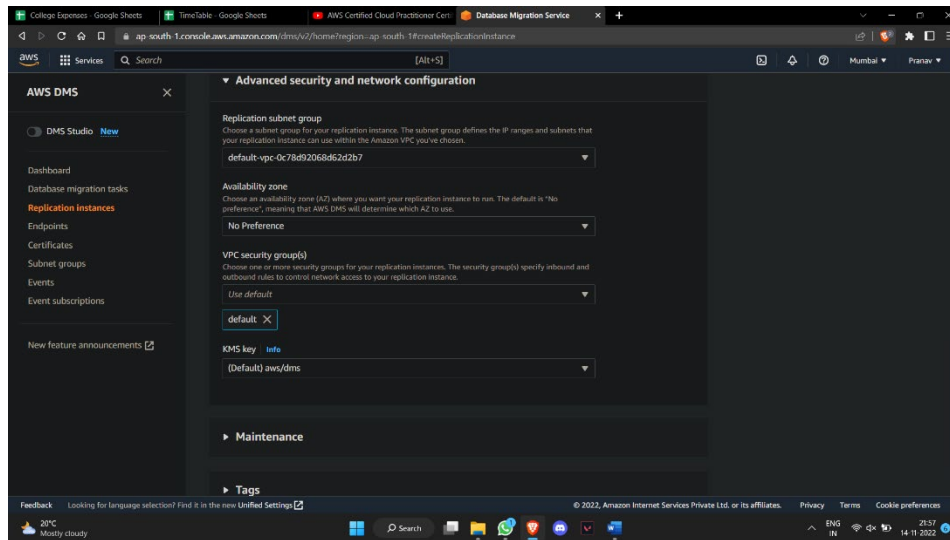
8. Choose the name for your instance and select “t3.micro” in instance class.



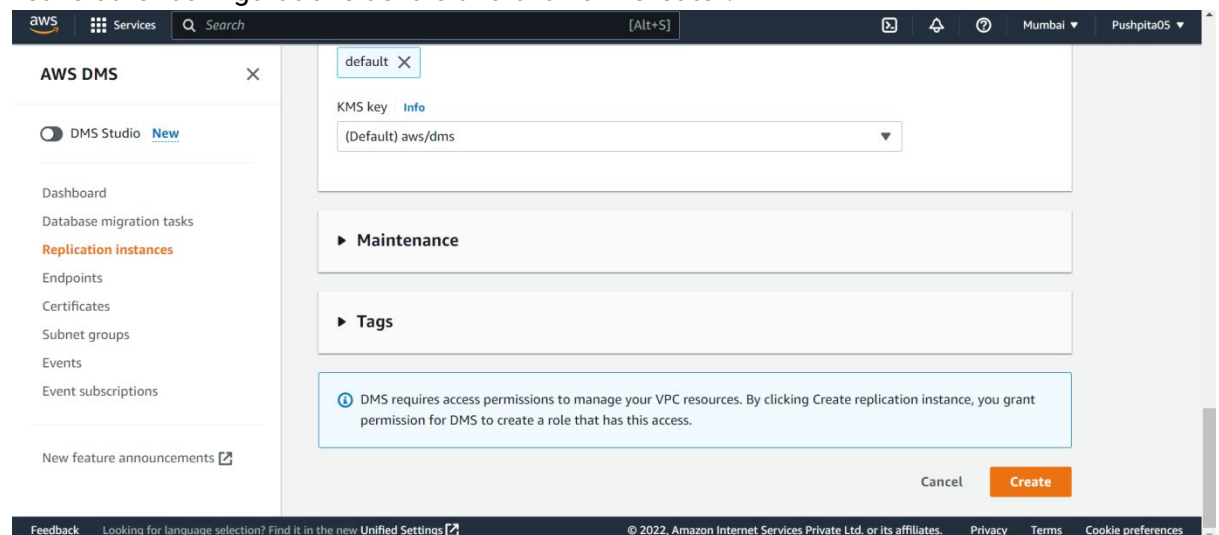
9. Select the vpc you want your instance to be in and select “Dev or test workload”.



