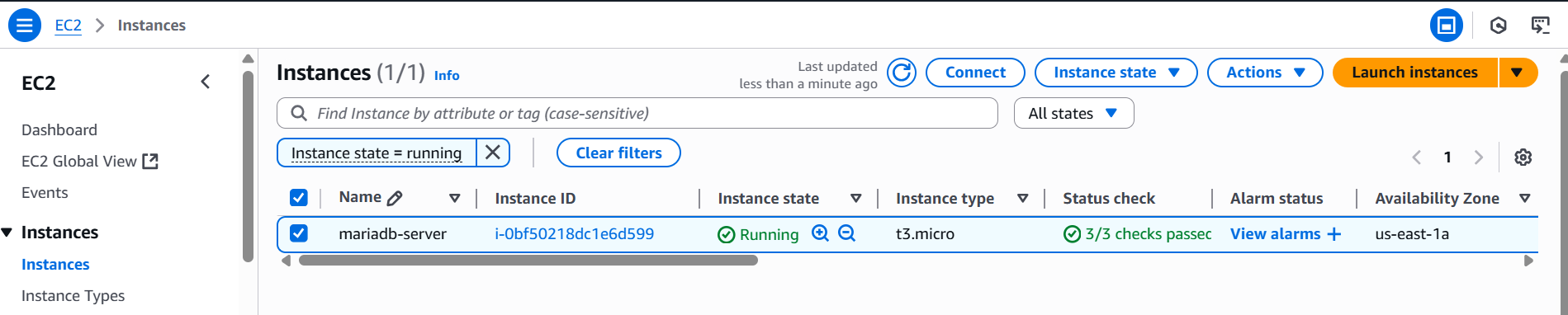
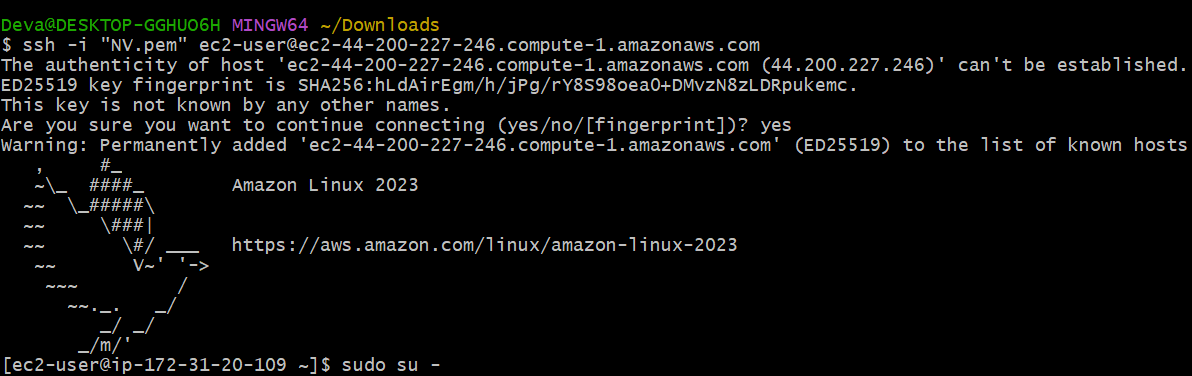
RDS Tasks

1. **Create MariaDB DB on EC2.**

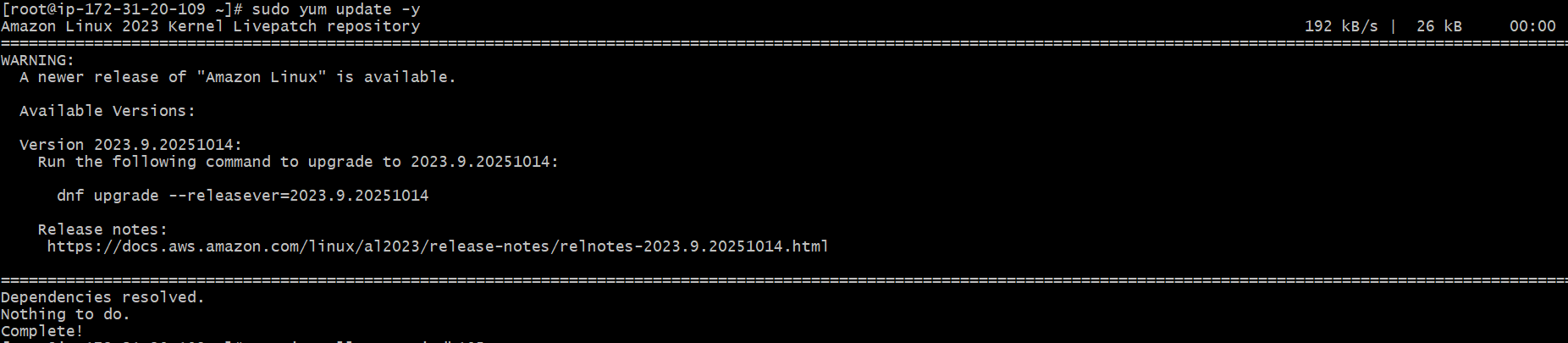
* Go to **AWS Console → EC2 → Launch Instance**
* Give name
* Select AMI
* Select key pair
* **Click on Launch Instance.**



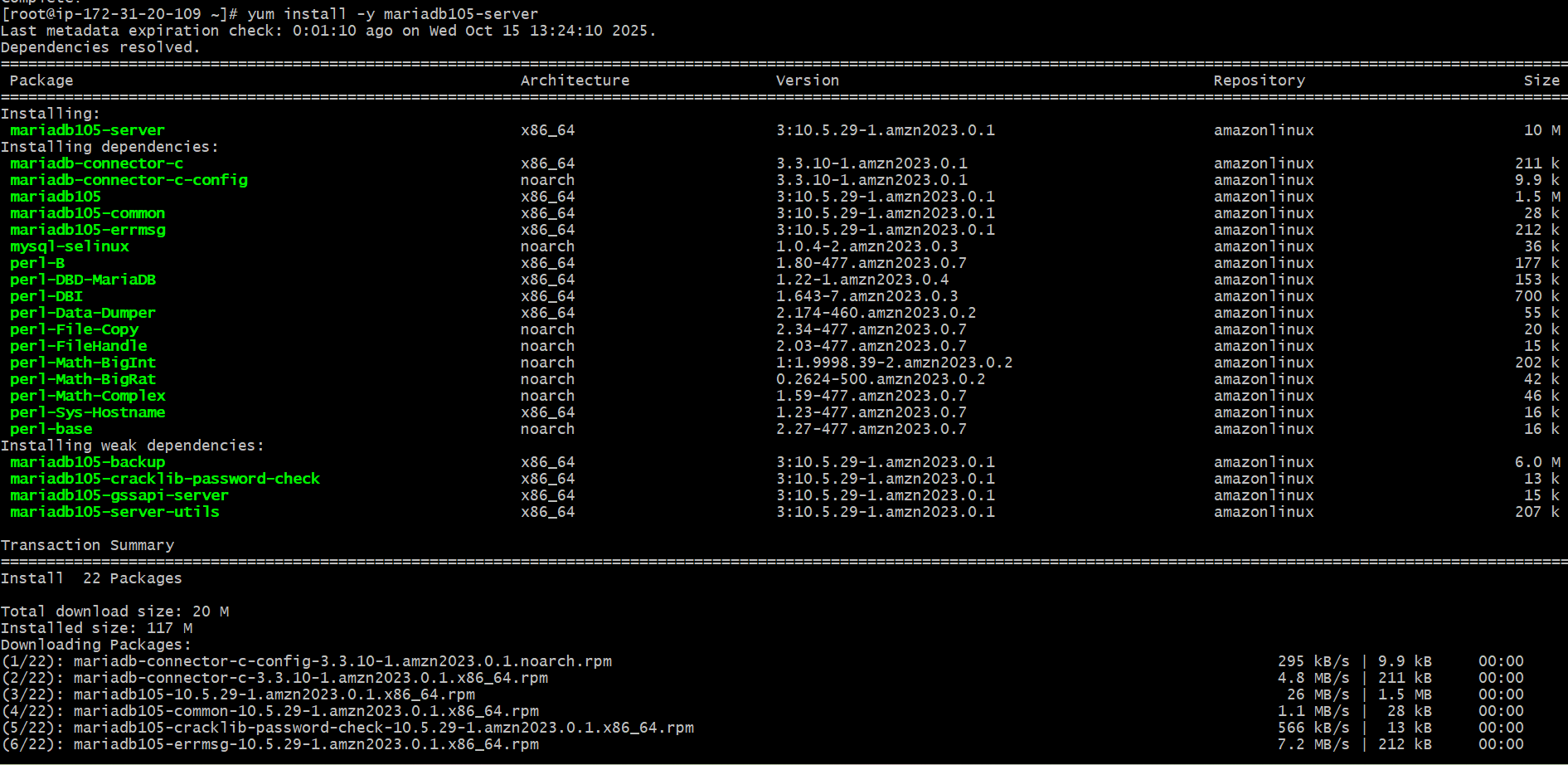
* Connect to ec2 via ssh
* Ssh -i keypair.pem ec2-user@ip address



