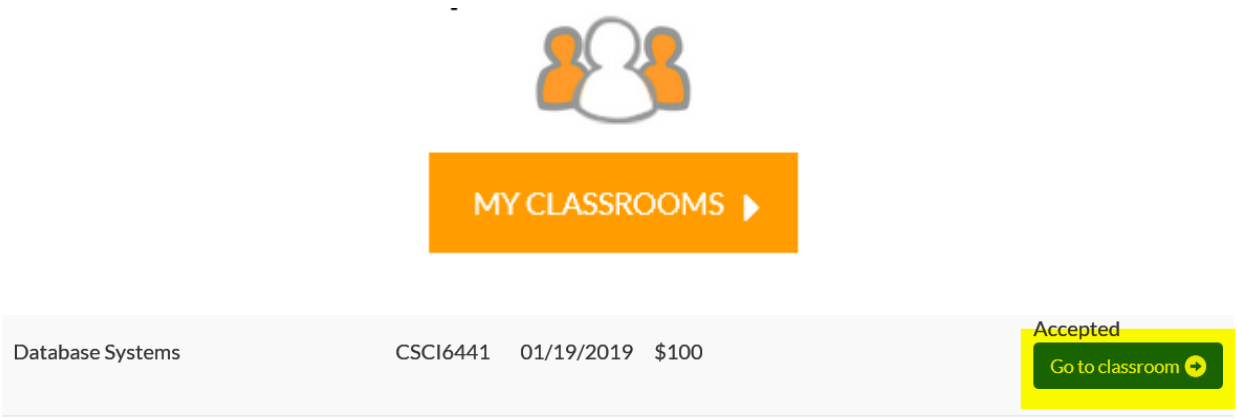
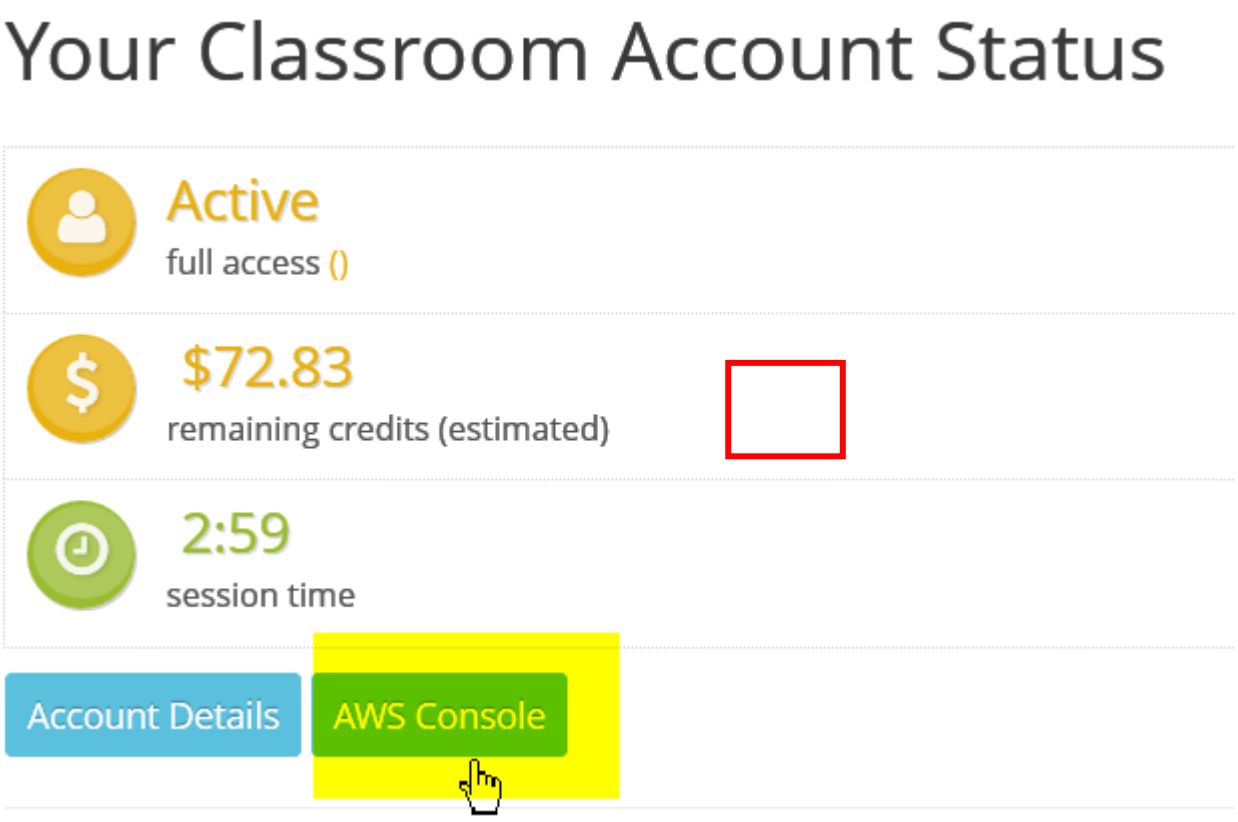
CREATE AWS RDS DATABASE AND CONNECT TO SQL DEVELOPER

CREATING RDS DATABASE INSTANCE IN AWS CONSOLE

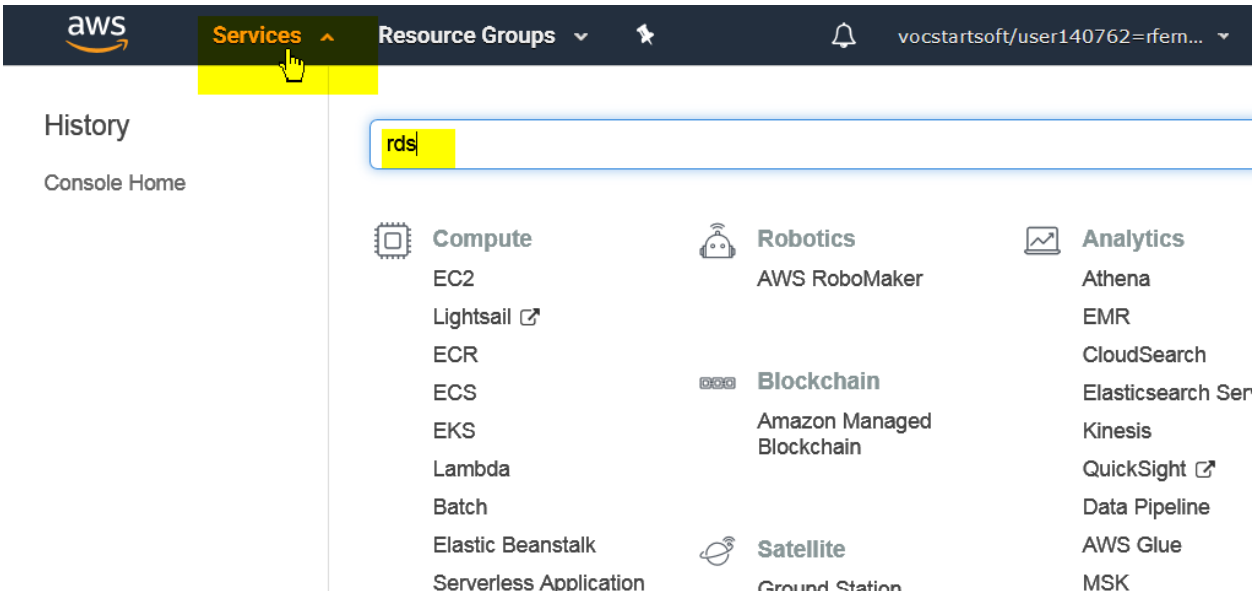
1. Login to AWS Educate (https://www.awseducate.com/signin/SiteLogin) and go to My Classrooms. Select Database Systems 1.



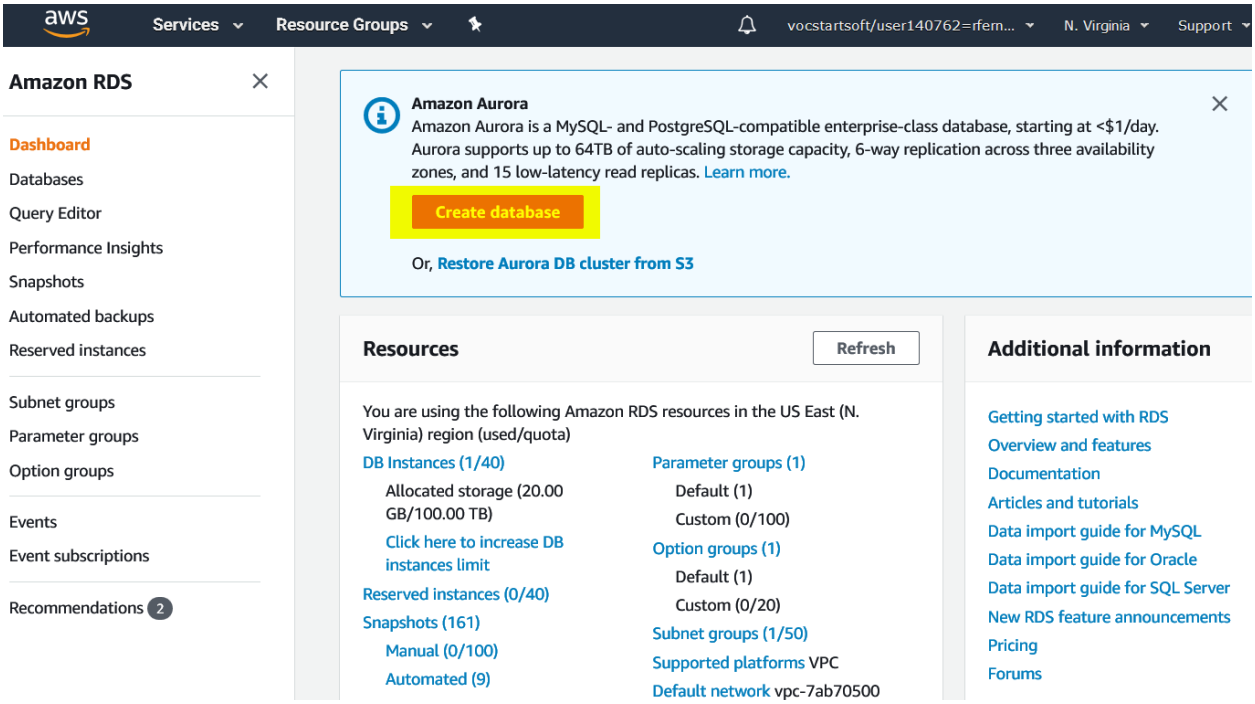
2. Click on AWS Console.



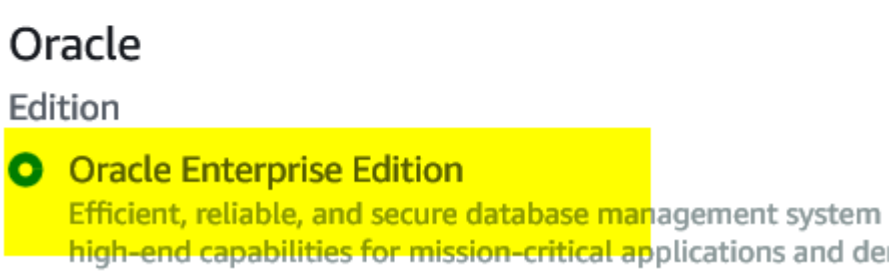
3. On the AWS Console, click on “Services” and in the Group search enter “rds” for Relational Database Services.



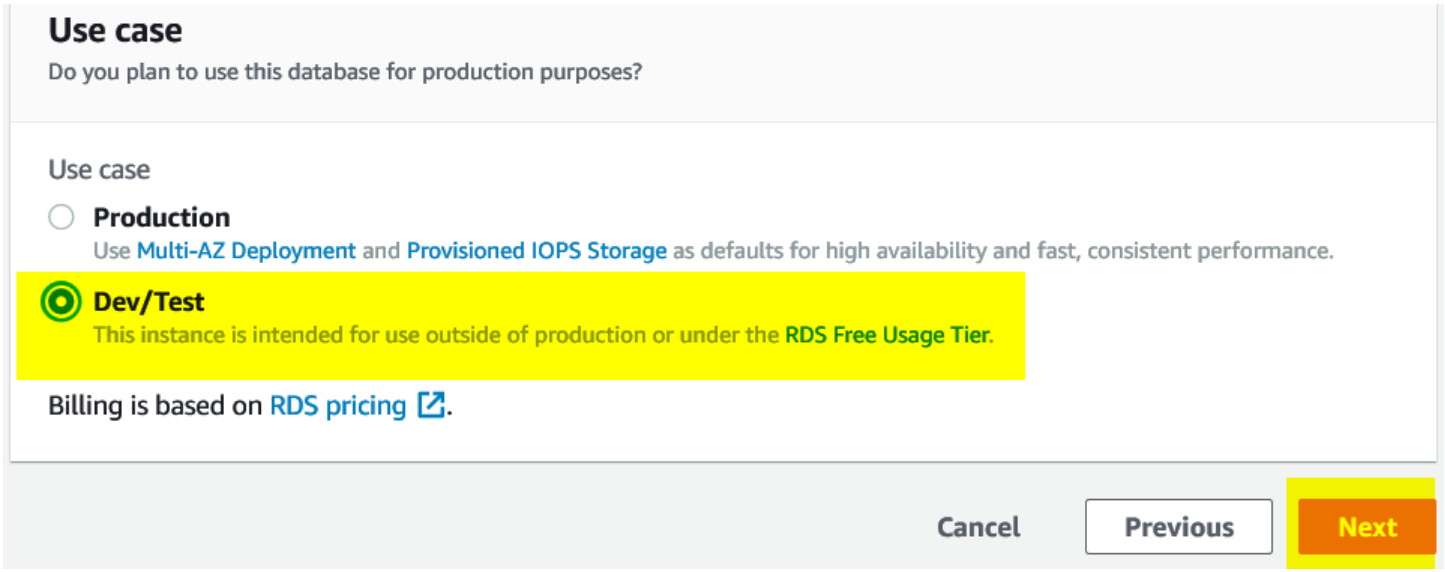
4. Click on ‘Create Database’.



