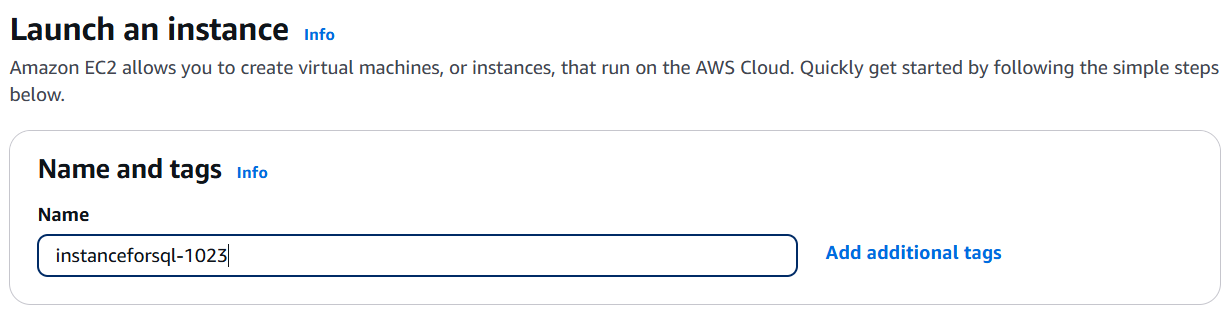
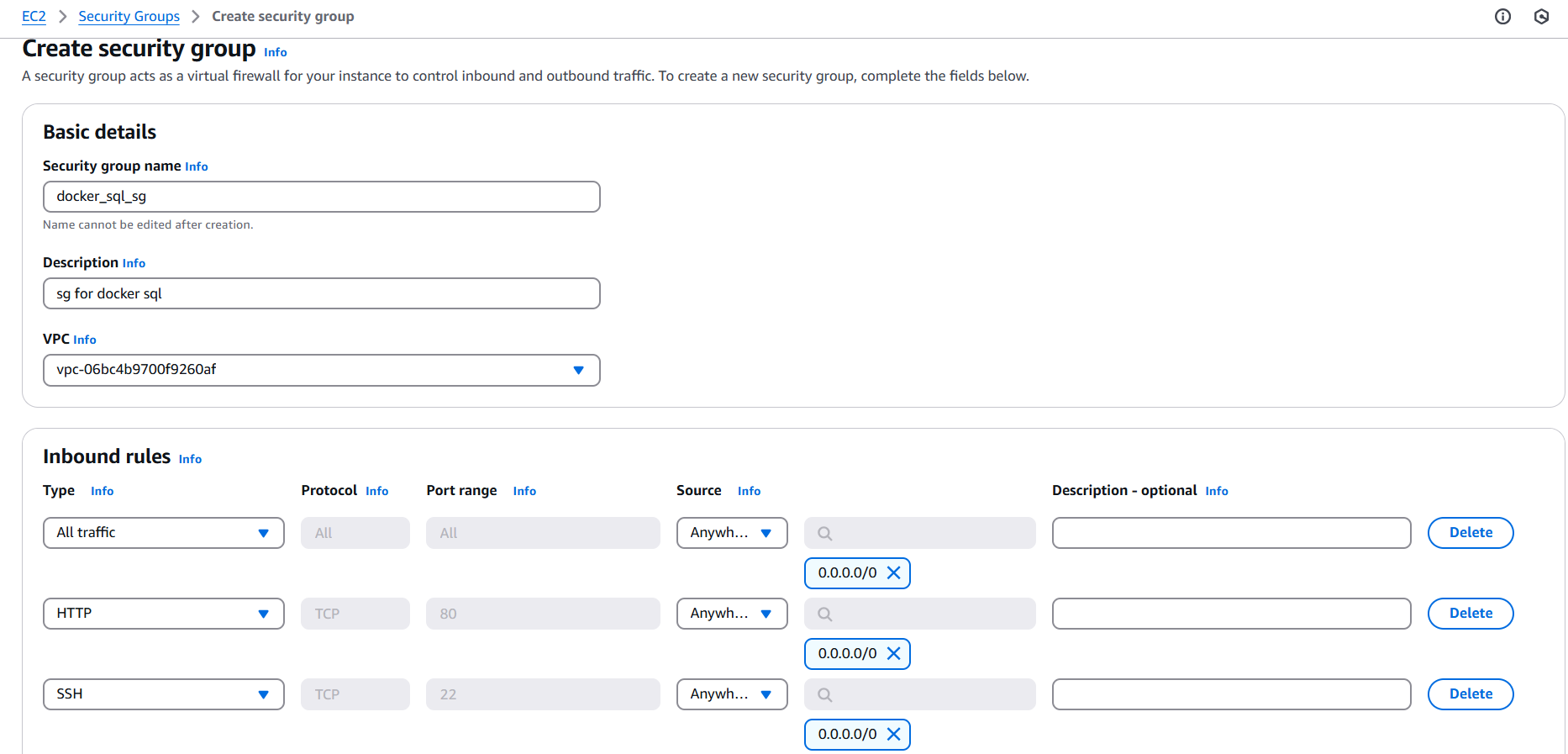
**STEP 1: Launch Instance**