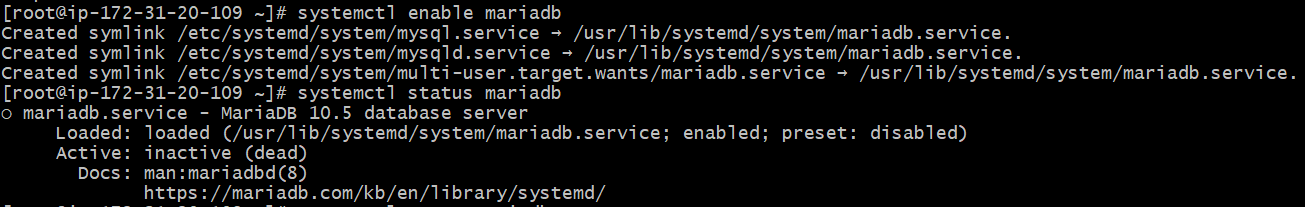
* Sudo yum update -y



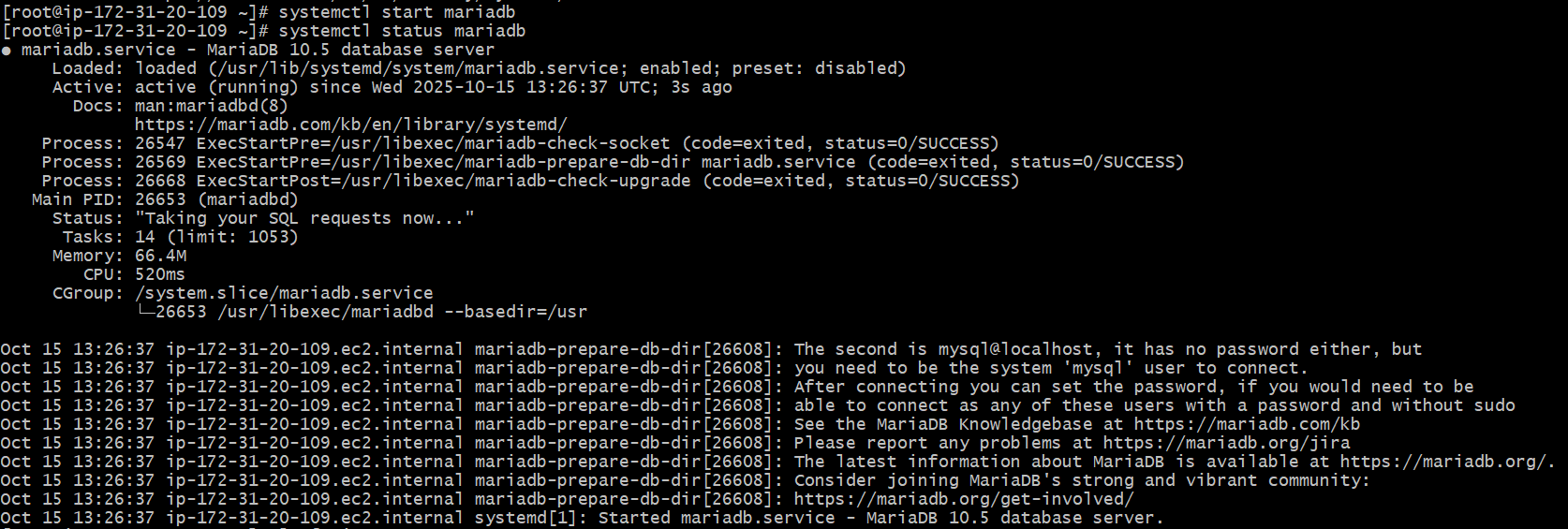
* Yum install –y mariadb105-server



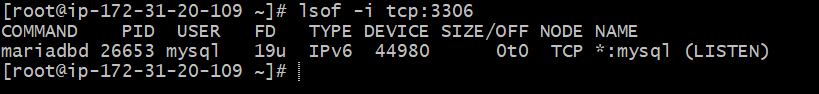
* Systemctl enable mariadb🡪enable the mariadb
* Systemctl status mariadb🡪check the status of mariadb



* Systemctl start mariadb🡪to start the mariadb server
* Systemctl status mariadb🡪check the status.

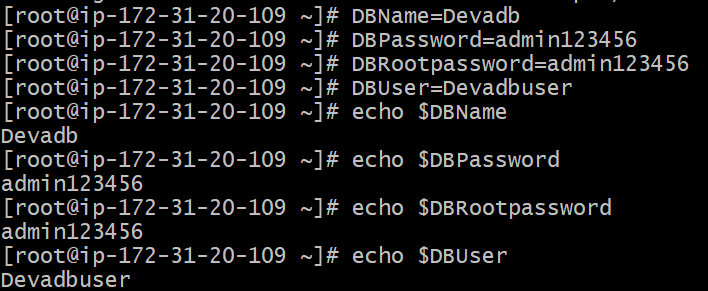


* Check the mariadb sever is running or not with port number
* **lsof -i tcp:3306**



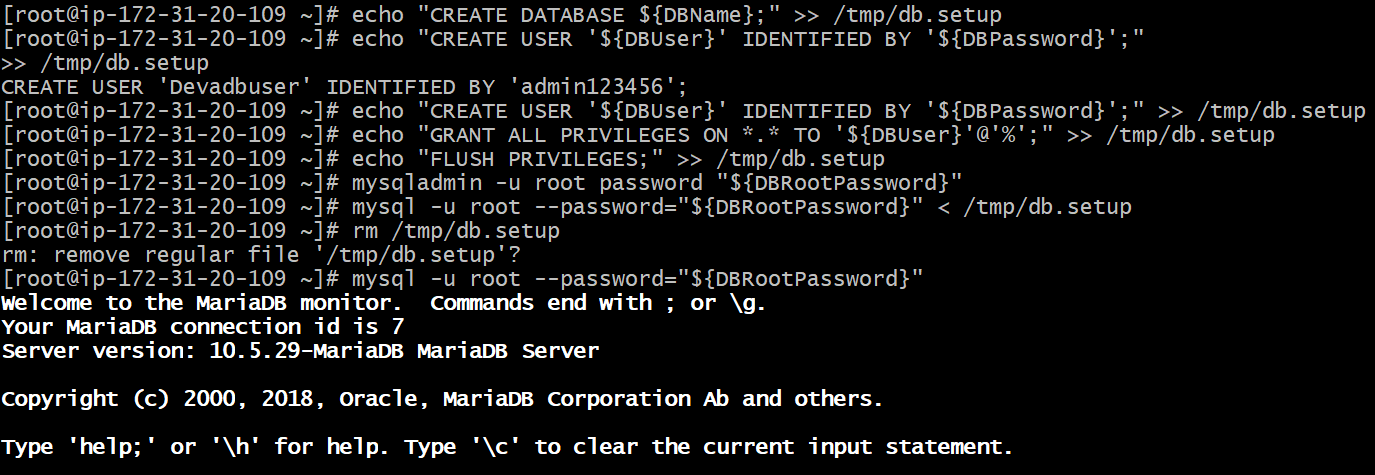
1. **Insert some dummy data.**

* Run following commands to set environmental variable.
* DBName=Devadb
* DBPassword=admin123456
* DBRootPassword=admin123456
* DBUser=Devadbuser