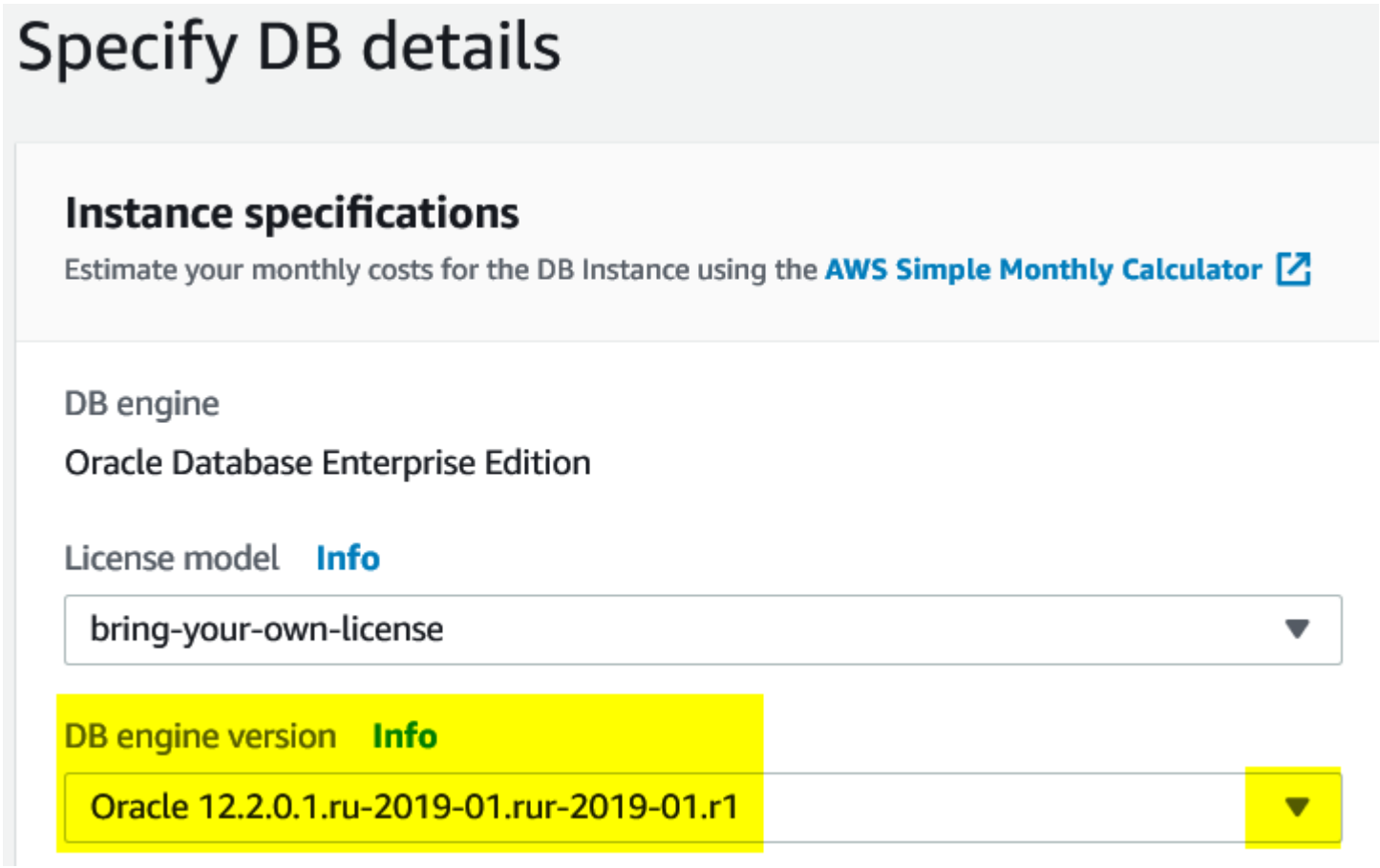
5. Select Oracle and Oracle Enterprise Edition.



6. Choose Dev/Test and click on Next.

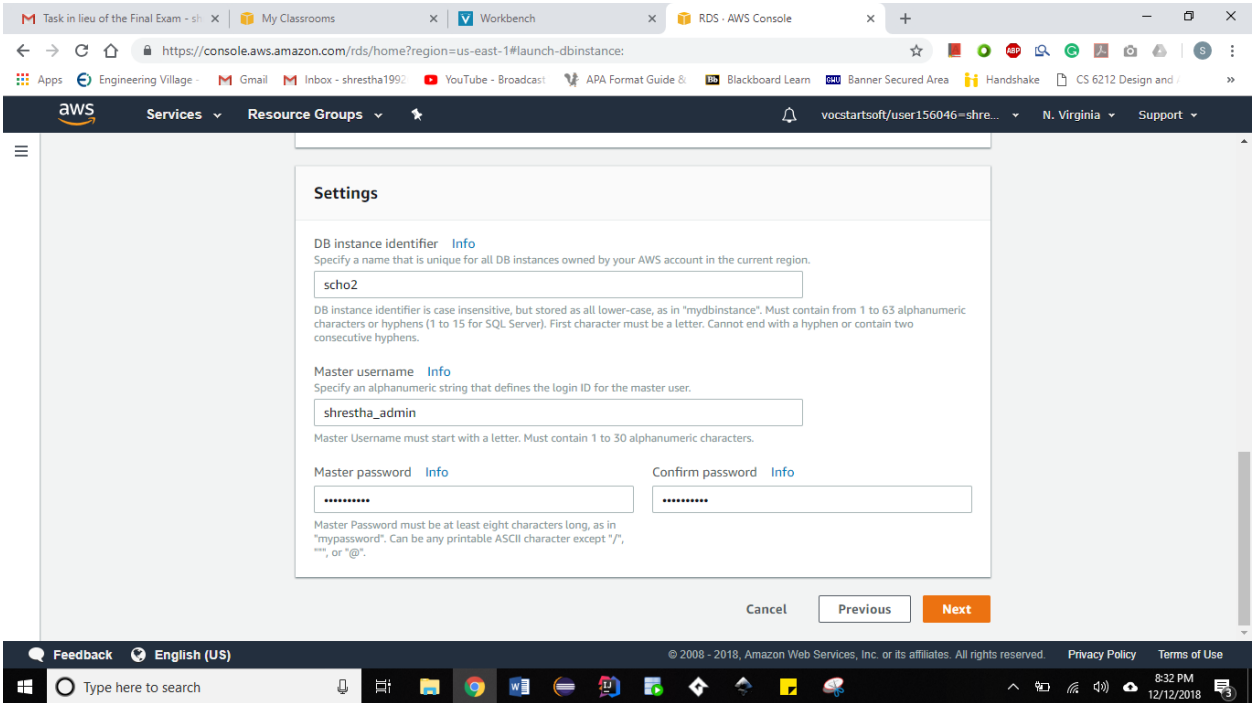


7. For “DB engine version” click on the drop down and select the latest patch level for Oracle 12.2.0.1

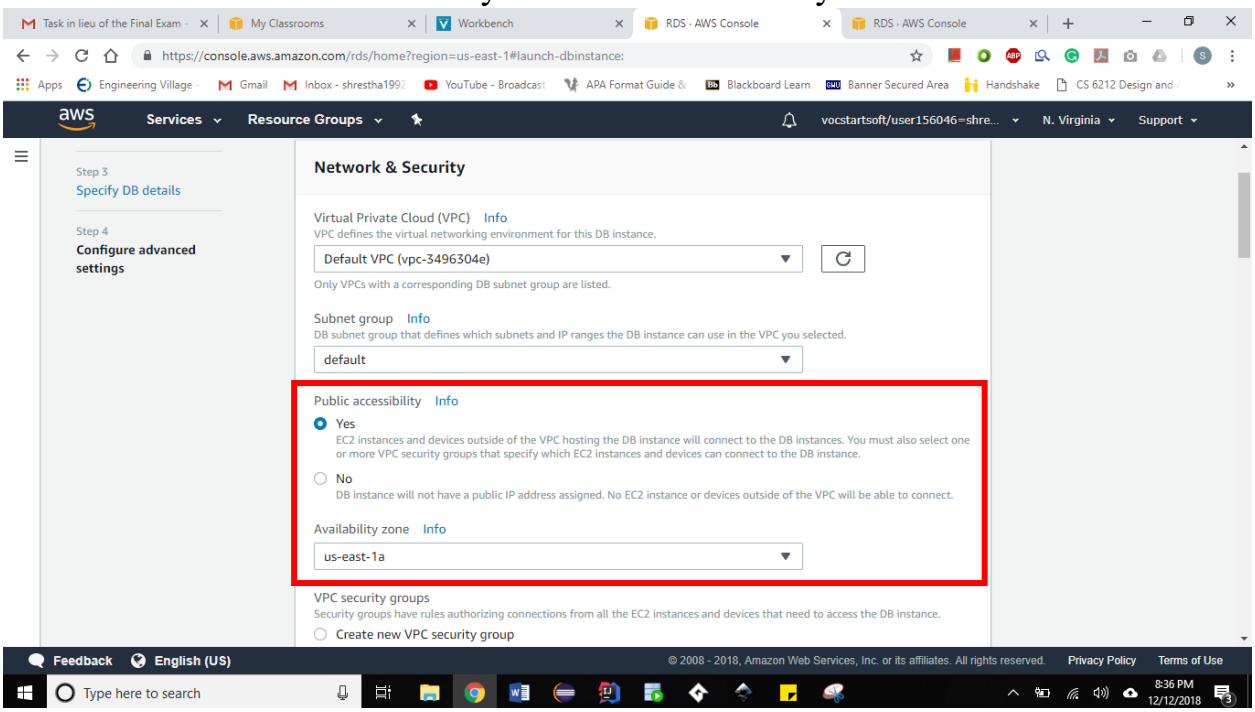


8. Enter a DB instance name. Example: First letter of first name + First 3 letters of last name + any number
   Shrestha Choudhury = scho2

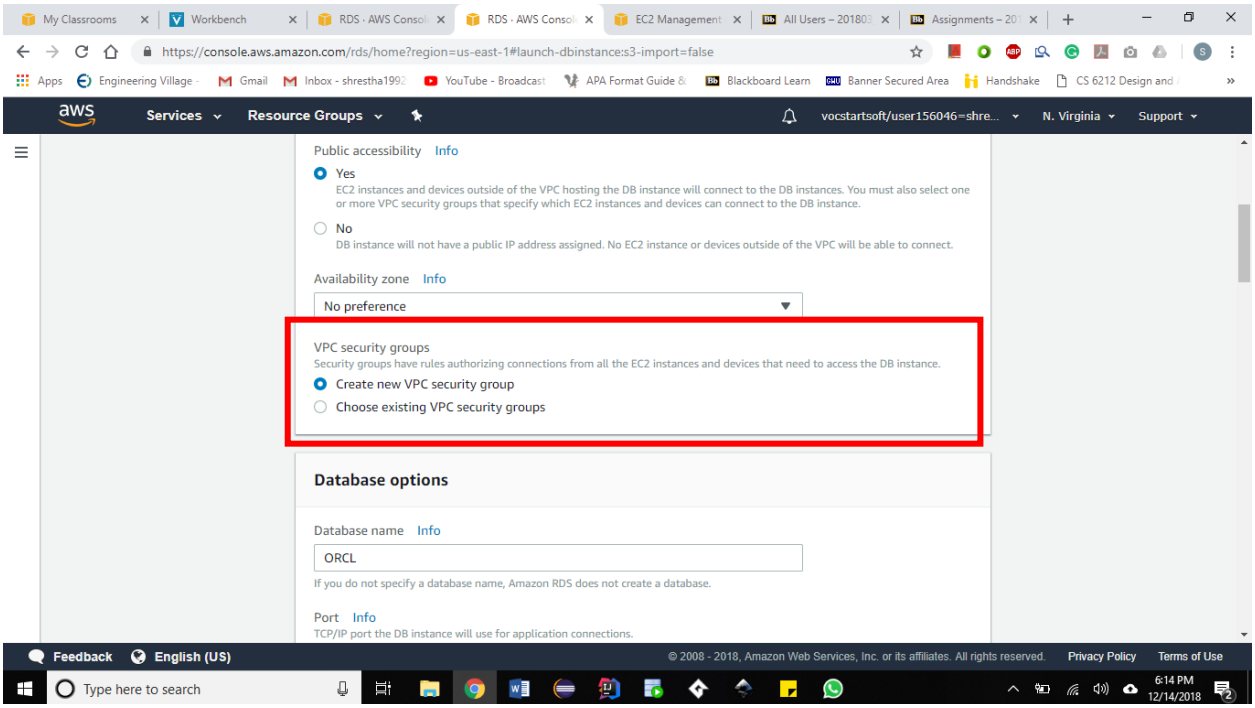
9. Enter a username and password of your choice.
   Click on Next.



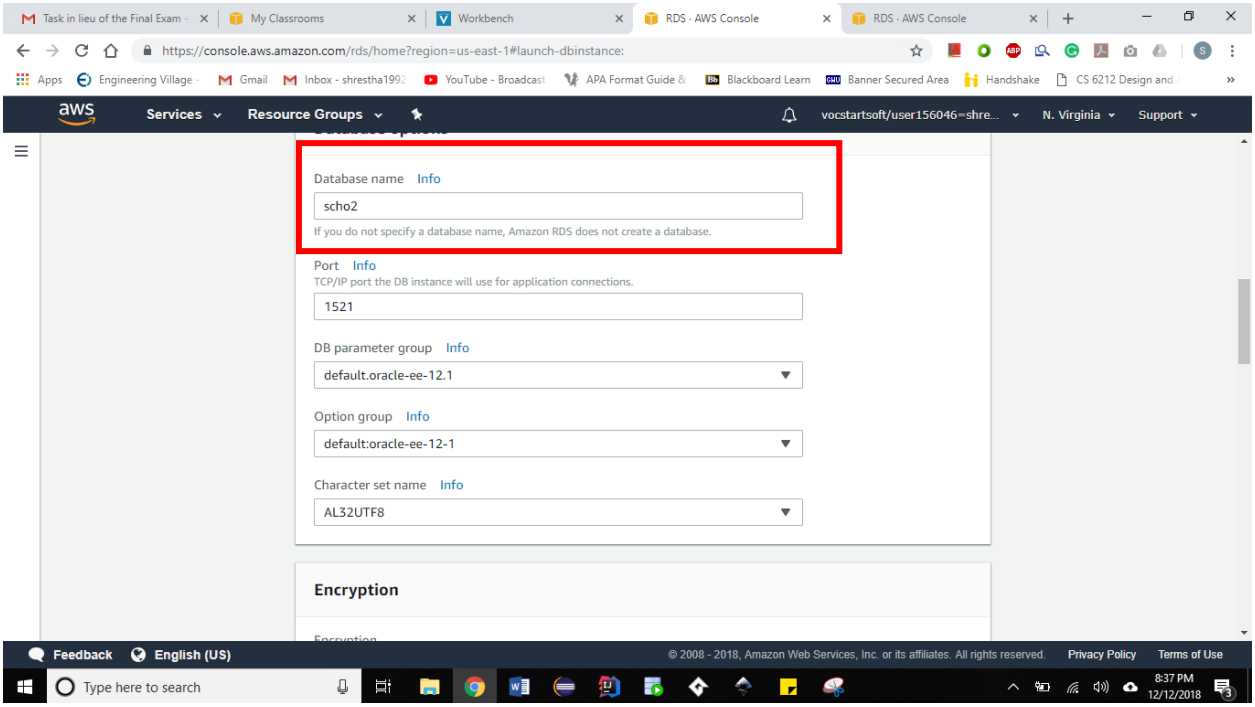
10. Enable Public accessibility and select availability zone.