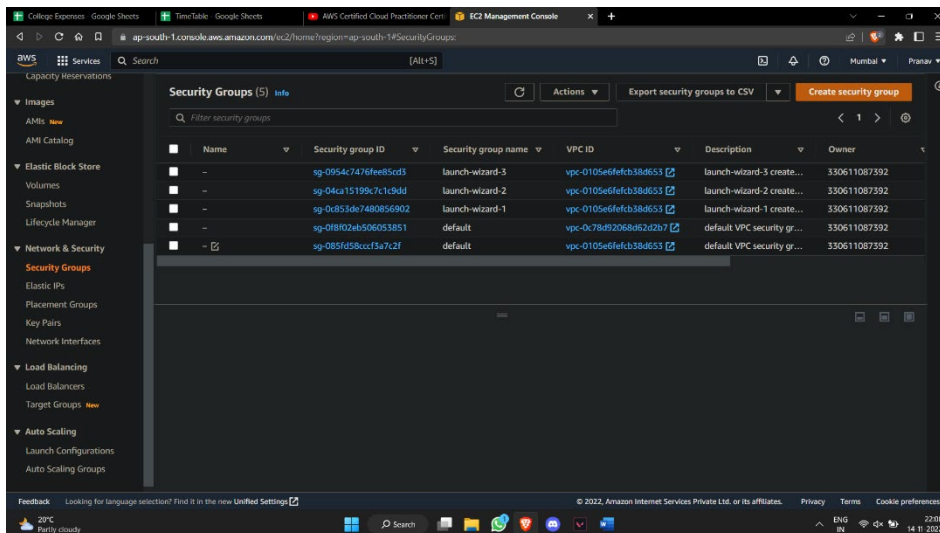
10. Select security group you want your instance to be part of and better to choose “default”.



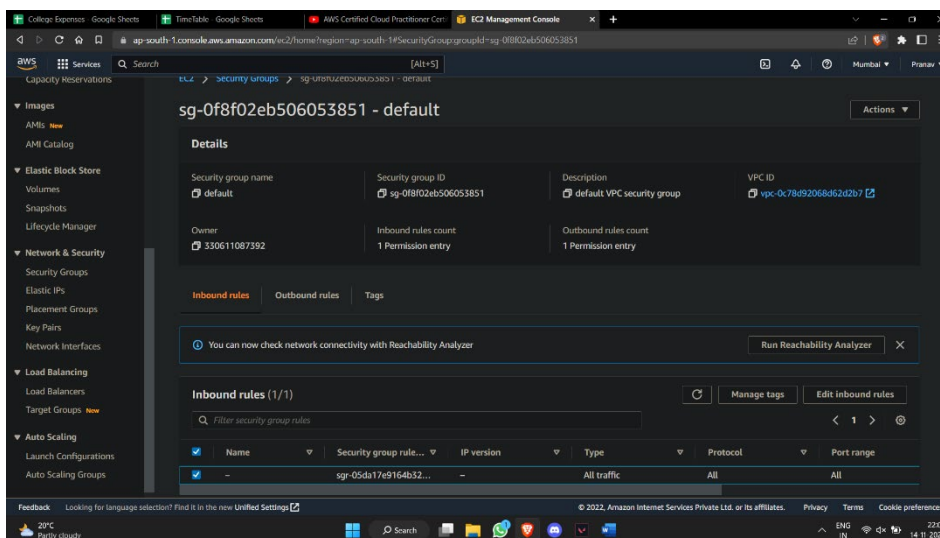
11. Leave other configurations as it is and click on “Create”.