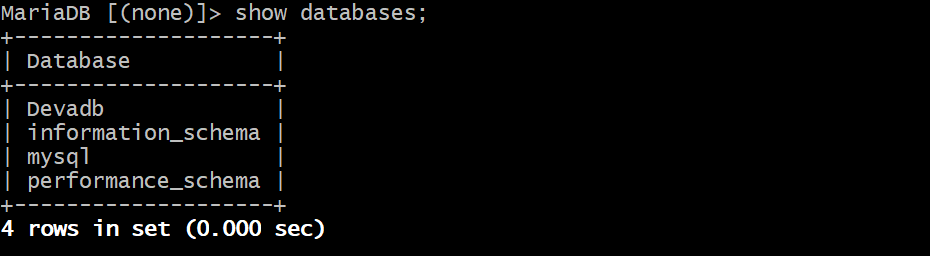
Run following commands to create database.

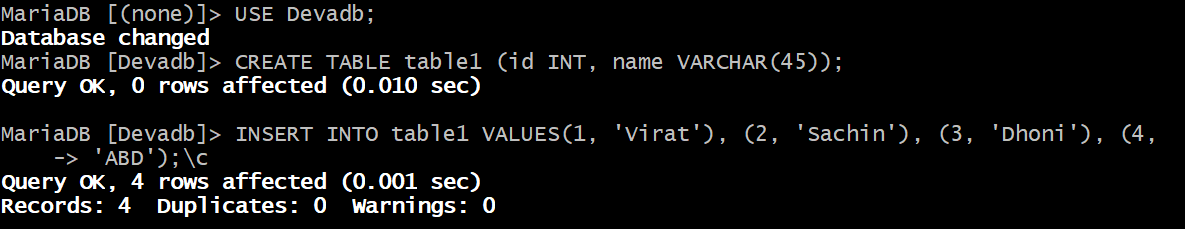
* echo "CREATE DATABASE ${DBName};" >> /tmp/db.setup
* echo "CREATE USER '${DBUser}' IDENTIFIED BY '${DBPassword}';"   
  >> /tmp/db.setup
* echo "GRANT ALL PRIVILEGES ON \*.\* TO '${DBUser}'@'%';" >>   
  /tmp/db.setup
* echo "FLUSH PRIVILEGES;" >> /tmp/db.setup
* mysqladmin -u root password "${DBRootPassword}"
* mysql -u root --password="${DBRootPassword}" < /tmp/db.setup
* rm /tmp/db.setup

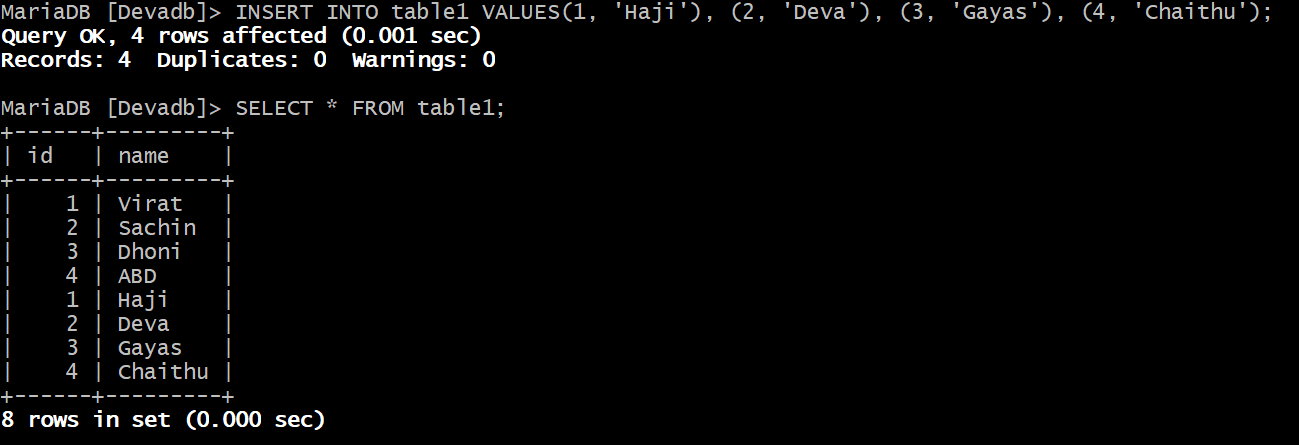


Run following commands to add data to database in EC2 instance.  
 mysql -u root --password="${DBRootPassword}"

* show databases;
* USE Devadb;
* CREATE TABLE table1 (id INT, name VARCHAR(45));
* INSERT INTO table1 VALUES(1, 'Haji'), (2, 'Deva'), (3, 'Gayas'), (4, ‘chaithu');
* SELECT \* FROM table1;