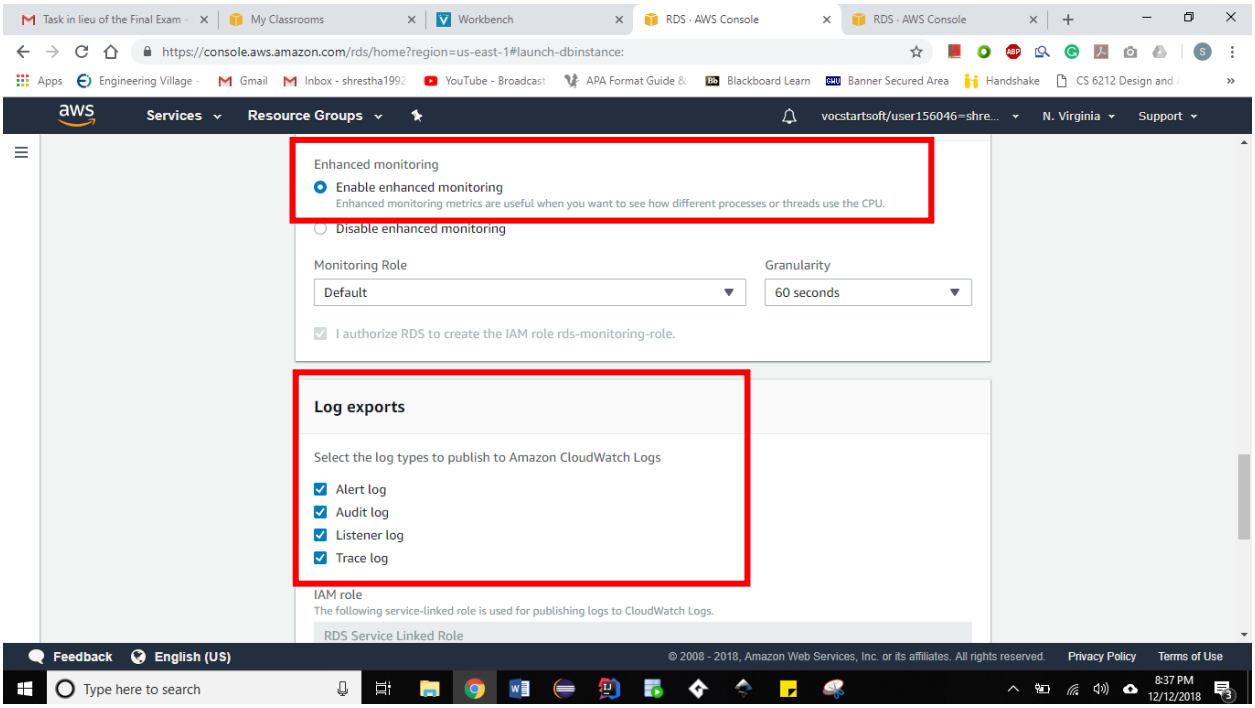
11. Select ‘Create new VPC security group’.



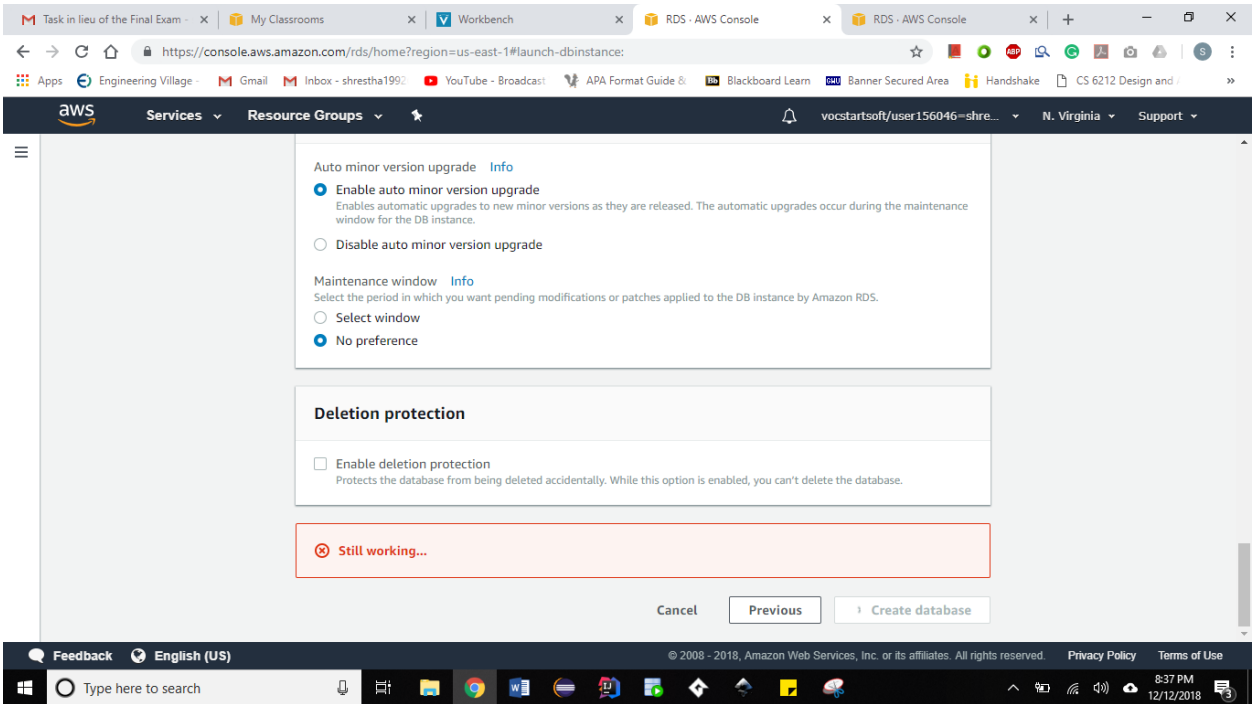
12. Enter the database name same as your DB instance identifier (step 8) to make it easier to remember.



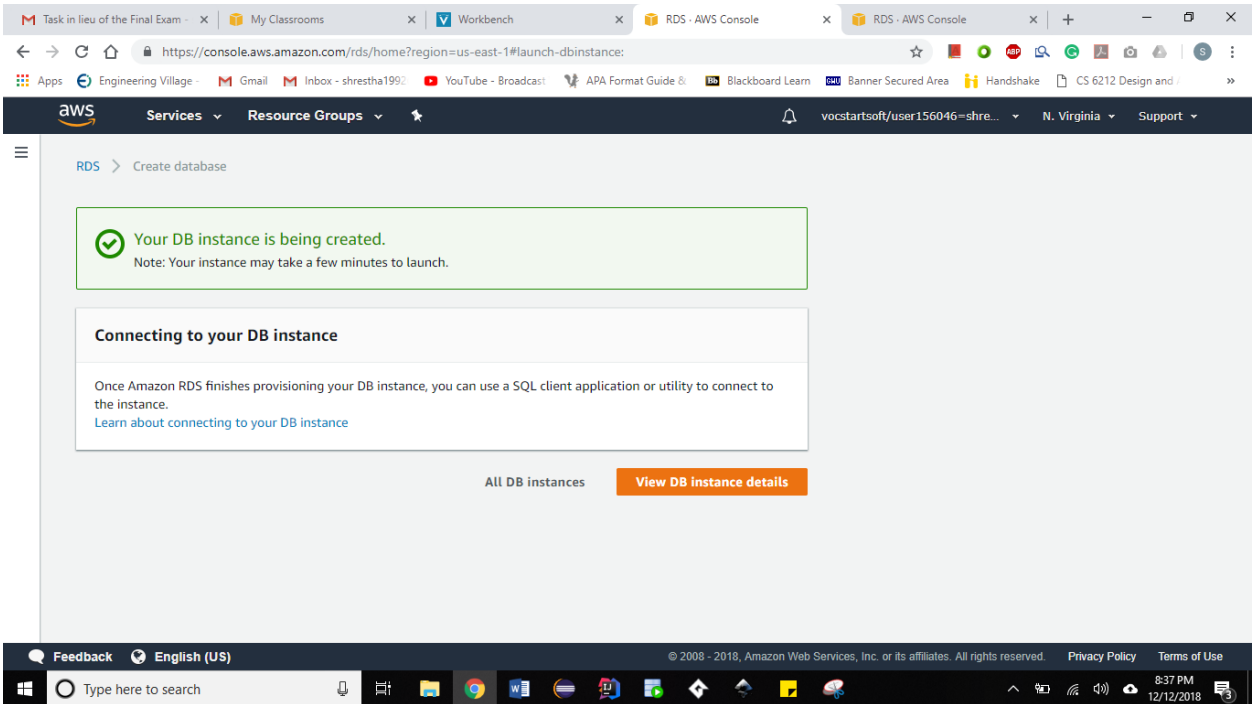
13. Select ‘Enable enhanced monitoring’ and select all checkboxes under ‘Log exports’.



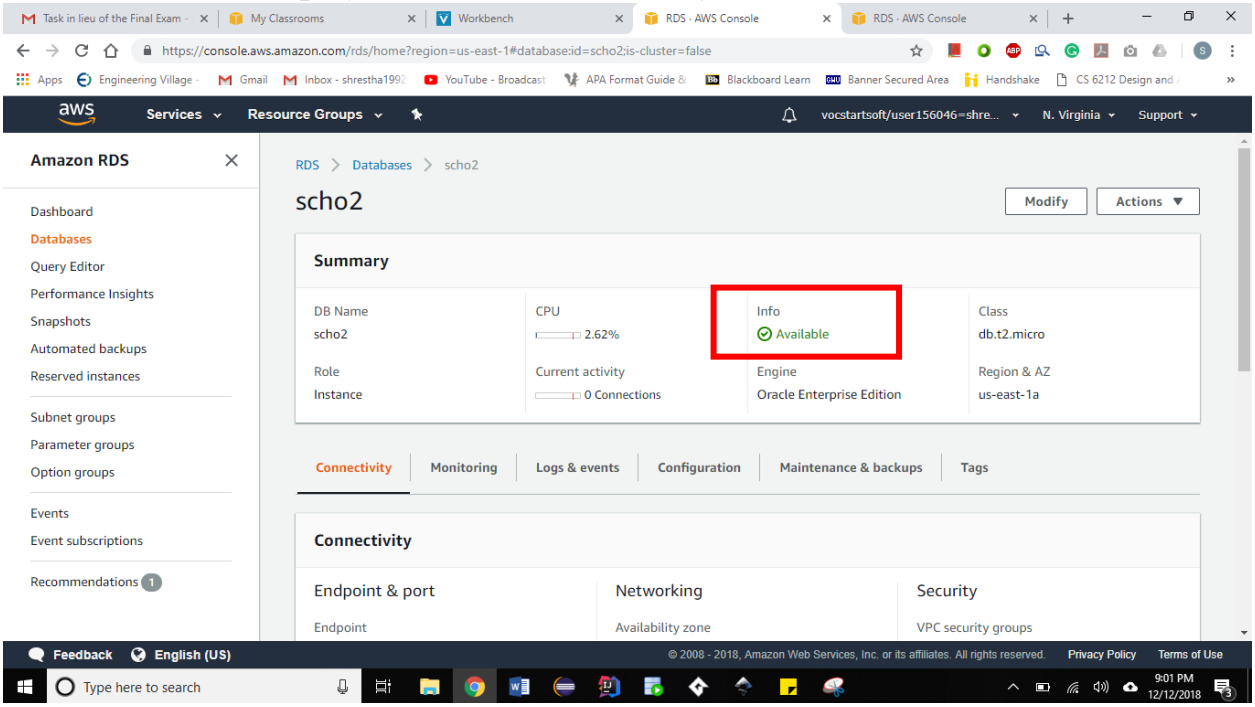
14.Click on ‘Create Database’



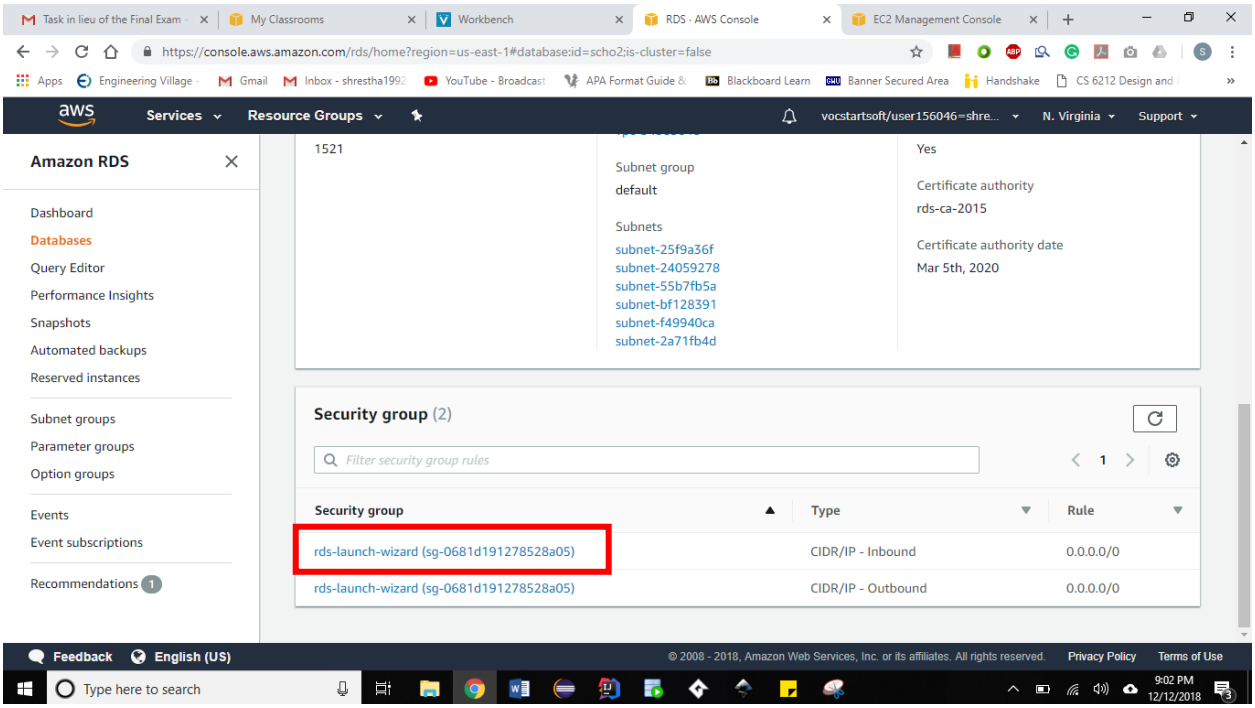
15.Click on ‘View DB instance details’.



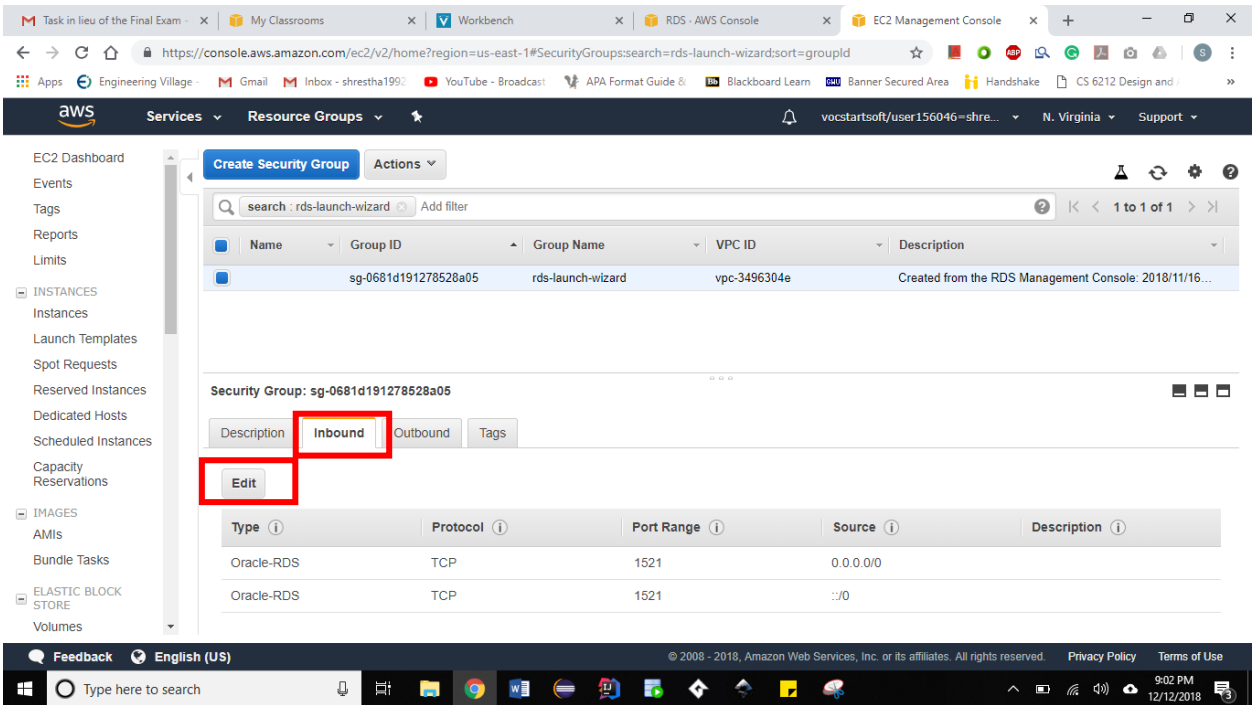
16. Wait until displays ‘Available’. This may take several minutes.