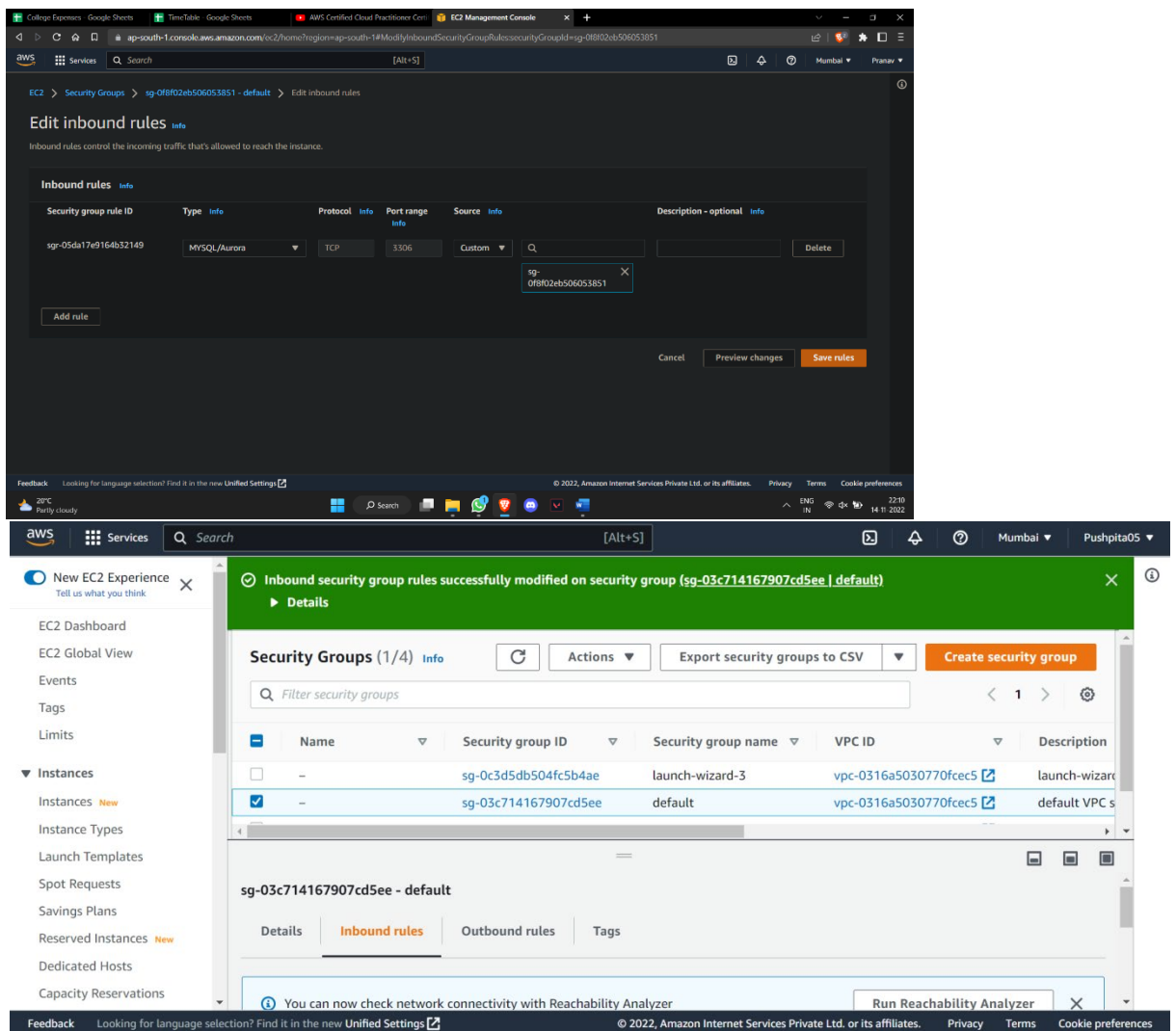
12. Go to “Security Groups” in EC2 console.