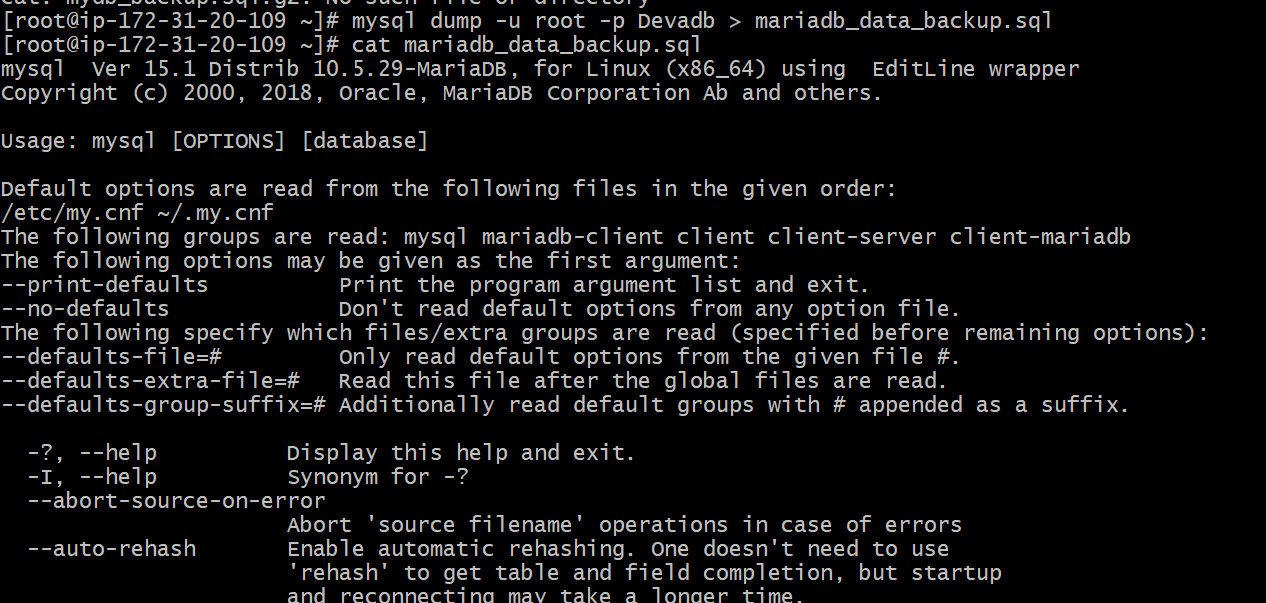




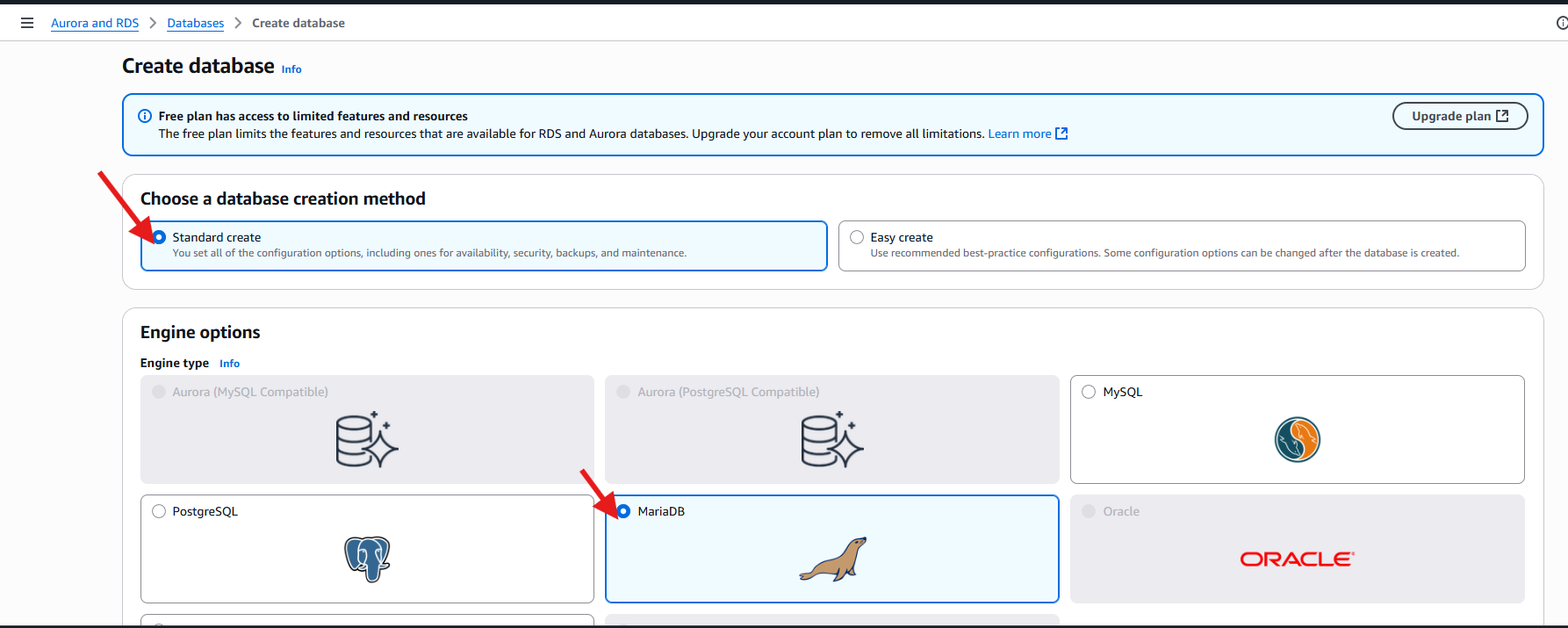
1. **Take the backup of dummy data on EC2.**

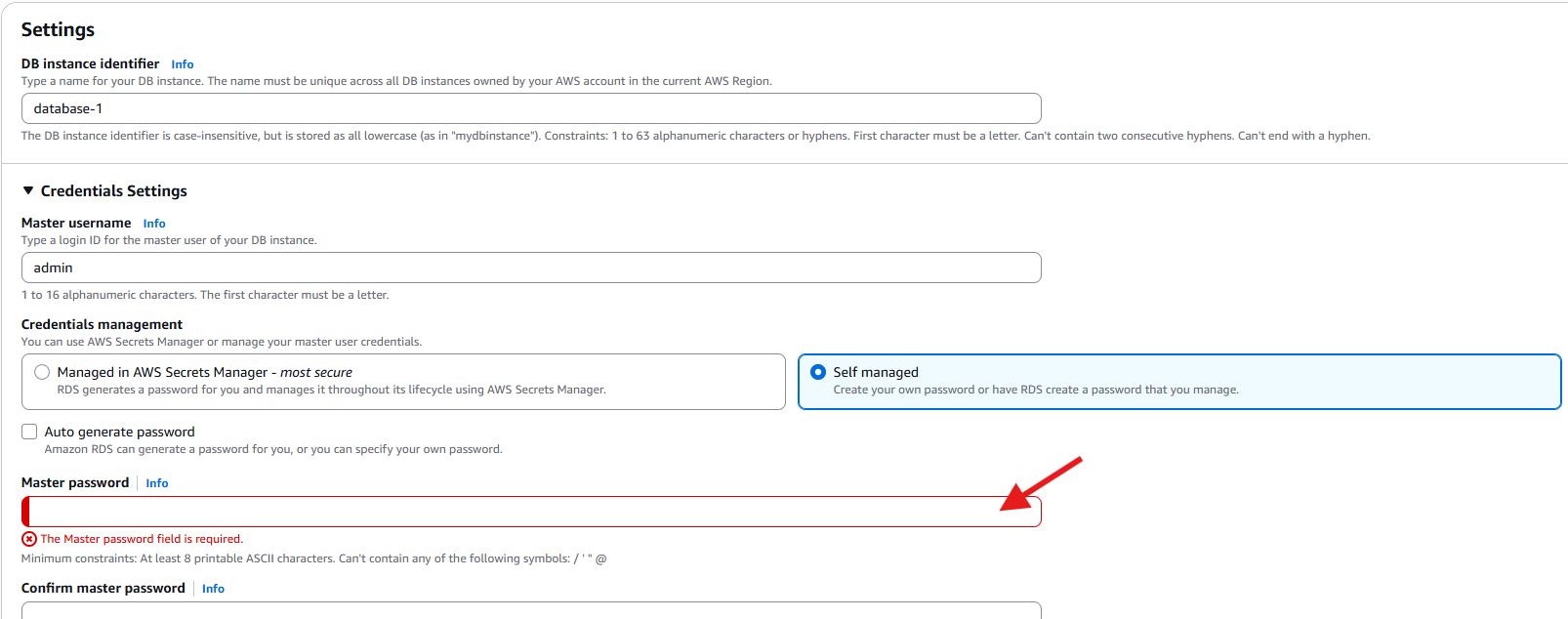
* Run the following command to take backup and store it in .sql file