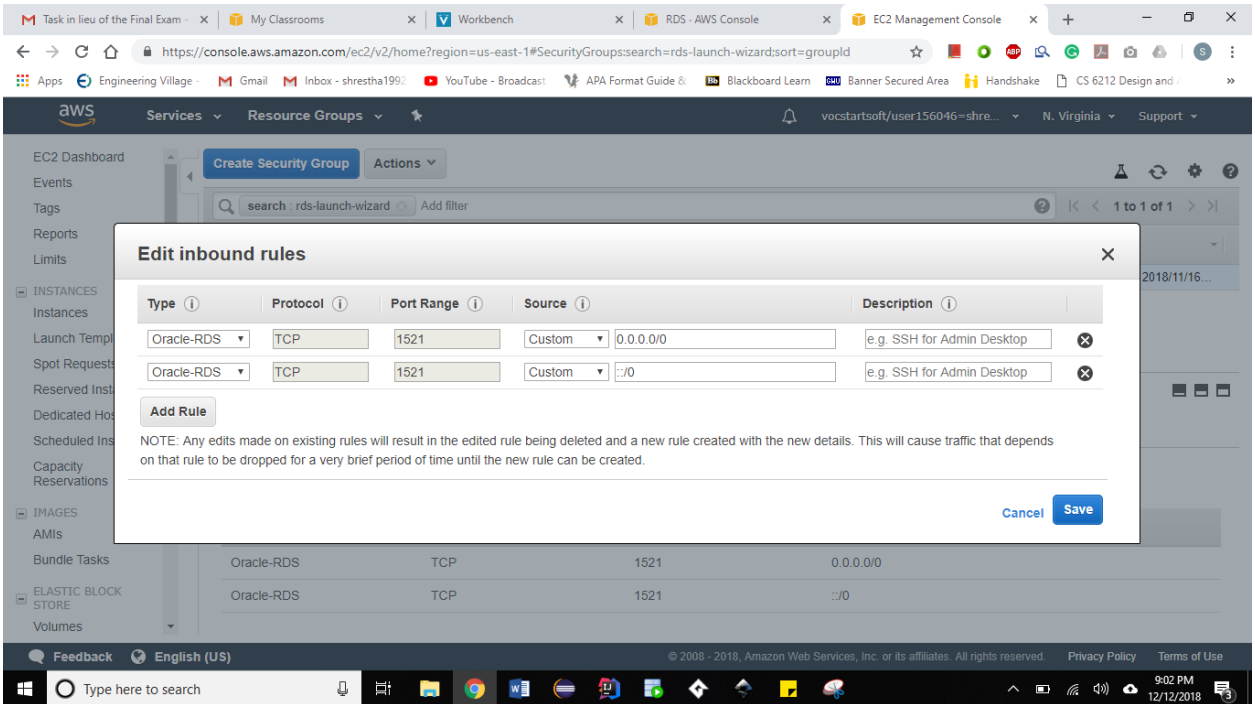
17. Scroll down to the security section and click on the security group name



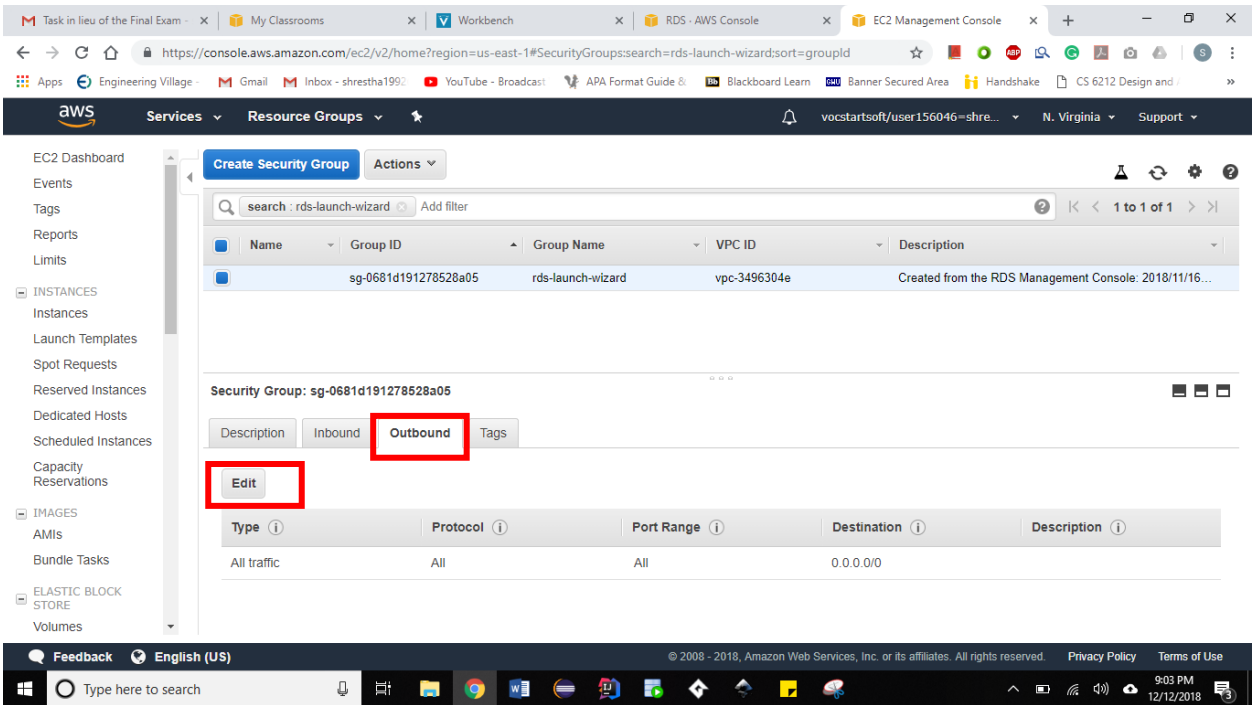
18. Click on Inbound and then click Edit



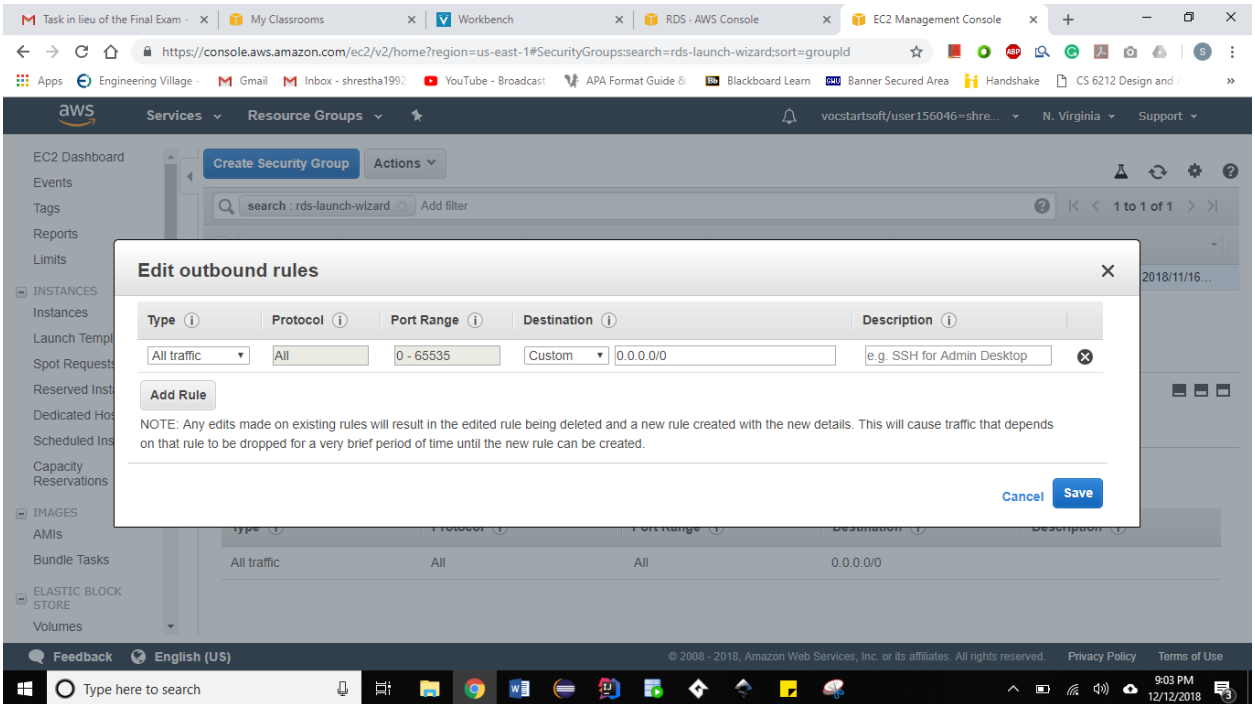
19. Make sure that your parameters match the screenshot below.
    Click on Save.



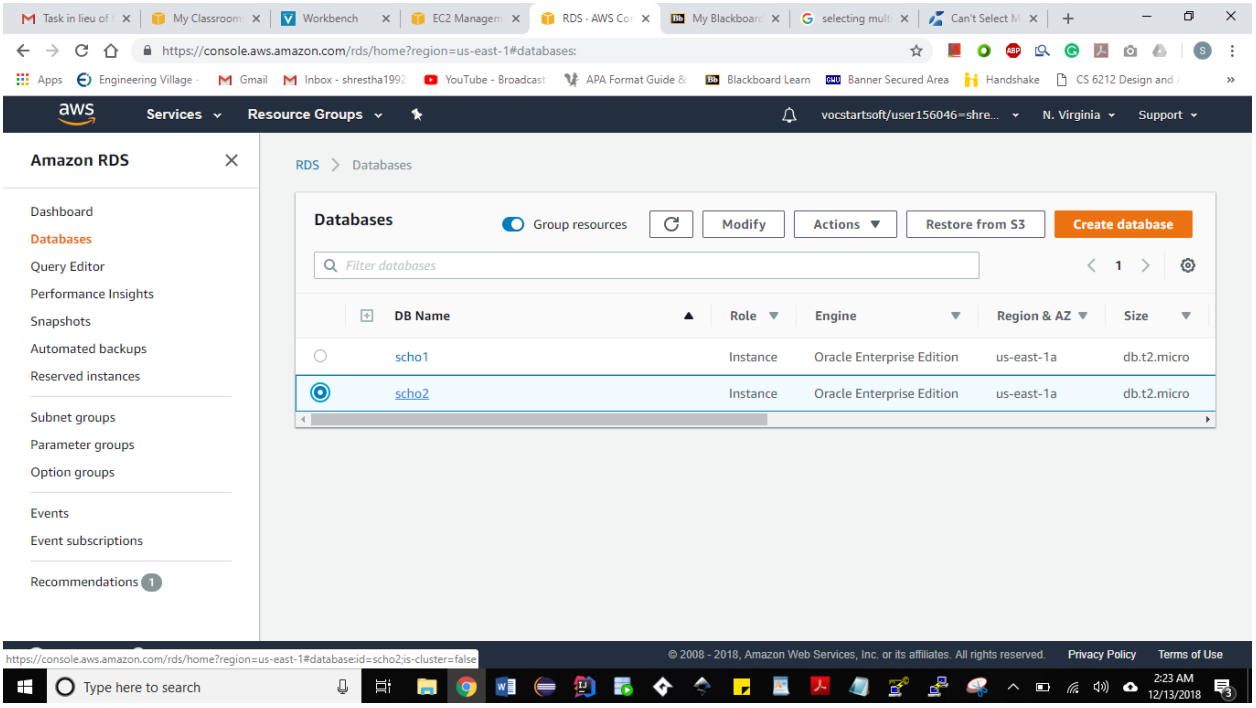
20. Click on Outbound and then click Edit.



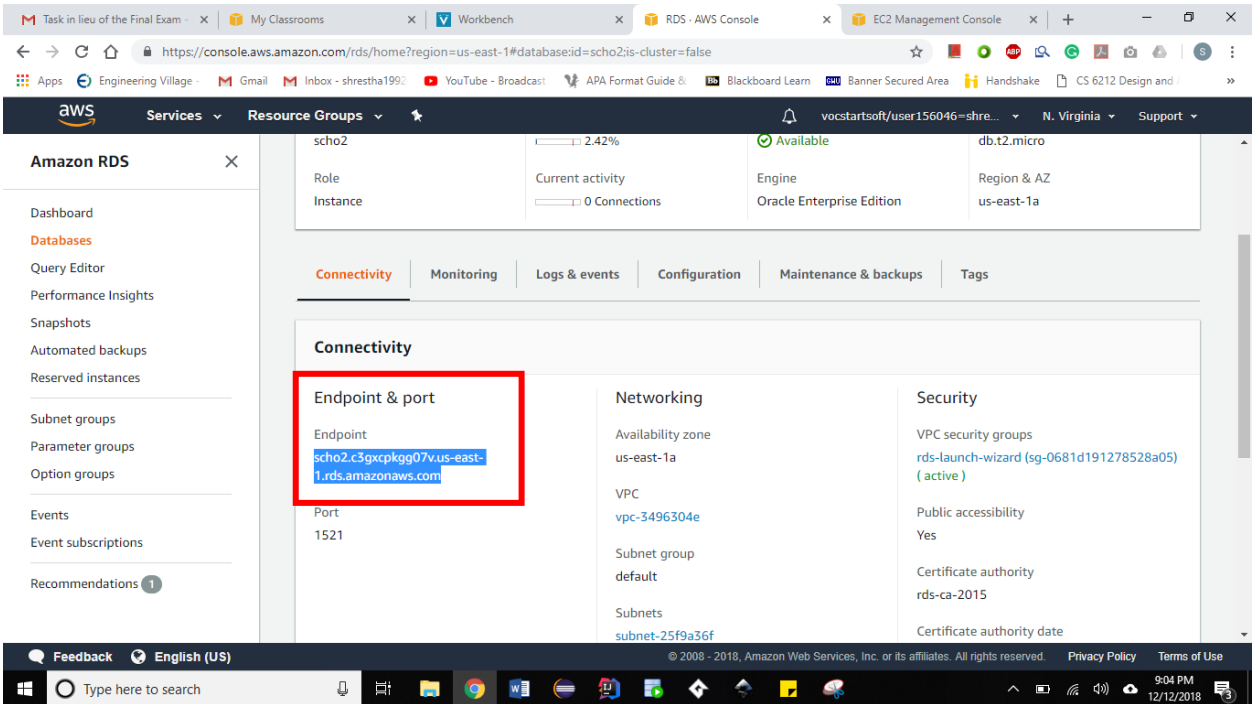
21. Make sure that your parameters match the screenshot below.
Click on Save.