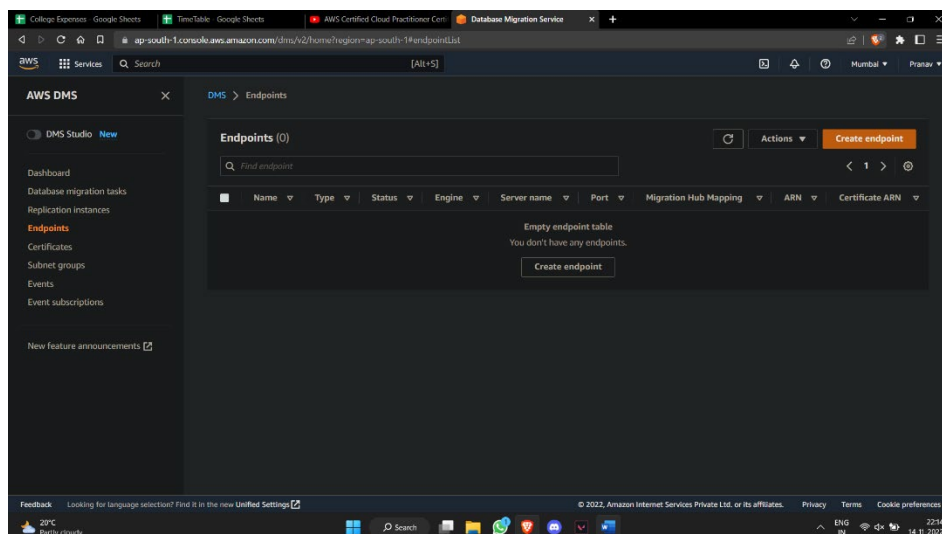
13. Click on your security group name and click on “edit inbound rules”.



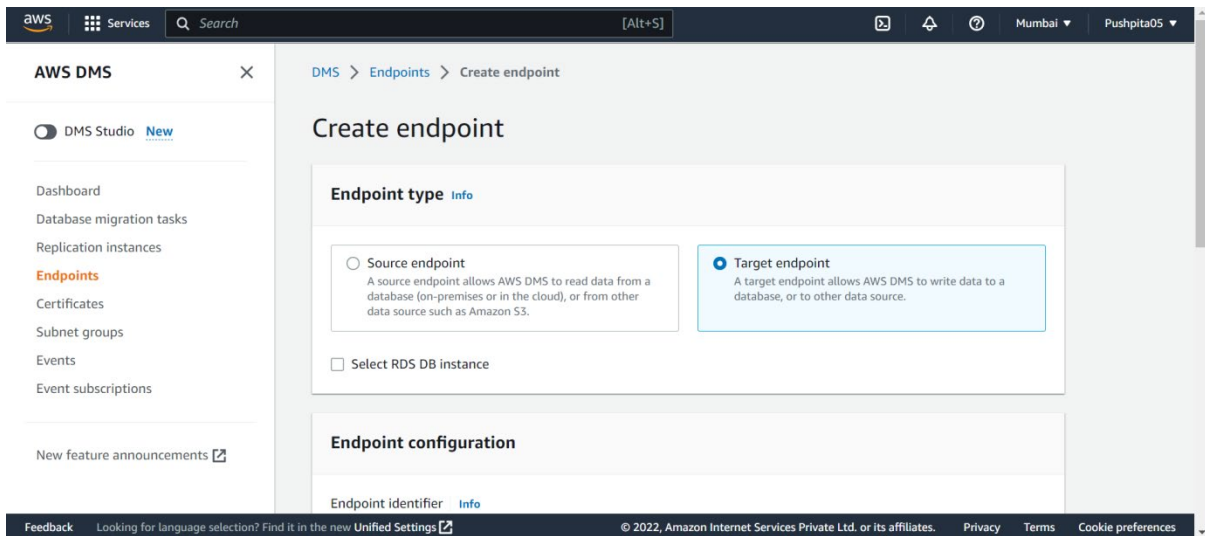
14. Select “MYSQL/Aurora” in type and select the security group of your instance, in this case default and click on “save rules”.