**mysql dump -u root -p user\_name > file\_name.sql**

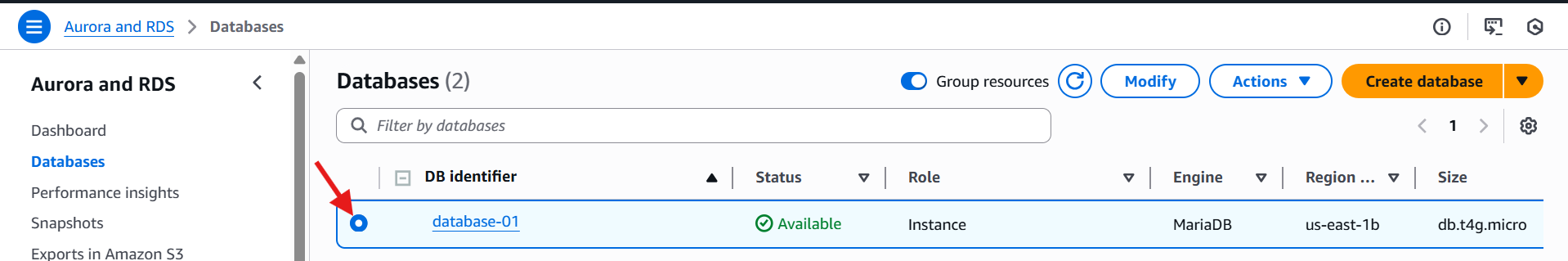


1. **Launch MariaDB RDS instance.**





* Create Database
* Click Databases → Create database.
* Select Standard Create.
* Under Engine options, choose:
* Engine type: MariaDB
* Version: Select the latest stable version (e.g., 11.x)
* Configure Database
* DB instance identifier: e.g., my-mariadb-rds
* Master username: e.g., admin
* Master password: Choose a strong password and confirm.
* DB instance class: e.g., db.t3.micro for free tier or testing.
* Storage: Choose allocated storage (e.g., 20 GB) and enable auto-scaling if desired.
* Step 4: Connectivity
* Virtual Private Cloud (VPC): Select your existing VPC or default.
* Subnet group: Default or custom
* Public access: Select Yes if you want to connect
* from outside the VPC (for testing; otherwise, keep No).
* VPC security group: Choose an existing one or
* create a new group that allows port 3306 for MariaDB.
* Availability zone: keep N.verginia region.
* Step 5: Additional Configuration
* Database name: e.g., myappdb (optional, can create later).
* Backup retention: e.g., 7 days (optional, recommended for production).
* Encryption: Enable if required.
* Monitoring & Maintenance: Optional.

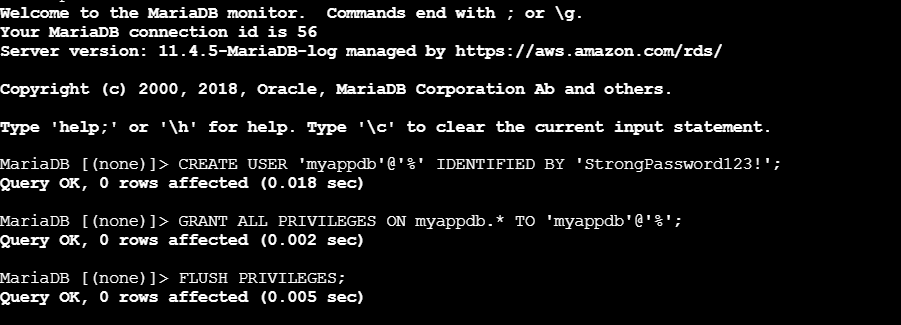


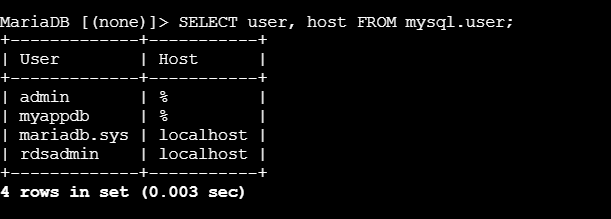
1. **Migrate database from EC2 to RDS.**

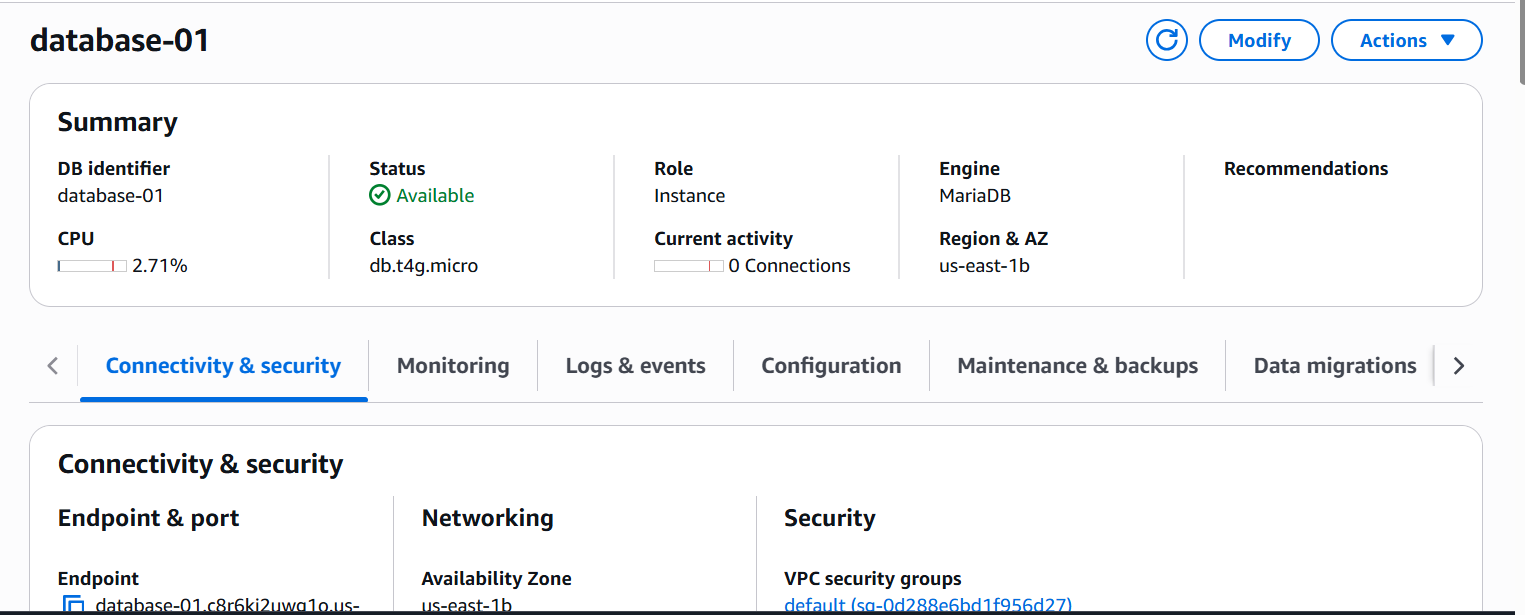
* Create one instance in ec2 the name of maria-db.
* Then go to Aurora and RDS.
* Then create one RDS data base in rds database.
* Gave name database-2.
* Then select maria-DB image then selcet family and choose

defult vpc if you want.

* Gave a master name As A ADMIN.
* Then use ur strong password.
* And create a data base
* mysqldump -u root -p myappdb > myappdb\_backup.sql
* mysql -h <RDS-endpoint> -u <rds\_username> -p
* CREATE DATABASE myappdb;
* EXIT;
* mysql -h <RDS-endpoint> -u <rds\_username> -p
* myappdb < myappdb\_backup.sql
* mysql -h <RDS-endpoint> -u <rds\_username> -p
* SHOW DATABASES;
* USE myappdb;
* SHOW TABLES;
* SELECT \* FROM users;