22. Go to RDS -> Databases. Click on the database you created.



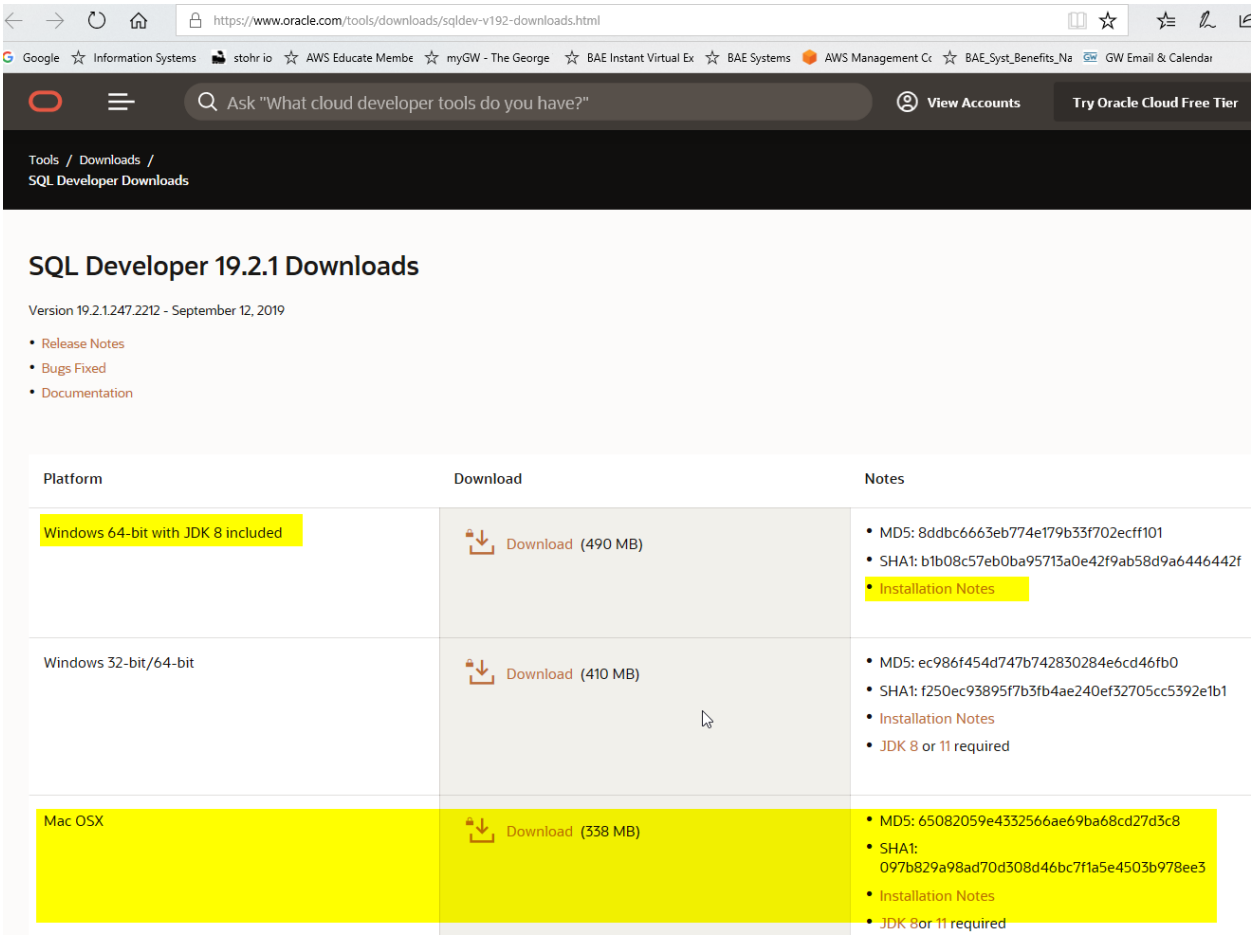
23. Save the Endpoint value under ‘Connectivity’ in notepad. We will use this later.



CONNECTING THE ORACLE SQL DEVELOPER TO THE RDS ORACLE DATABASE INSTANCE

The Oracle SQL Developer can be downloaded from:

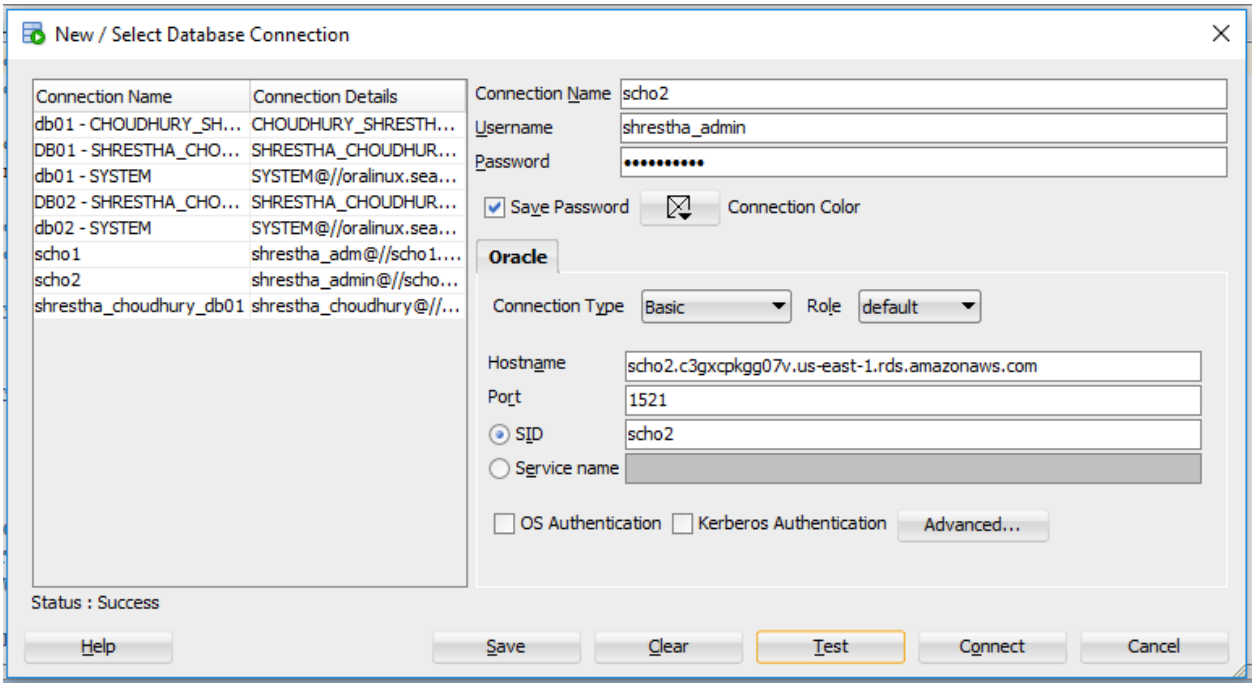
https://www.oracle.com/tools/downloads/sqldev-v192-downloads.html



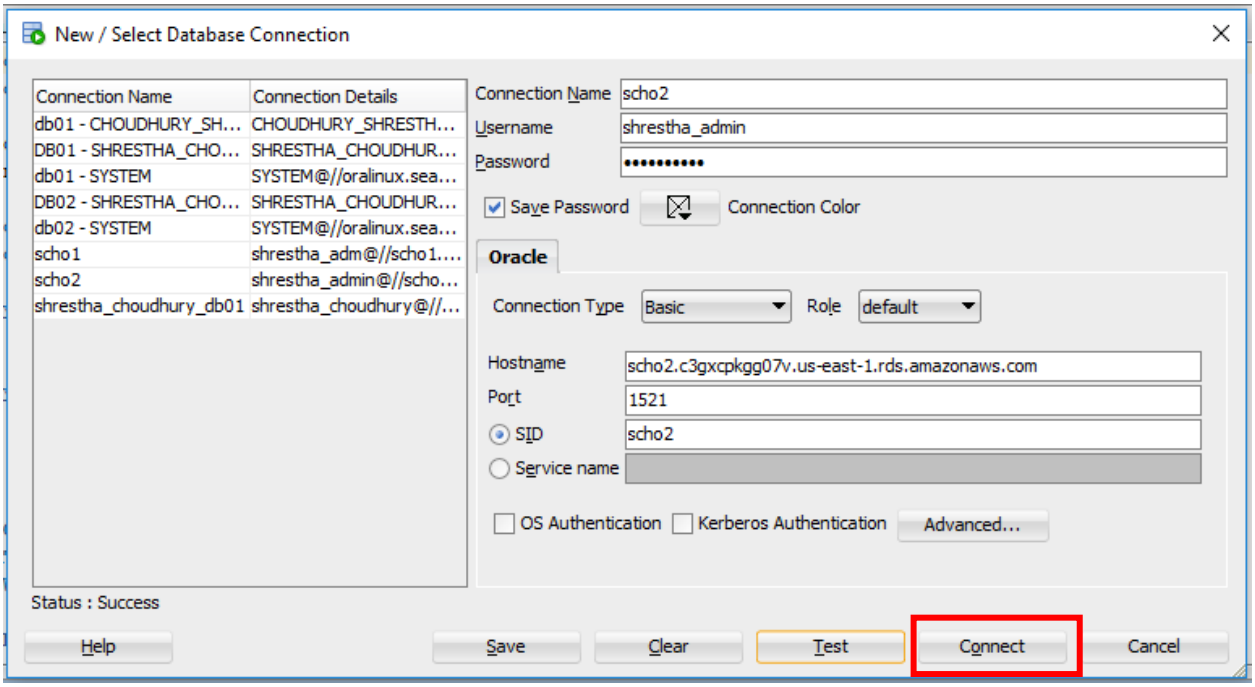
24. Open Oracle SQL Developer and click on New connection

25. Enter the below details and click on Test. You should get 'Success'.

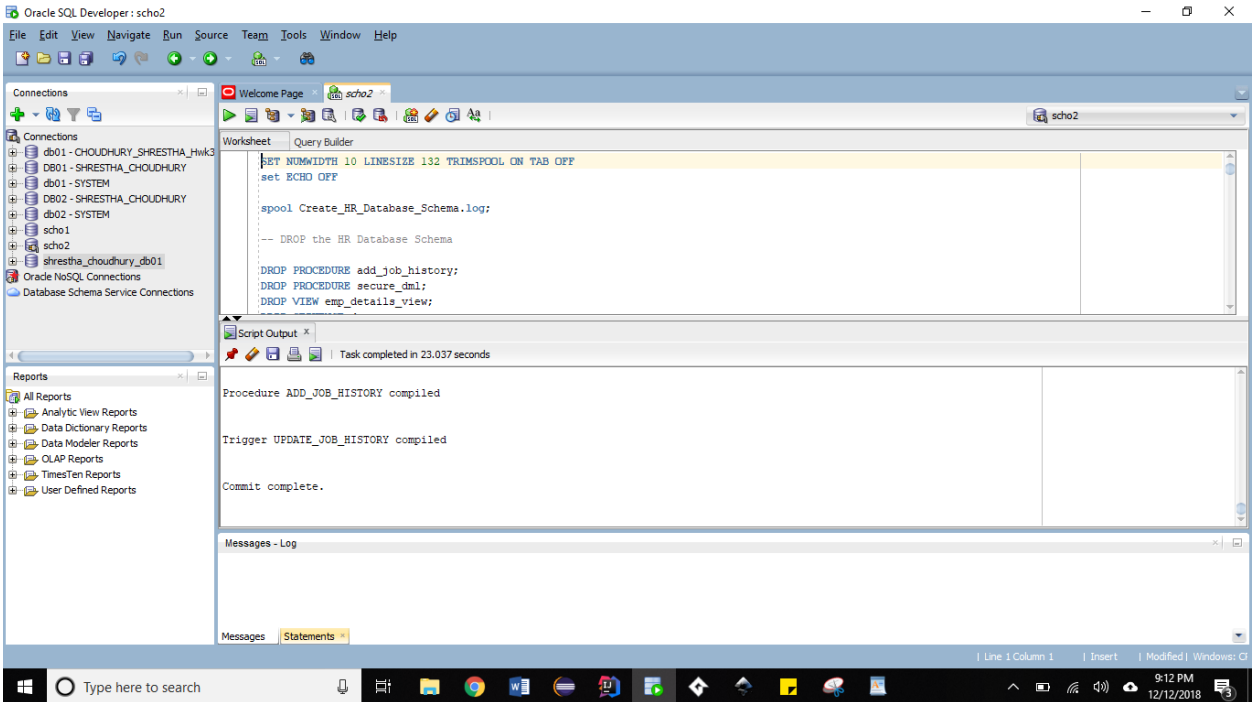
SQL DEVELOPER CONNECTION	AWS RDS INSTANCE	STEP IN DOCUMENT
Connection Name	DB instance identifier	From step 9
Username	Master username	From step 9
Password	Master password	From step 9
Hostname	Endpoint	From step 23
Port	1521	
SID	Database Name	From step 12



26. Click on Connect.



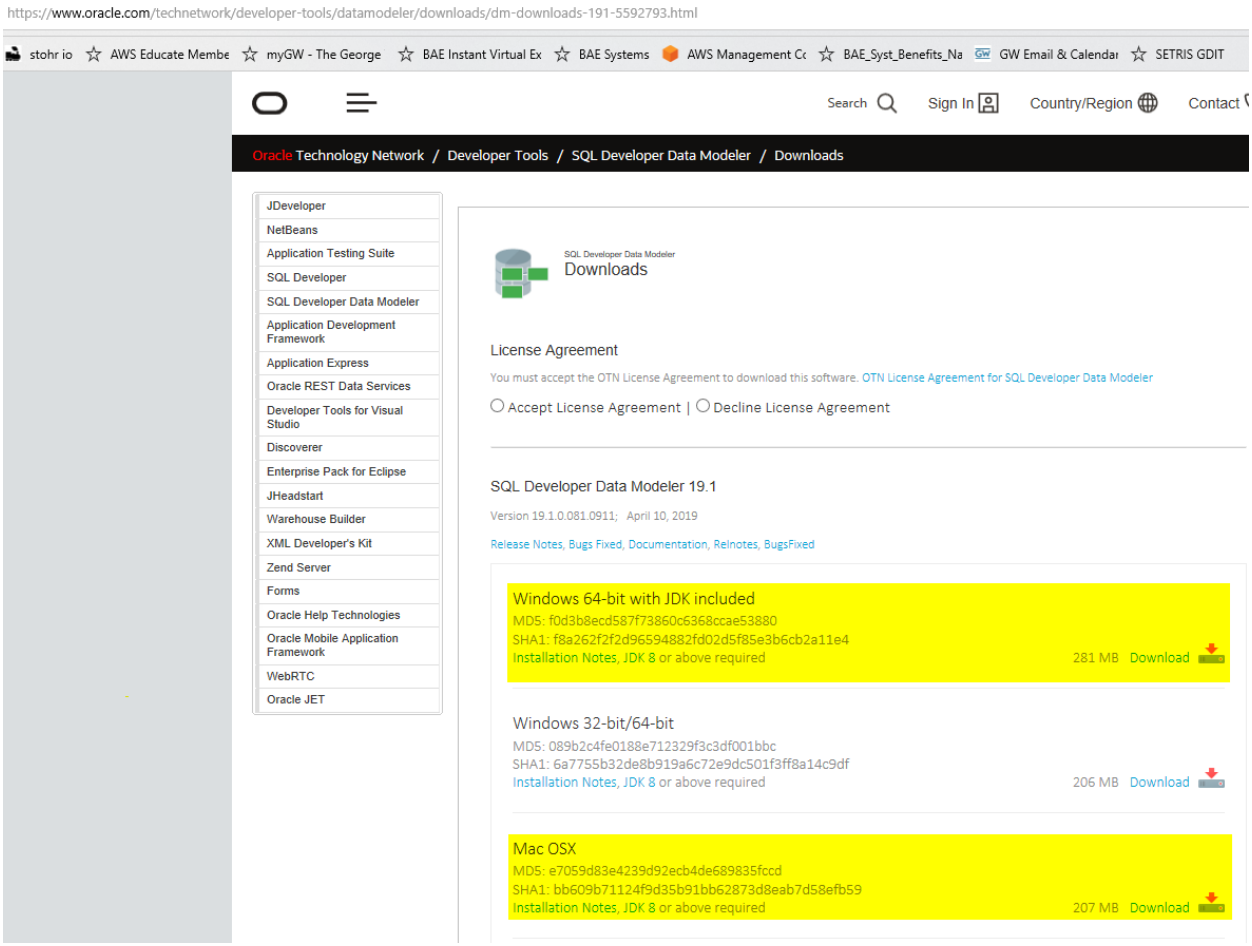
27. Run queries for the HR Database Schema.