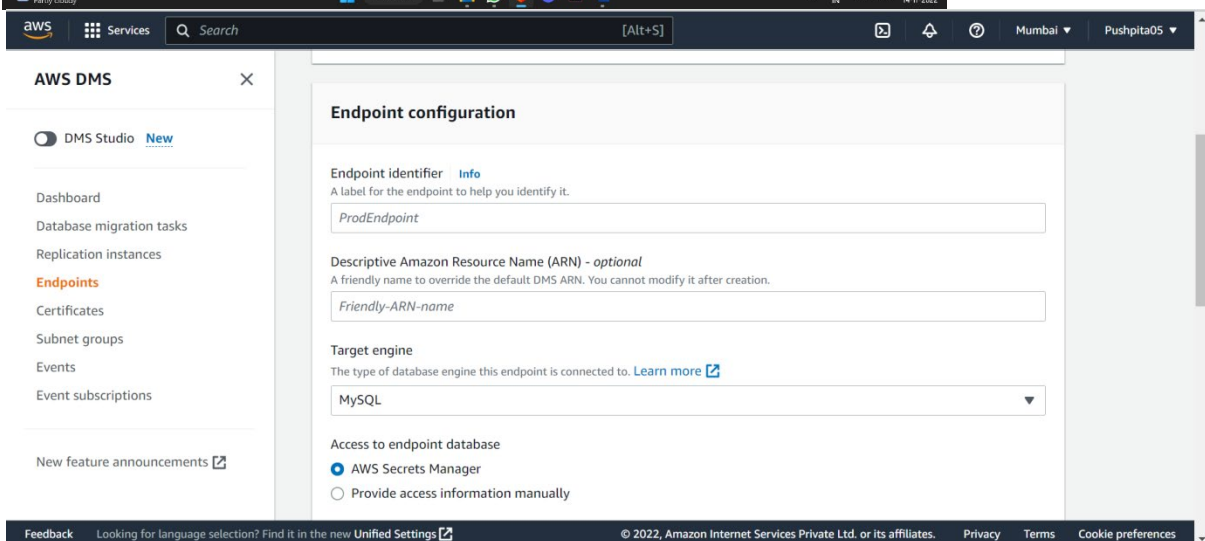
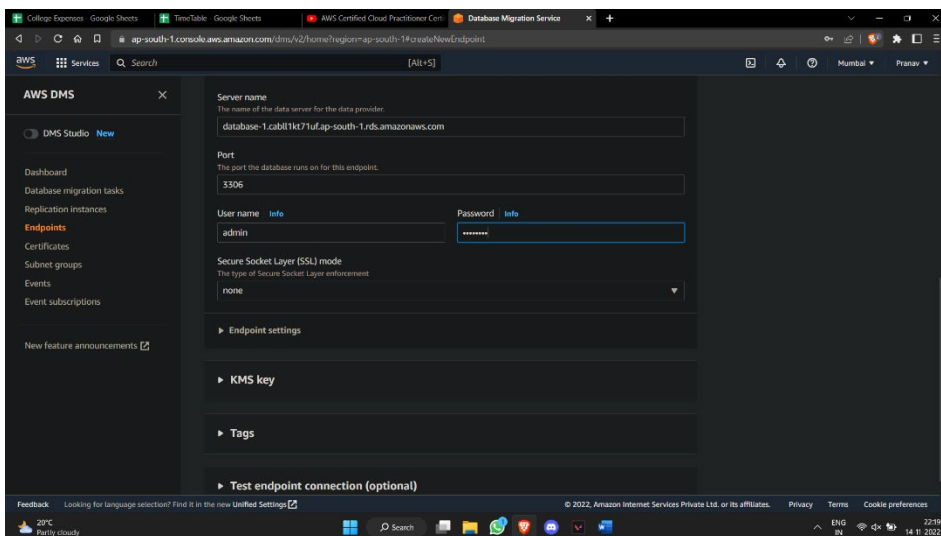
15. Go to AWS DMS console and to the endpoints page and click on “Create Endpoint”.