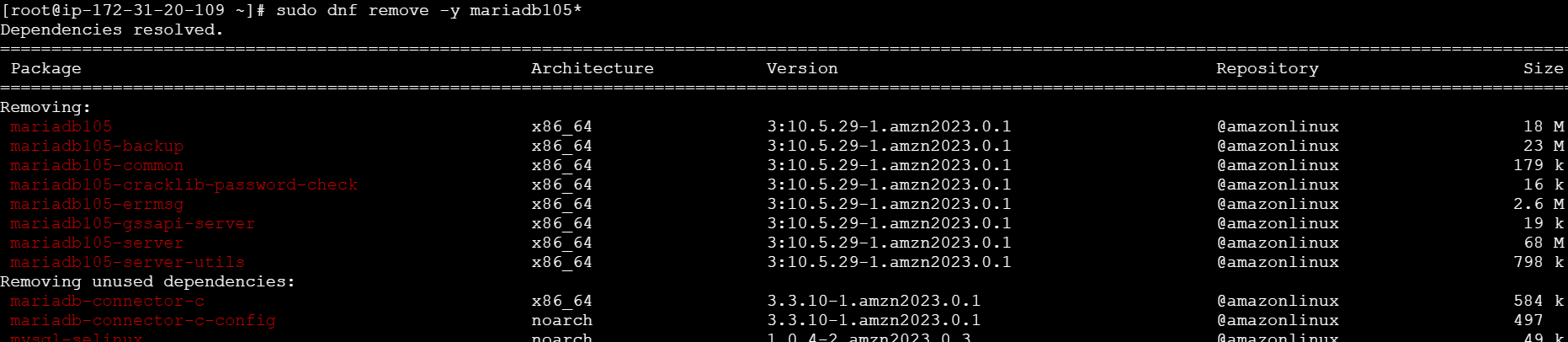


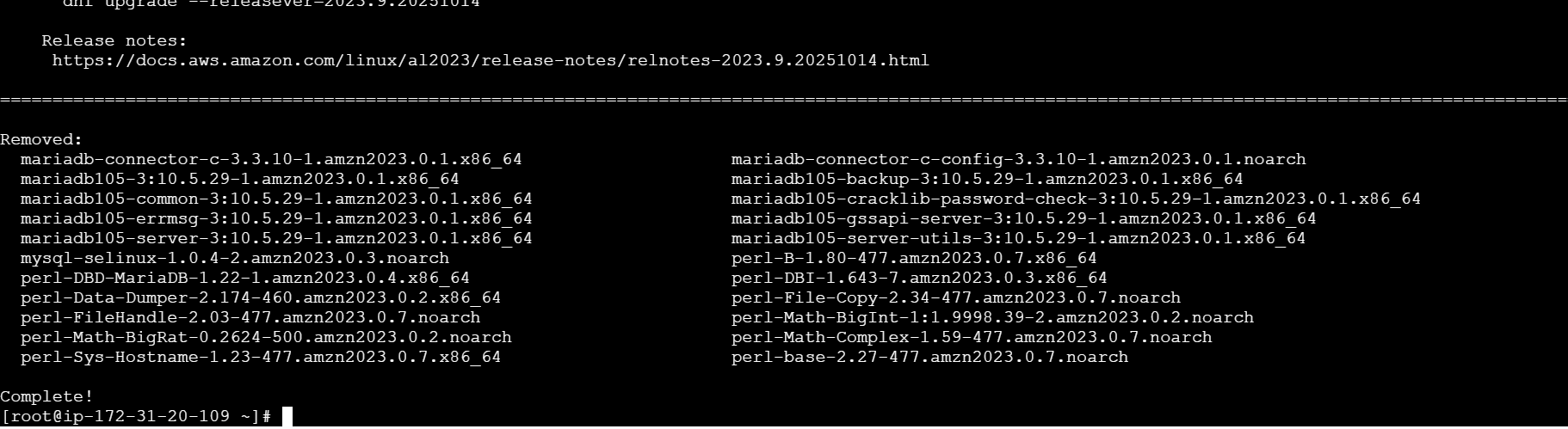




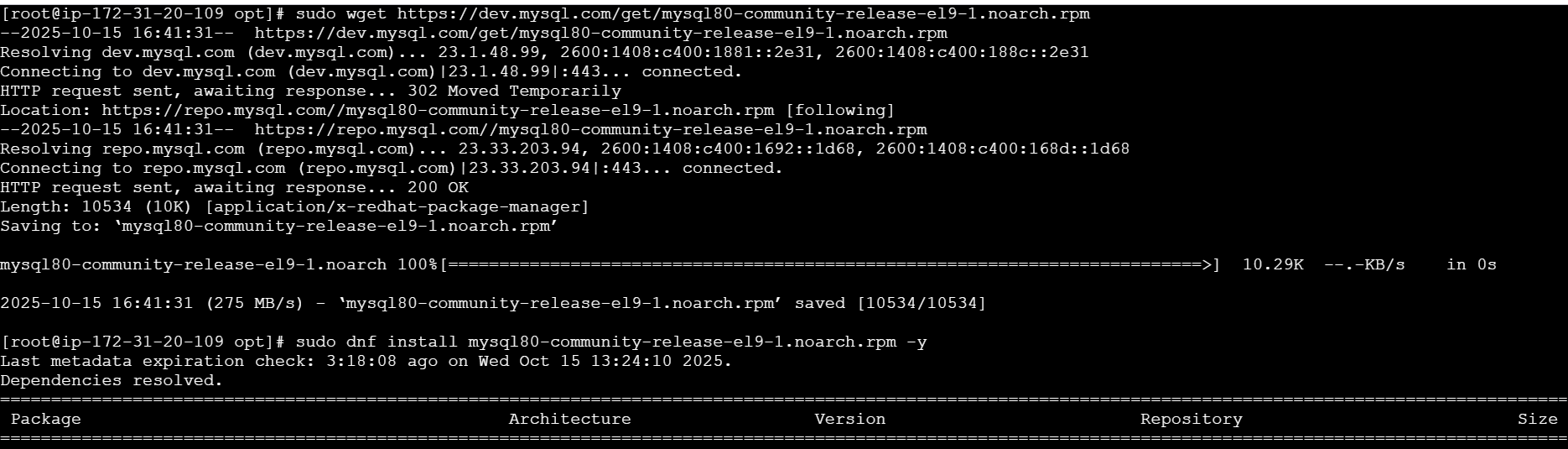
1. **Install MySQL DB on EC2.**

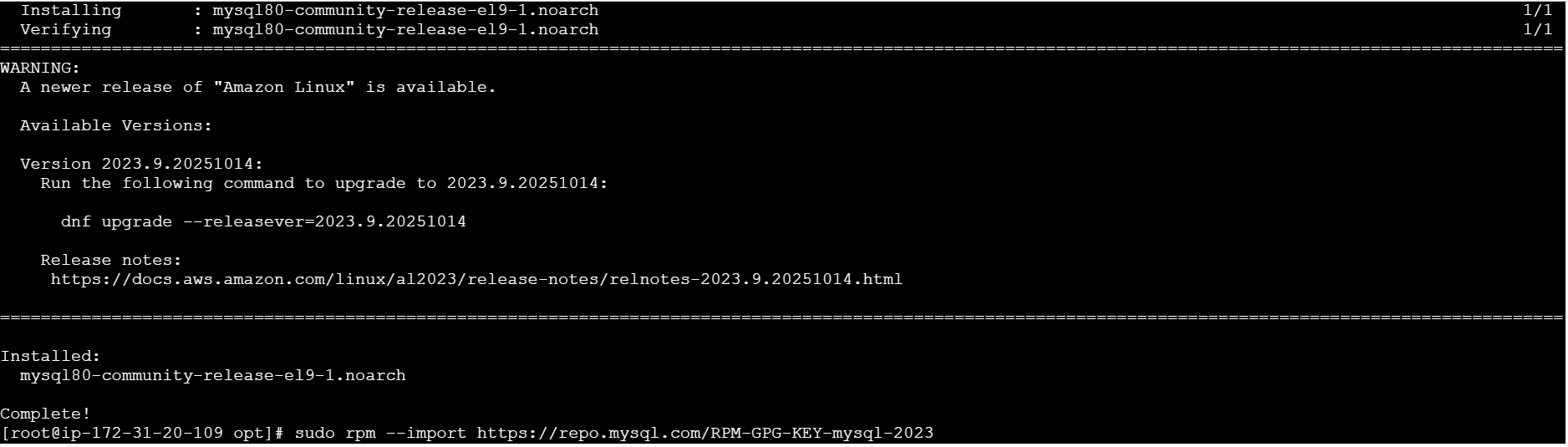
* Remove Mariadb using following commands
* sudo dnf remove -y mariadb105\*
* sudo dnf clean packages