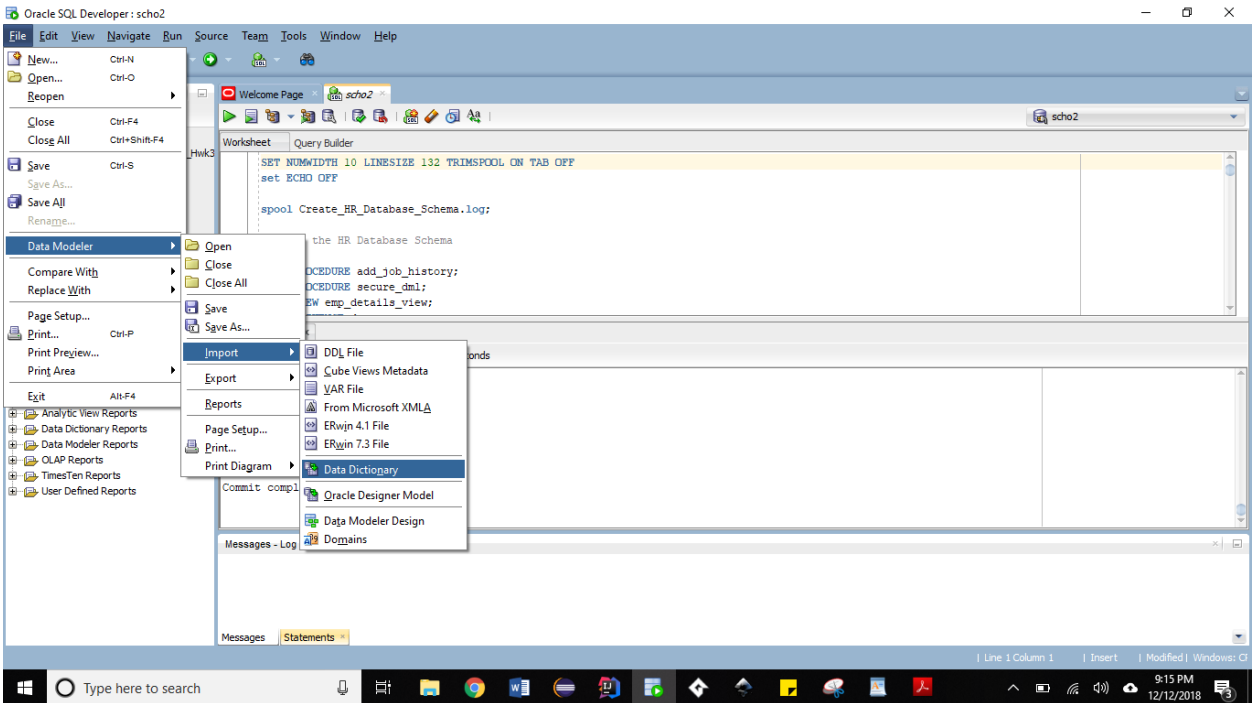
CONNECT TO ORACLE DATAMODELER AND REVERSE ENGINEER THE DATABASE SCHEMA

The Oracle Datamodeler software can be downloaded from:

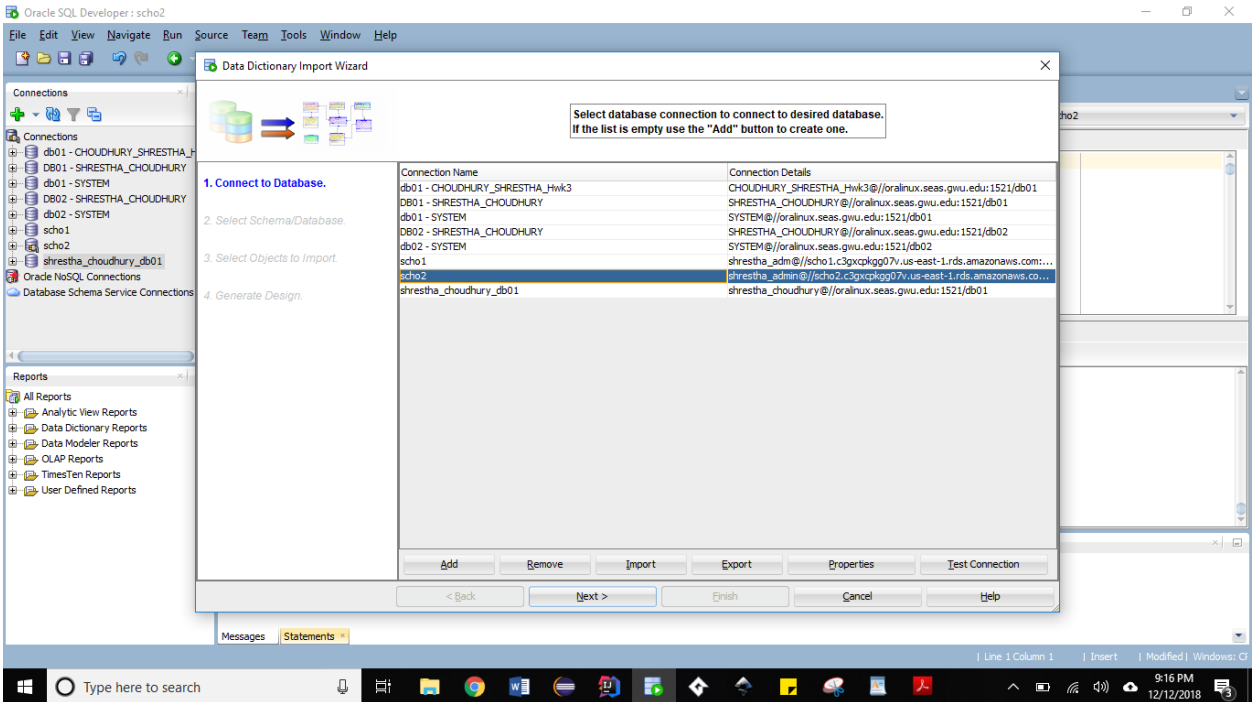
https://www.oracle.com/technetwork/developer-tools/datamodeler/downloads/dm-downloads-191-5592793.html



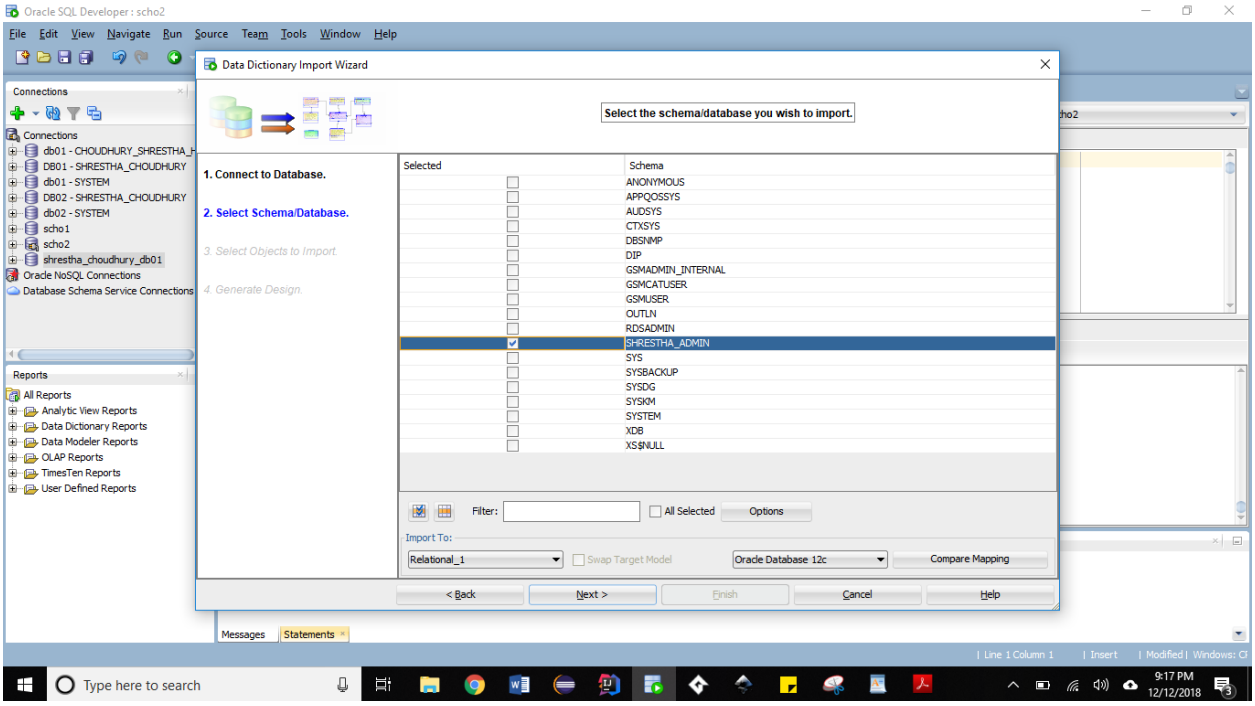
28. Go to Datamodeler -> Import -> Data Dictionary



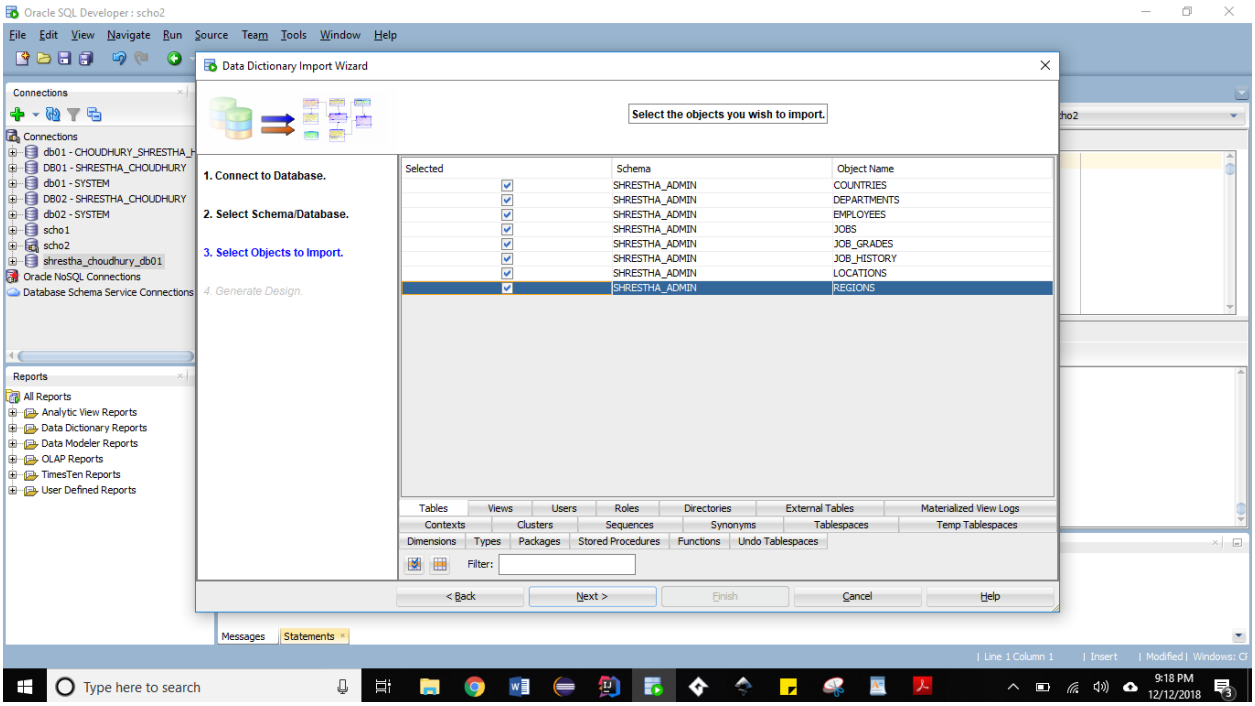
29. Select your connection name and click on Next.



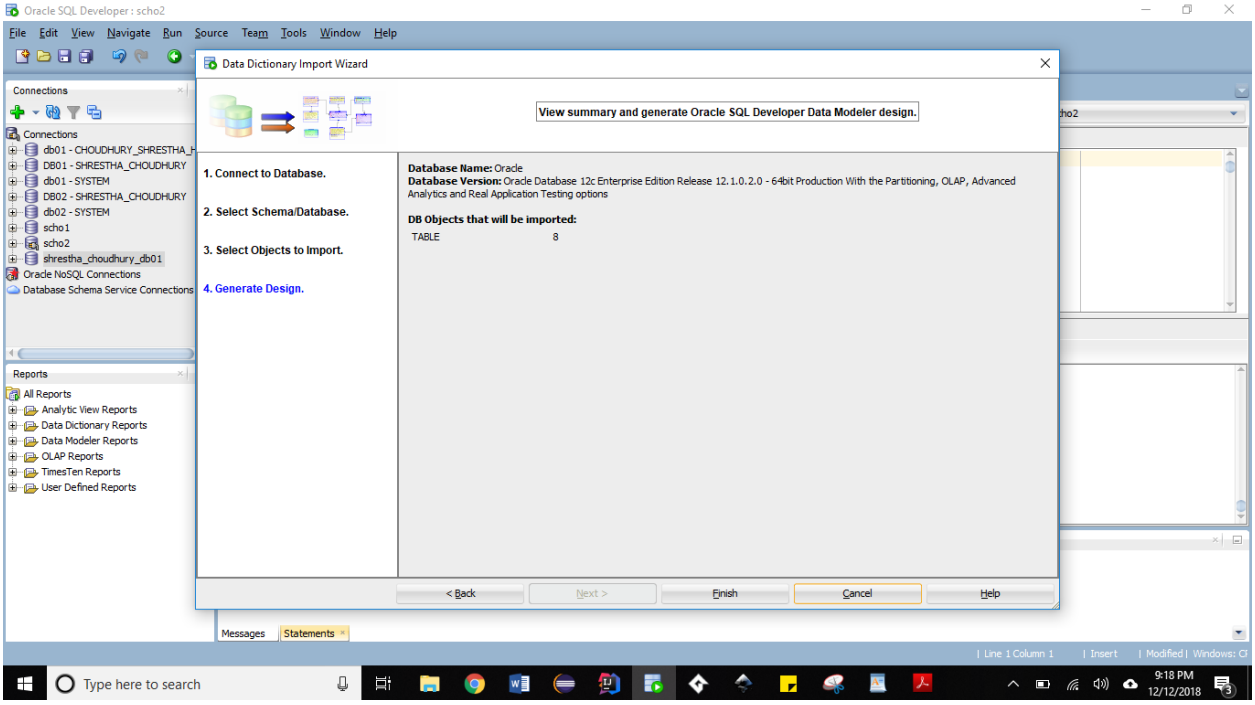
30. Select your user name and click on Next.