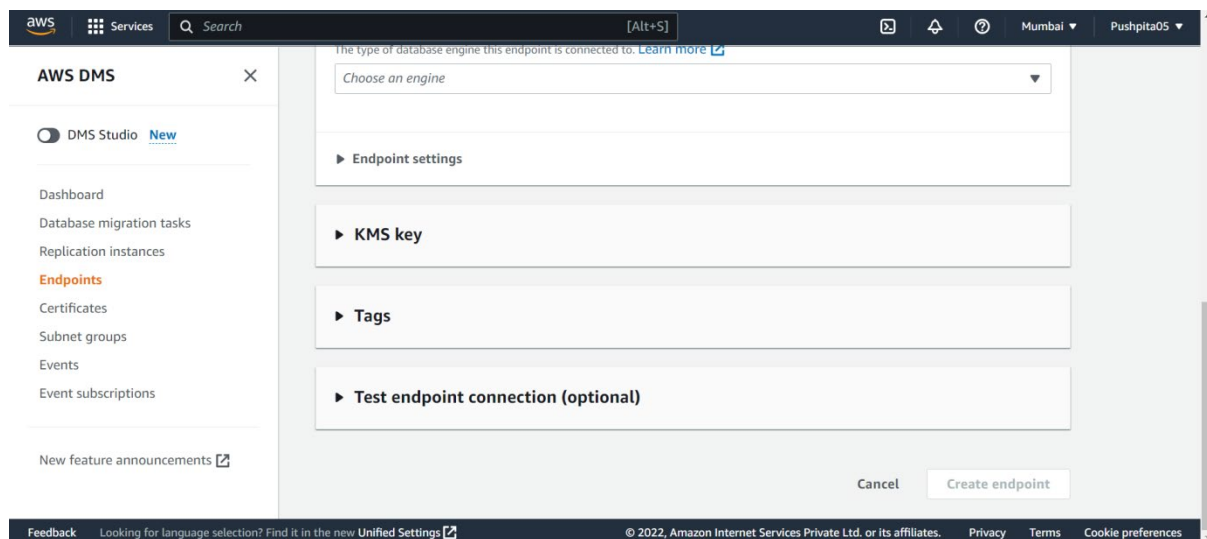
16. Select “Target endpoint” and check the select RDS DB instance box.



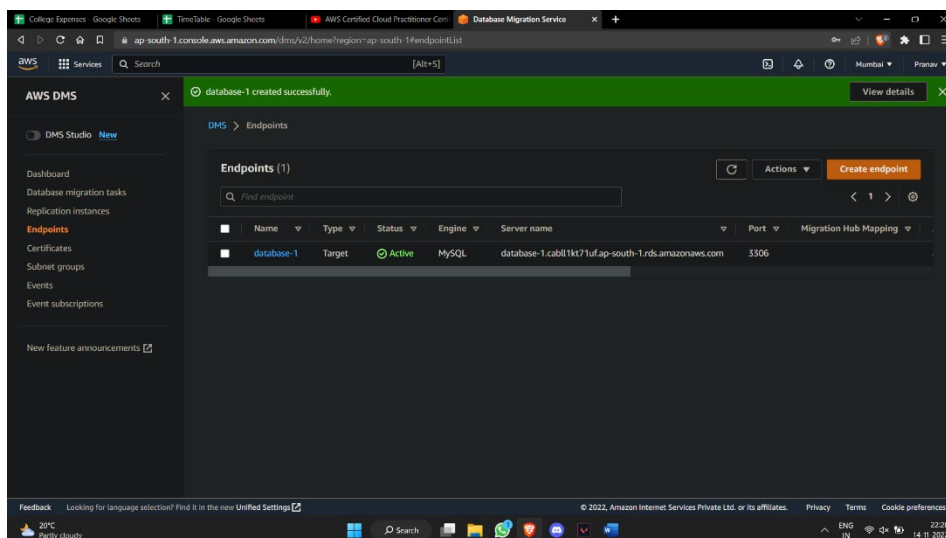
17. Select “Provide access information manually” and enter password chosen before.