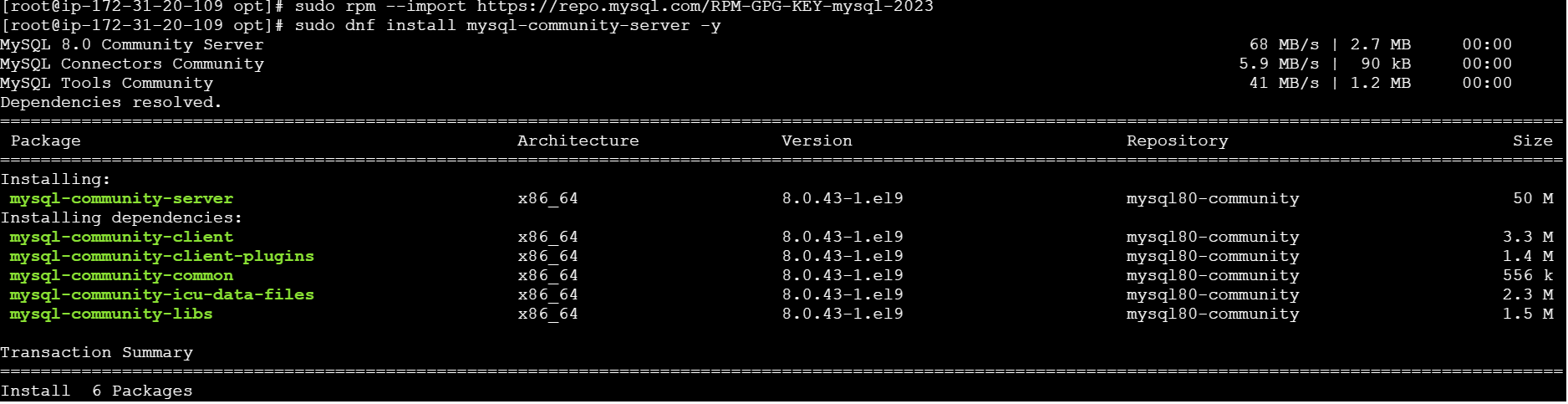


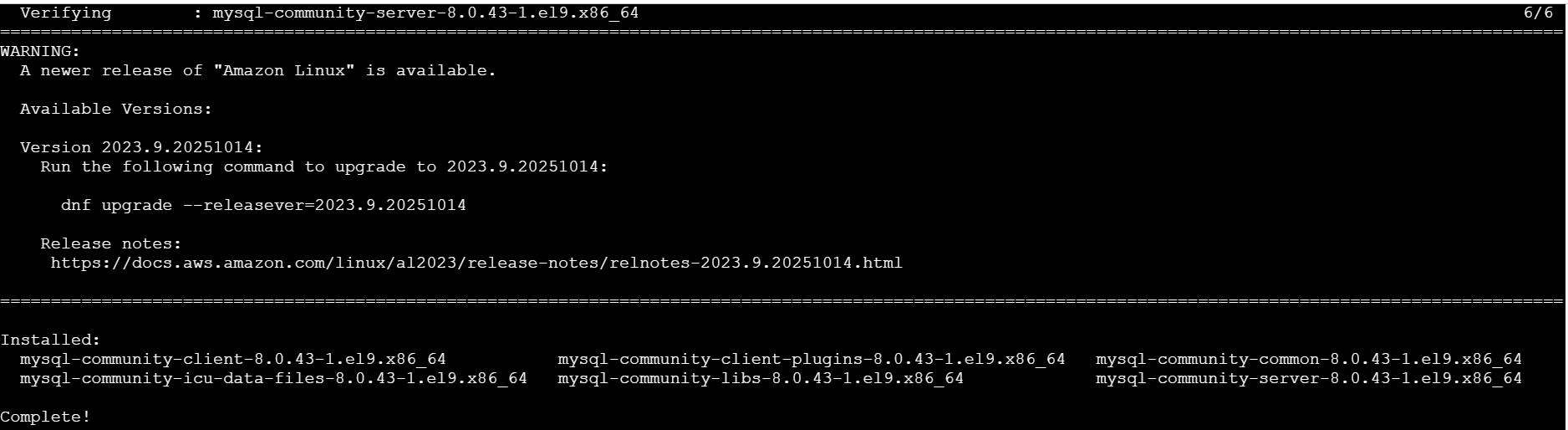


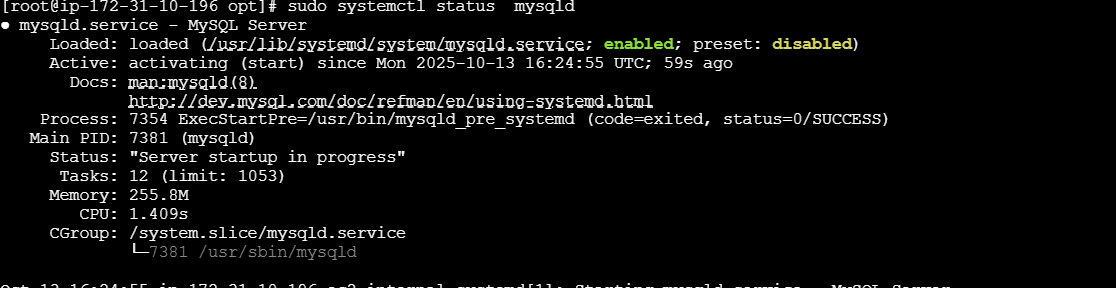
* Goto /opt directory and run the following commands to download and install the MYSQL
* sudo wget <https://dev.mysql.com/get/mysql80-community-release-el9-1.noarch.rpm>
* sudo dnf install mysql80-community-release-el9-1.noarch.rpm -y
* sudo rpm --import https://repo.mysql.com/RPM-GPG-KEY-mysql-2023
* sudo dnf install mysql-community-server -y
* sudo systemctl start mysqld
* sudo systemctl enable mysqld
* sudo mysql\_secure\_installation
* sudo systemctl status mysqld