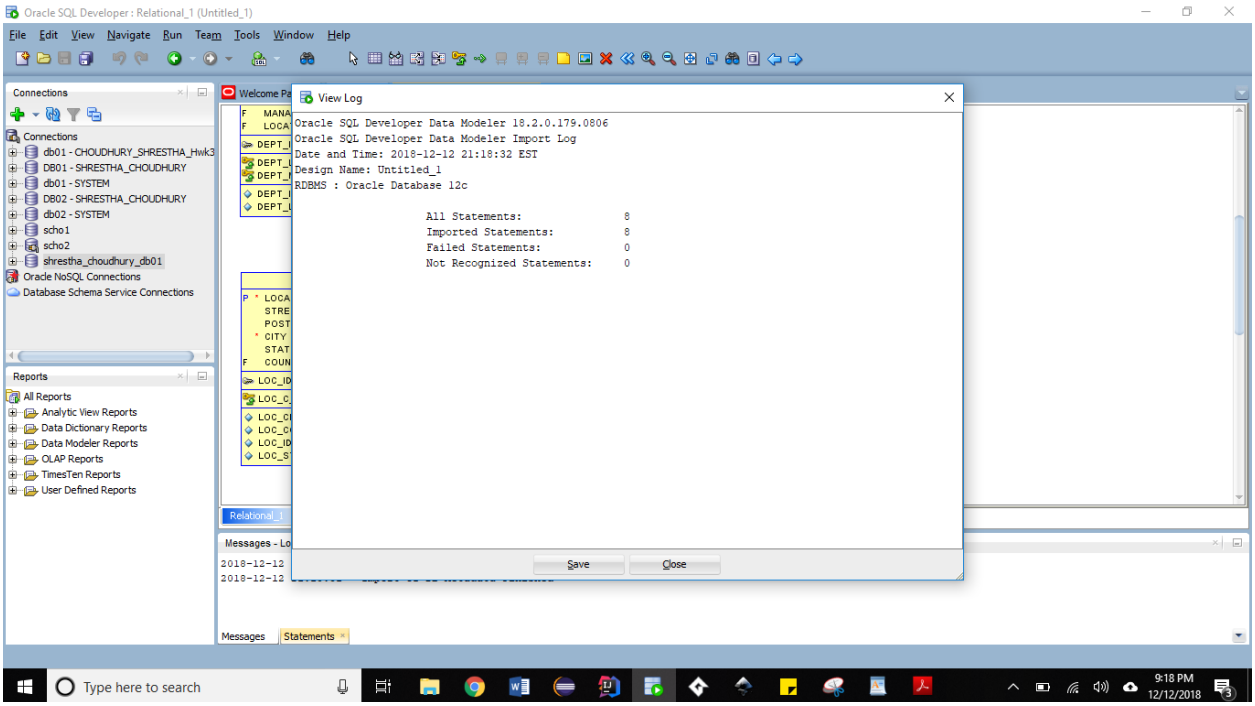
31. Select all the table and click on Next.



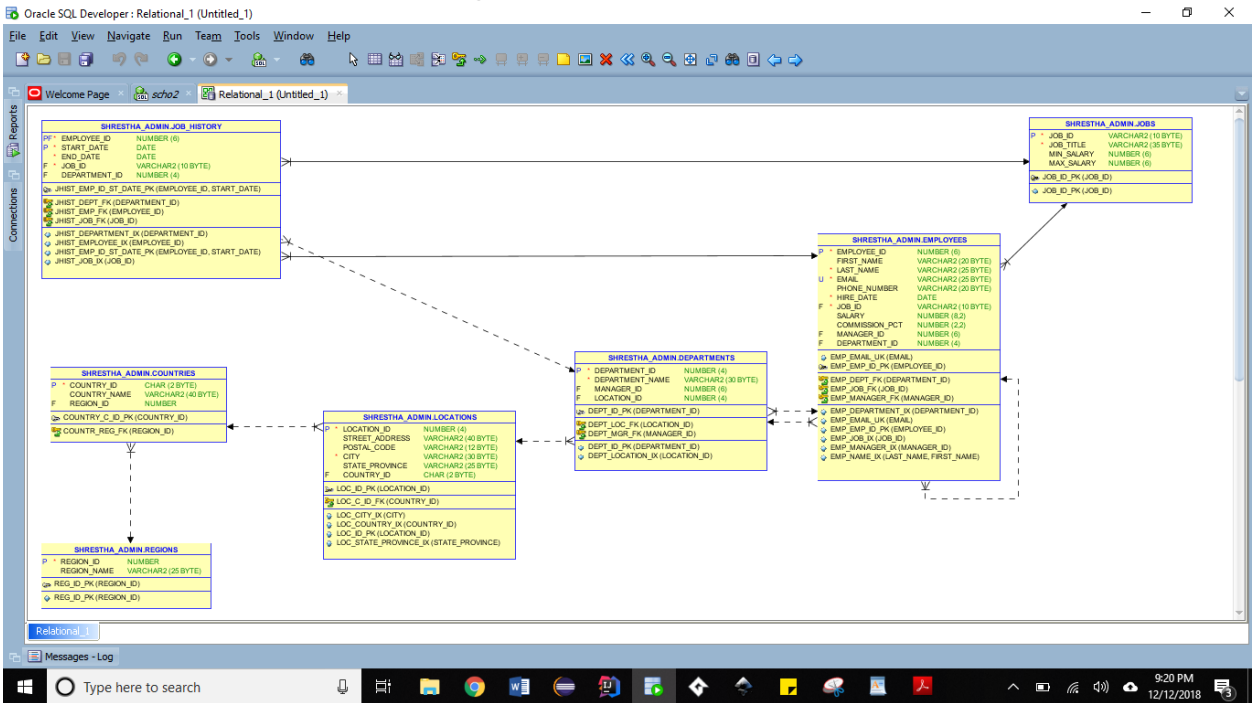
32. Click on Finish.



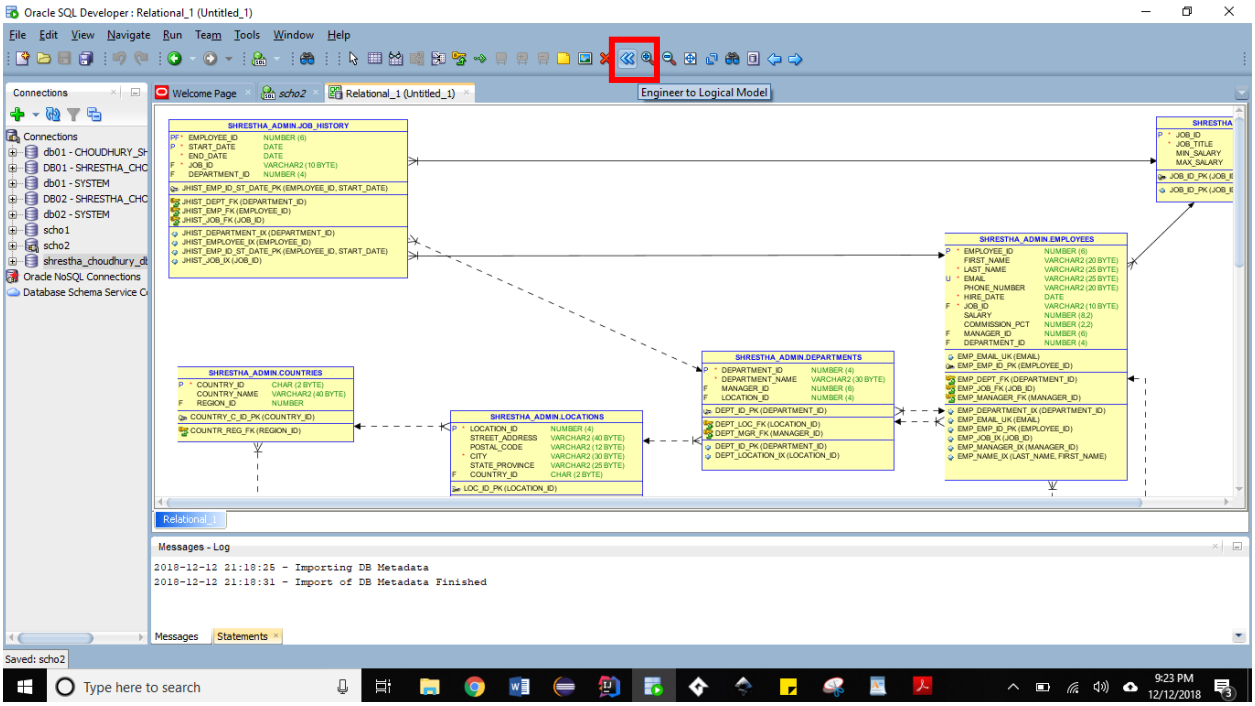
33. Check the log to verify that all tables were imported successfully.



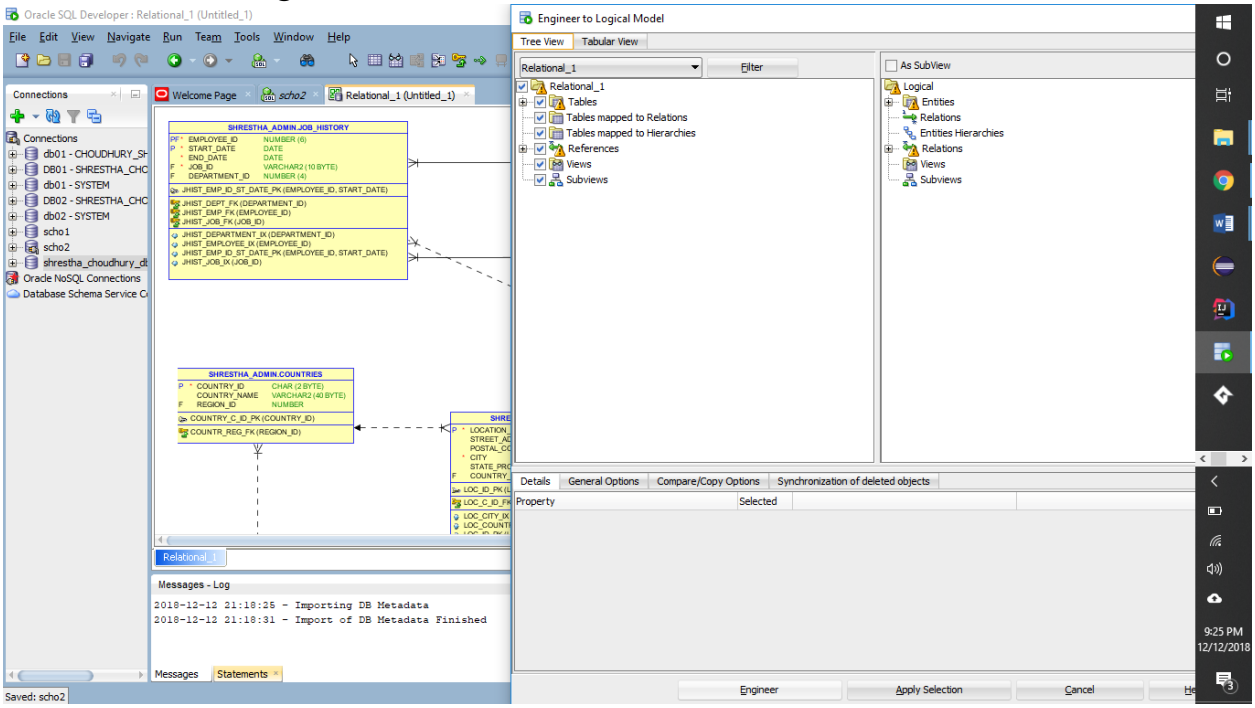
34. This is the Relational diagram of the HR database schema.



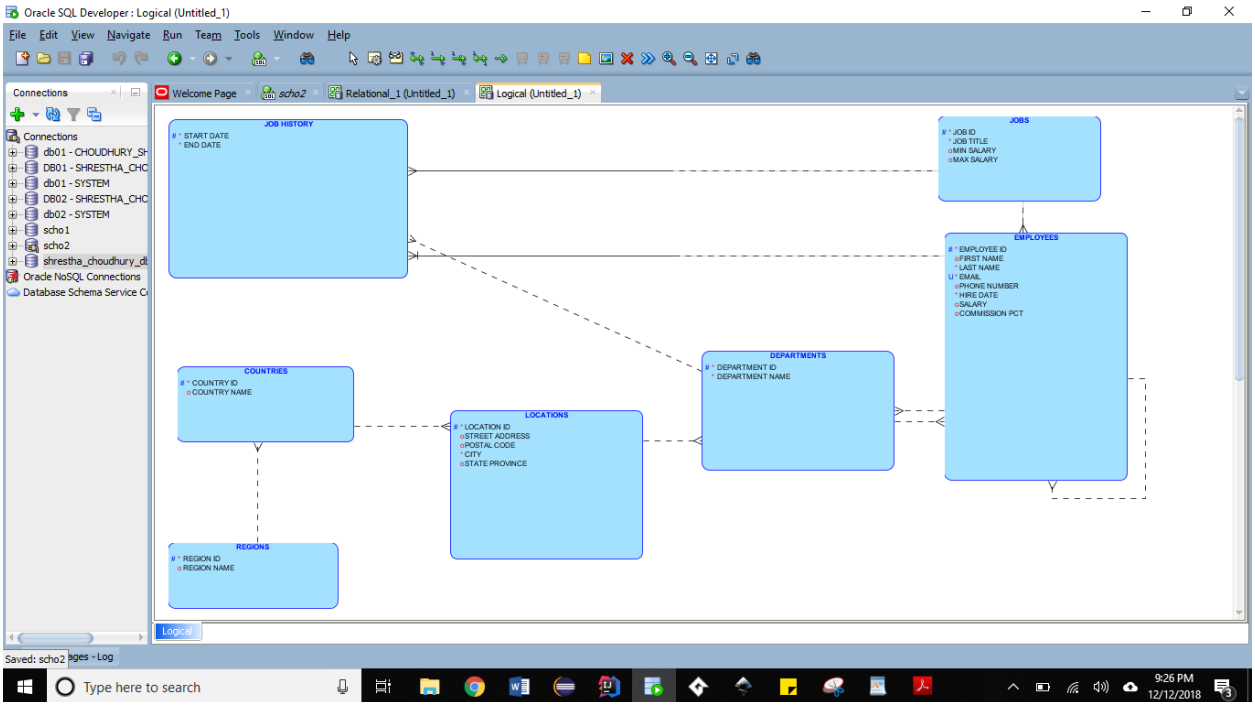
35. Click on ‘Engineer to Logical Model’