* Name: instanceforsql-1023
* AMI (OS): Ubuntu Server 24.04 LTS
* Instance type: t2.micro
* Key pair: dockrkey (KP type: RSA, Private key: .pem)
* Security group: All traffic, HTTP, SSH
* Launch Instance





**STEP 2: Connect Instance**

Commands:

* sudo -I [go into root directory]

1. Install Docker :

* sudo apt-get update
* sudo apt-get install ca-certificates curl
* sudo install -m 0755 -d /etc/apt/keyrings
* sudo curl -fsSL https://download.docker.com/linux/ubuntu/gpg -o /etc/apt/keyrings/docker.asc
* sudo chmod a+r /etc/apt/keyrings/docker.asc
* echo \

"deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.asc] https://download.docker.com/linux/ubuntu \

$(. /etc/os-release && echo "${UBUNTU\_CODENAME:-$VERSION\_CODENAME}") stable" | \

sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

* sudo apt-get update

2. Install Docker Packages

* sudo apt-get install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin

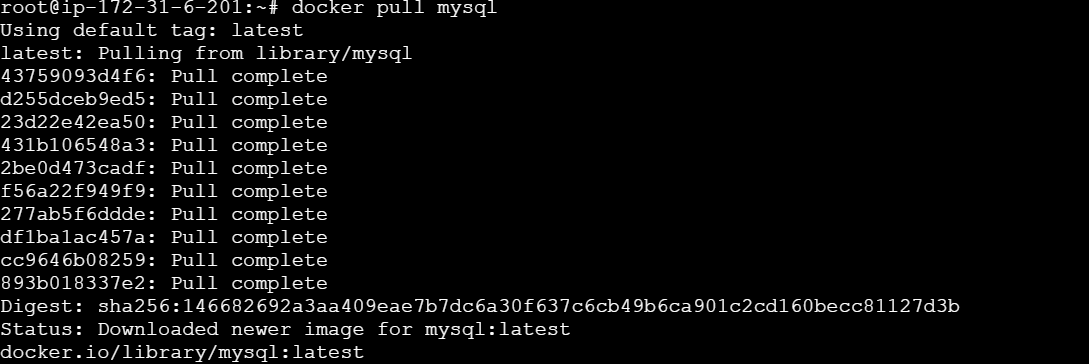
3. Check version of docker installed

* docker -v



4. Pull the MySQL Docker Image

* docker pull mysql



5. Run a MySQL Container : (create and start the container)

docker run --name (any name of container) deepu -e MYSQL\_ROOT\_PASSWORD=shinchan (set any password) -e MYSQL\_DATABASE=employeedb (any name of database) -p 3306:3306 -d mysql:latest



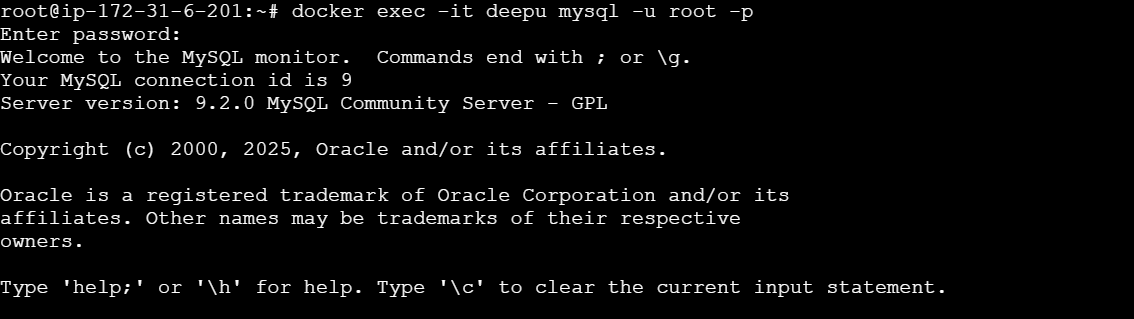
6. Check if container is running :