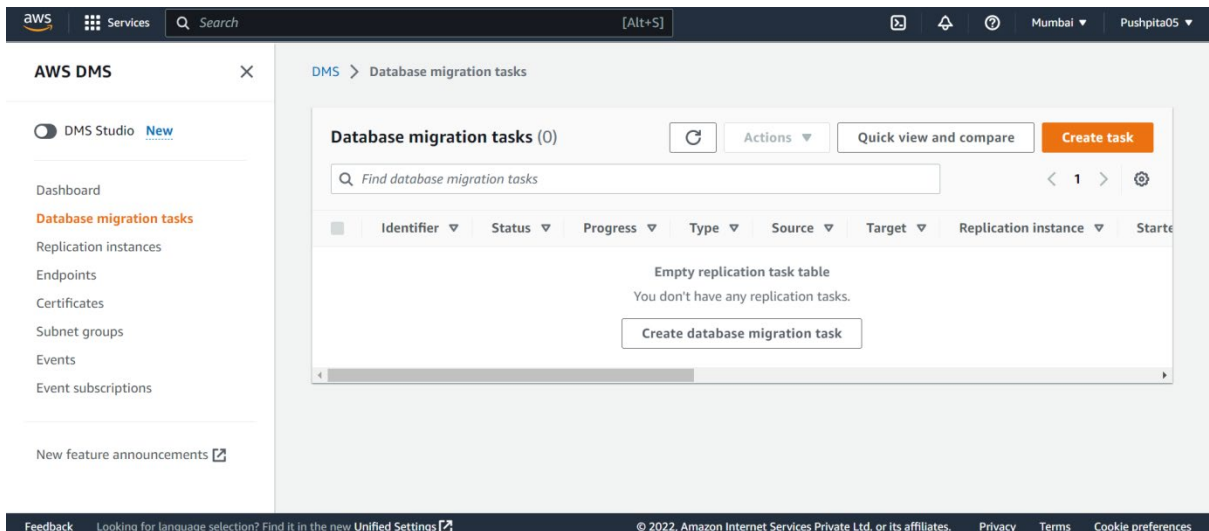
18. Leave other configurations as it is and click on “create endpoint”.



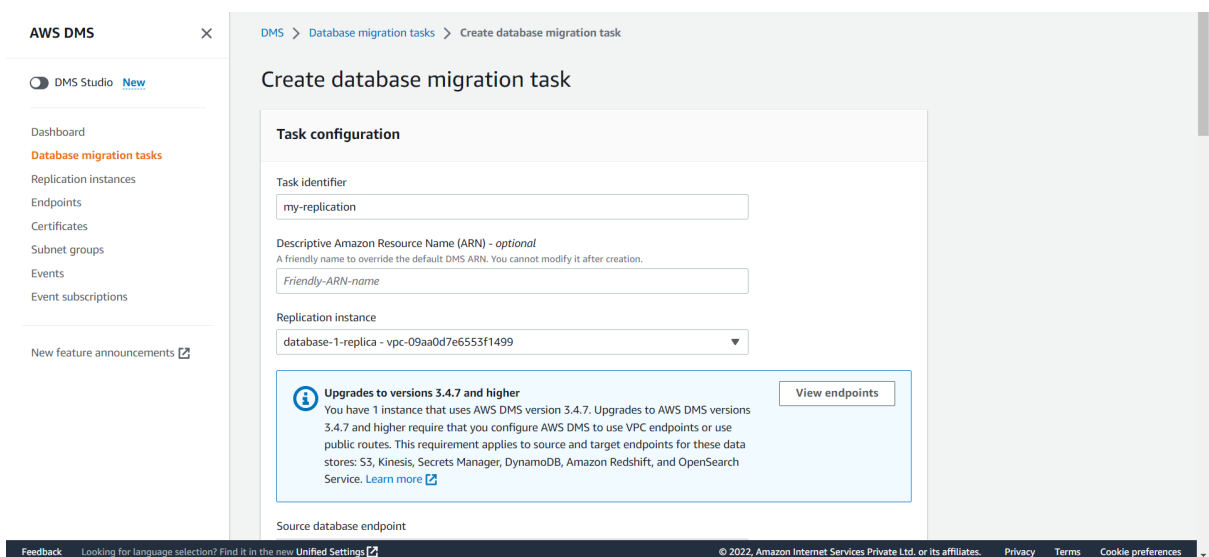
19. Repeat the above steps for “Source Endpoint” except do not check the “select RDS DB instance” and choose a different name for endpoint identifier.