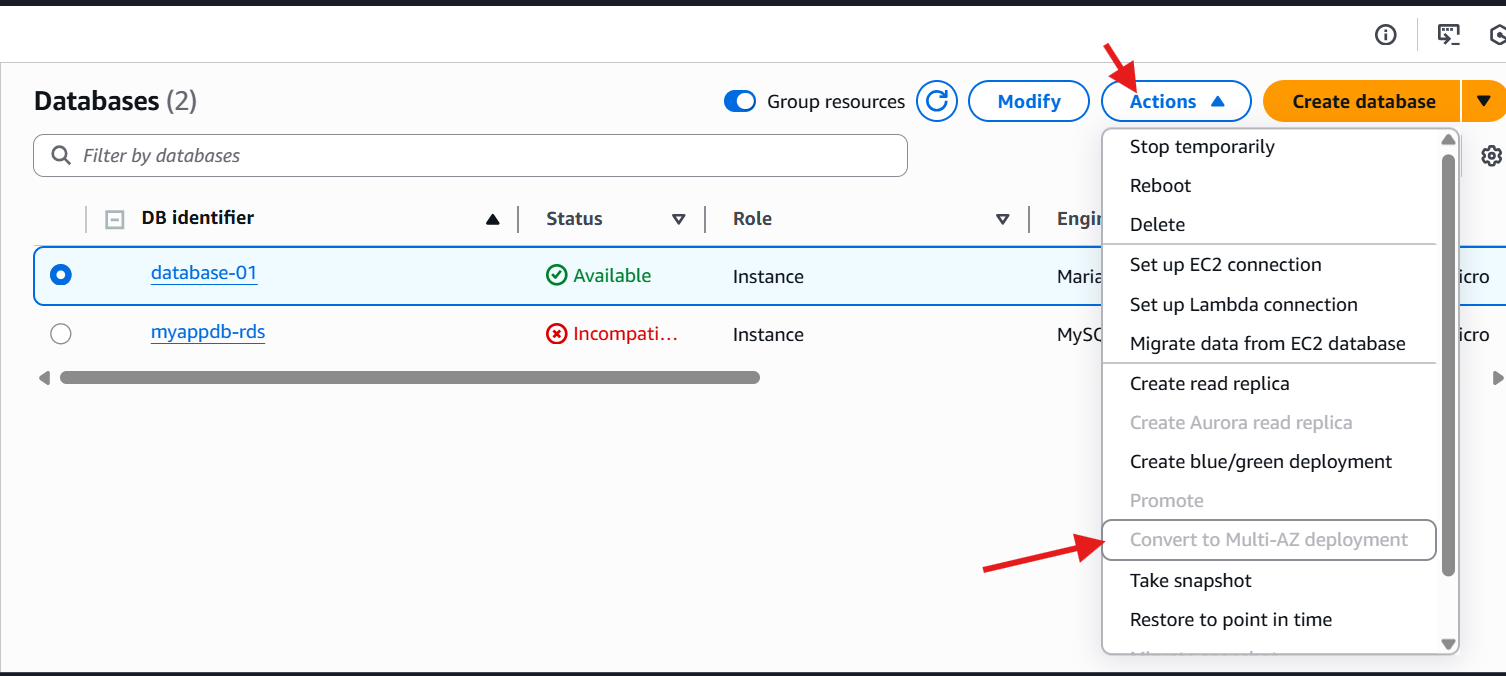






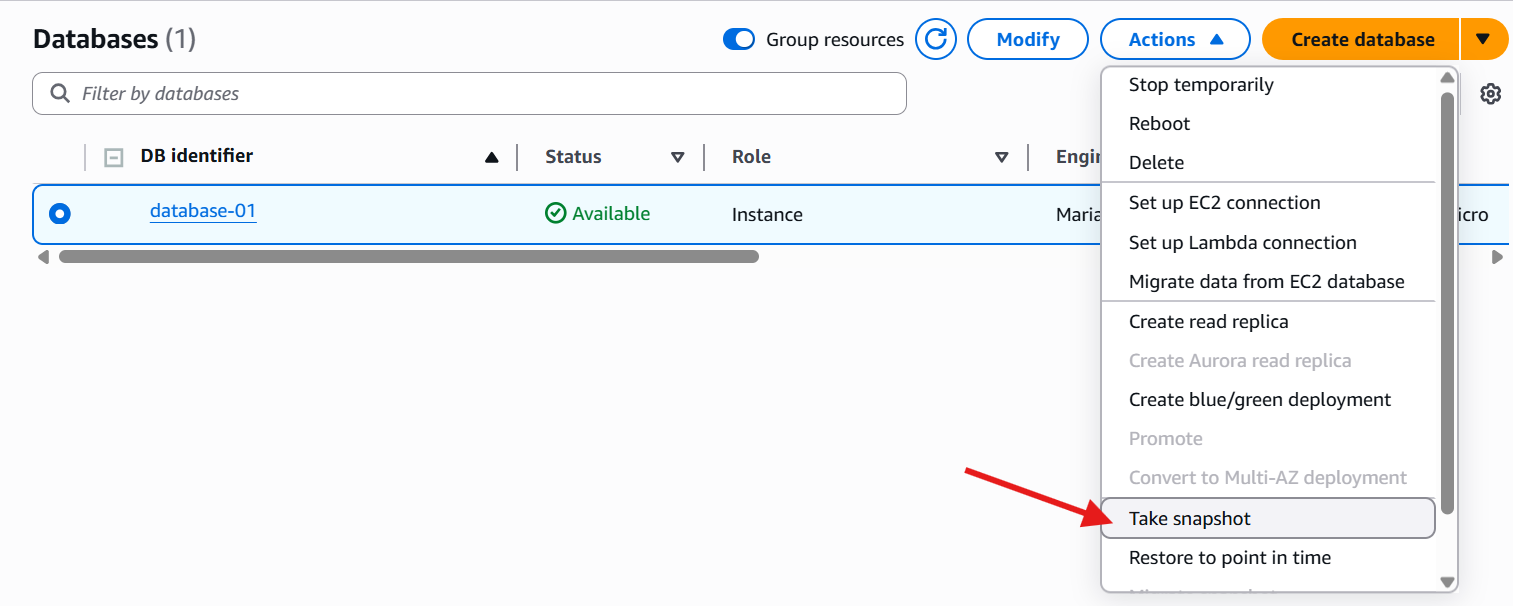
1. Launch MySQL RDS image.
2. **Configure Multi-AZ.**

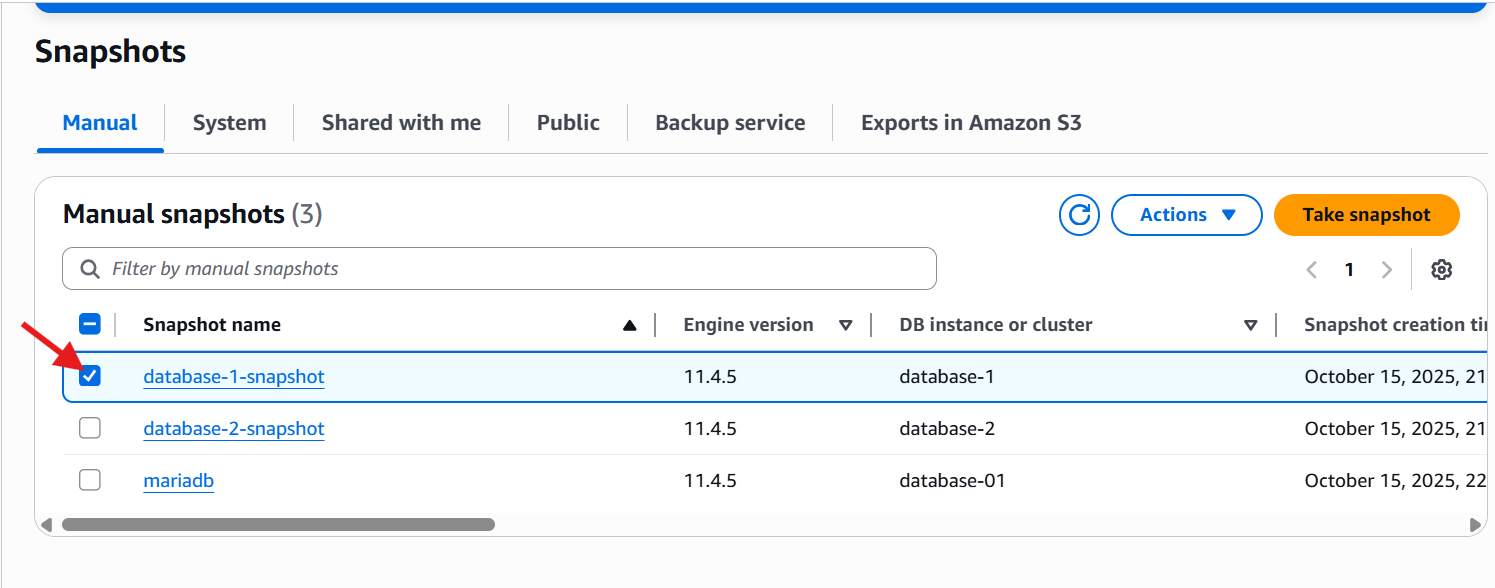
* GO to actions and choose multi az option.
* But the thing is this option is use full for only free account user



1. **Take back up of DB and restore the DB.**

* Choose the data base which backup uh want.
* Then go the actions.
* Then use snapshot





1. **Create read replica.**

* Use the data base and go the actions.
* And use the option of
* Create read replica