* docker ps



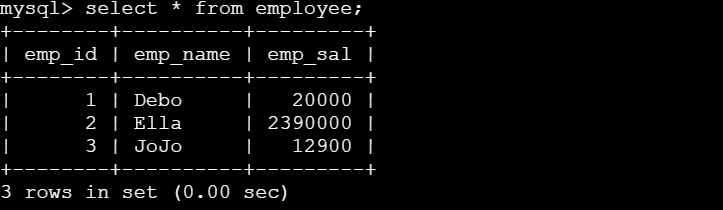
7. Access MySQL Inside the Container

* docker exec -it deepu (name of container) mysql -u root -p
* Enter password : shinchan



8. Create a table in mysql and enter data in it:

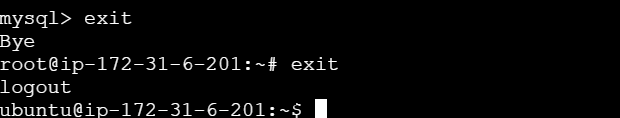
* create database employeedata;
* use employeedata;
* create table employee(emp\_id int unique, emp\_name varchar(20), emp\_sal int);
* insert into employee values(1,"Debo",20000),(2,"Ella",2390000),(3,"JoJo",12900);
* select \* from employee;



9. We need to exit from mysql and container :

exit

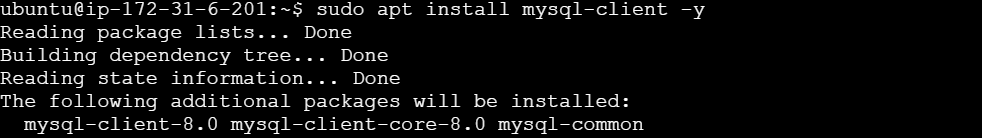
exit



**Access MySQL from Outside the Container:**

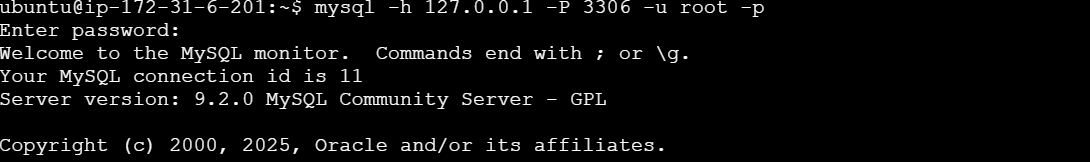
10. Install MySQL client (if not installed):

* sudo apt install mysql-client -y [bash]

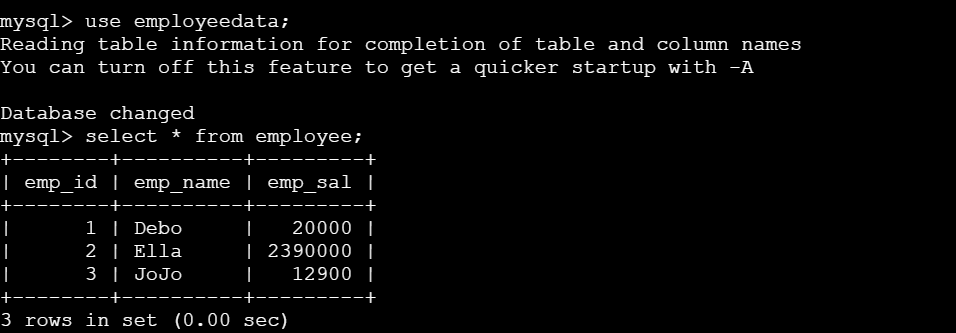


11. Connect to MySQL from the host machine:

* mysql -h 127.0.0.1 -P 3306 -u root -p



* Enter password set (shinchan)
* use employeedata;
* select \* from employee;



Database Data accessed outside the container ------------------------------------------------------------------------