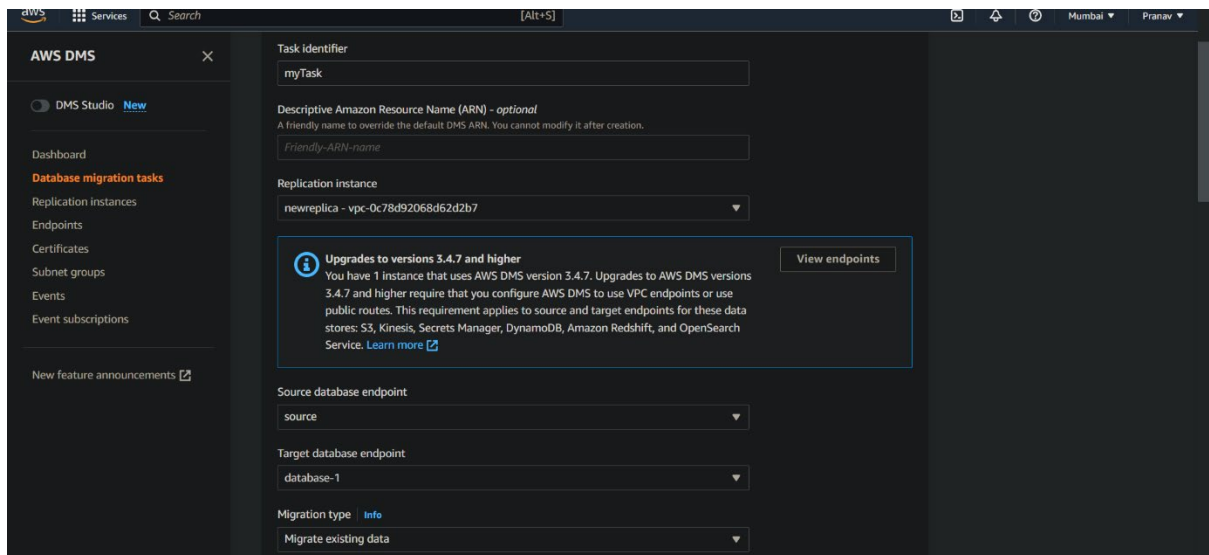
20. Go to “Database migration tasks” page in AWS DMS console and select “Create task”.



21. Give a name to the task and select replication instance.



22. Select source and target database endpoints. Also select "migrate existing data" as migration type.



23. Click on “Add new selection rule”, enter a source name- it can be anything and put “%” in table name. Finally click on “create task”.

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AWS DMS

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- Dashboard
- Database migration tasks**
- Replication instances
- Endpoints
- Certificates
- Subnet groups
- Events
- Event subscriptions

New feature announcements [🔗](#)

Specify at least one selection rule with an include action. After you do this, you can add one or more transformation rules.

Selection rules

Choose the schema and/or tables you want to include with, or exclude from, your migration task. [Info](#) [Add new selection rule](#)

▼ where schema name is like 'source' and Source table name is like '%', include

Schema
Enter a schema

Source name
Use the % character as a wildcard
source

Source table name
Use the % character as a wildcard
%

Action
Choose "Include" to migrate your selected objects, or "Exclude" to ignore them during the migration.
Include

Source filters [Info](#) [Add column filter](#)

RESULT:

A MySQL database was migrated to Amazon RDS with the help of AWS DMS.

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AWS DMS

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New feature announcements [🔗](#)

DMS > Database migration tasks

Database migration tasks (1) [Refresh](#) [Actions](#) [Quick view and compare](#) [Create task](#)

	Identifier	Status	Progress	Type	Source	Target	Replication instance	Started	Stopped	Elapsed
<input checked="" type="checkbox"/>	mytask	Ready	0%	Full load	source	database-1	newreplica	-	-	-