36. Click on Engineer.



37. This is the Logical diagram of the HR Database schema.



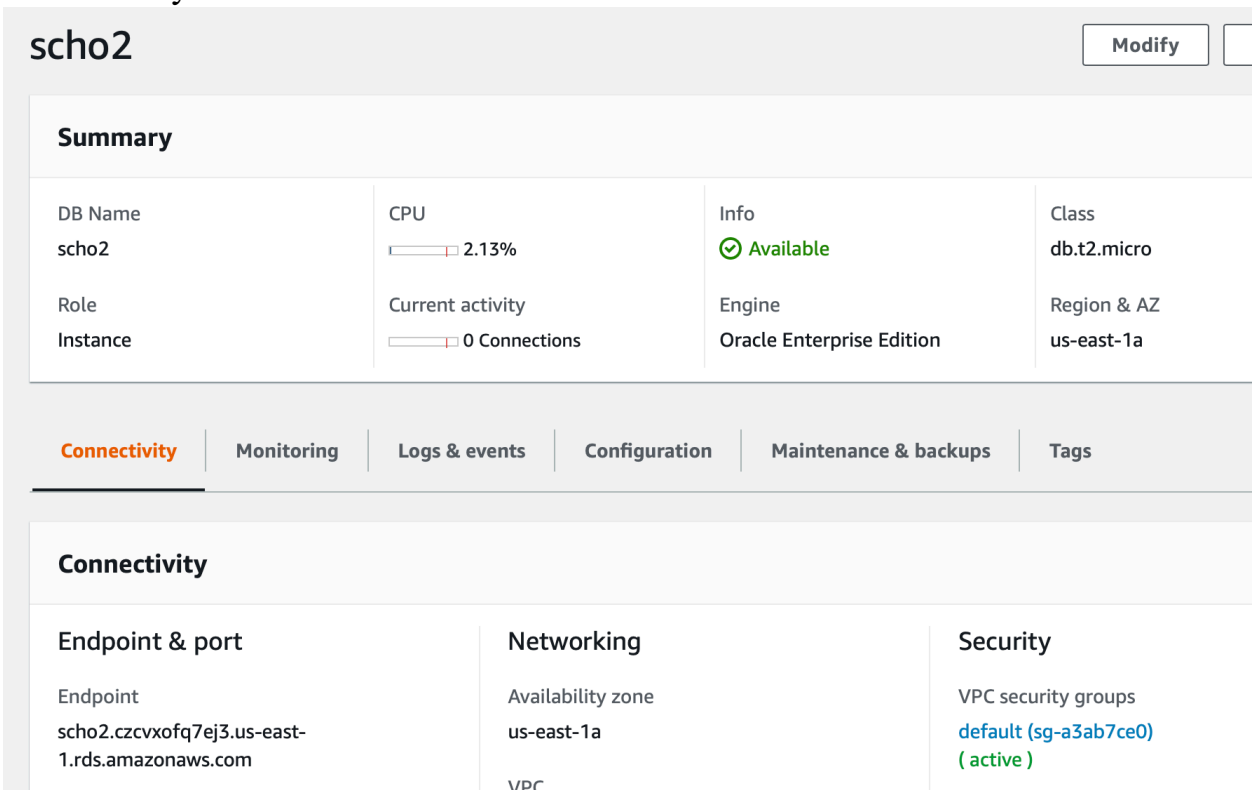
virtual private cloud:
A virtual private cloud (VPC) is an on-demand configurable pool of shared computing resources allocated within a public cloud environment, providing a certain level of isolation between the different organizations (denoted as usershereafter) using the resources. The isolation between one VPC user and all other users of the same cloud (other VPC users as well as other public cloud users) is achieved normally through allocation of a

private IP subnet and a virtual communication construct (such as a VLAN or a set of encrypted communication channels) per user. In a VPC, the previously described mechanism, providing isolation within the cloud, is accompanied with a VPN function (again, allocated per VPC user) that secures, by means of authentication and encryption, the remote access of the organization to its VPC cloud resources. With the introduction of the described isolation levels, an organization using this service is in effect working on a 'virtually private' cloud (that is, as if the cloud infrastructure is not shared with other users), and hence the name VPC.

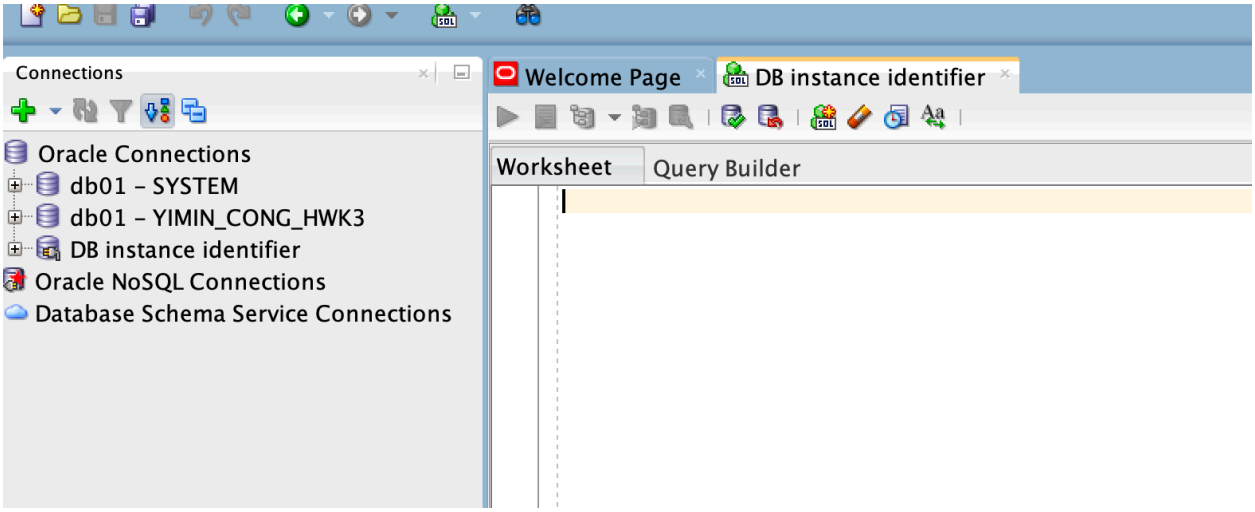
Role:
Instance

Configuration:
Endpoint: scho2.czcvxofq7ej3.us-east-1.rds.amazonaws.com
DB instance id: scho2
Engine version:12.1.0.2.v14
Storage type:General purpose(SSD)
Storage: 20GB
DBname: SCHO2
Character set AL32UTF8
Option groups: default:oracle-ee-12-1
ARN: arn:aws:rds:us-east-1:067691806802:db:scho2
Resource id: db-KGJ53DF6XUVXM7TWNXHOPOLP5A

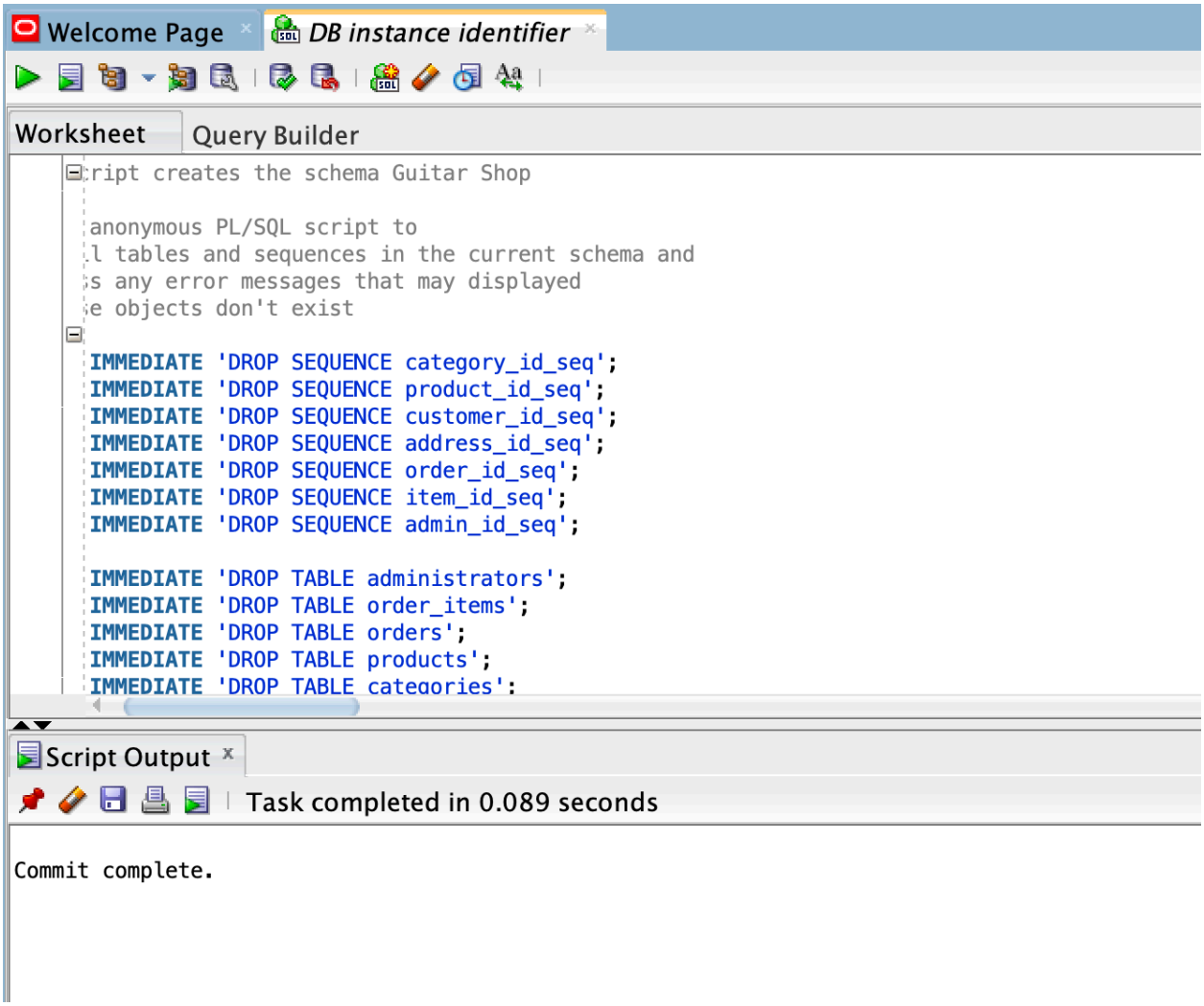
ScreenShot
Successfully created a RDS instance



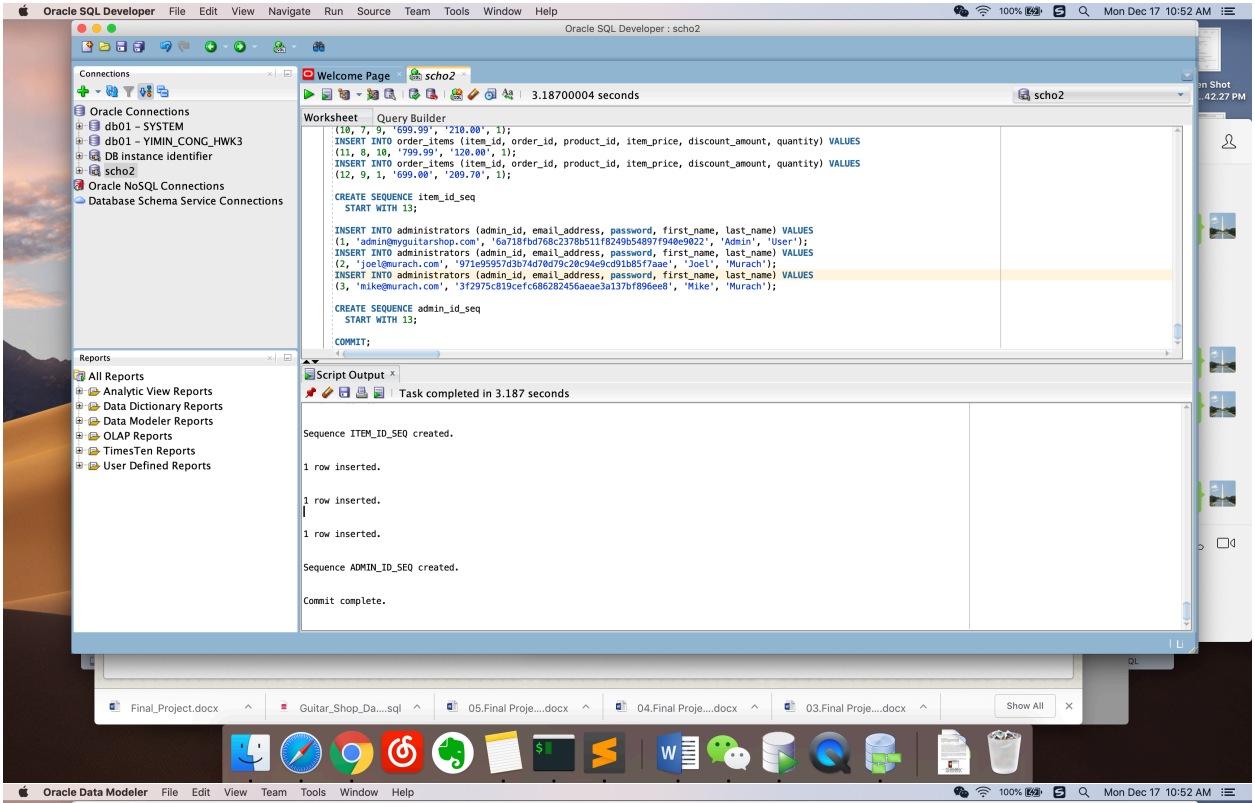
Successfully connect to RDS

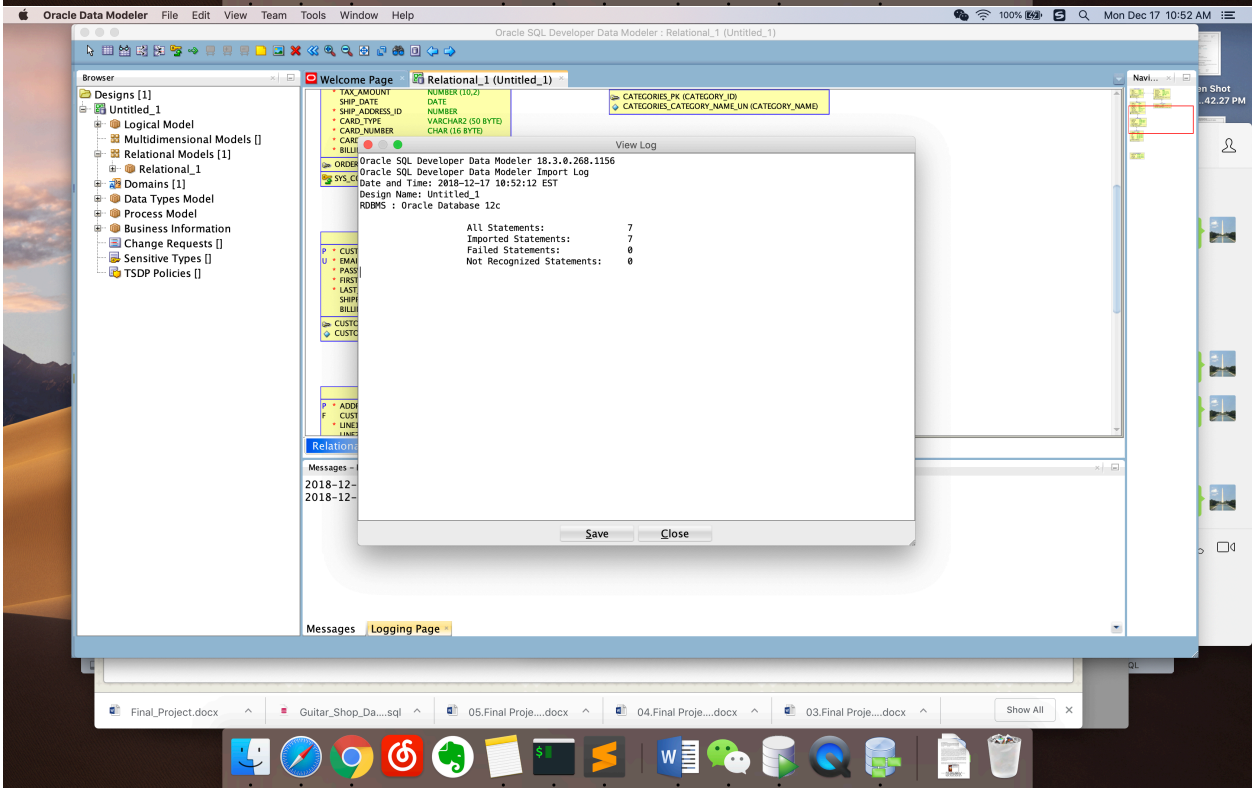


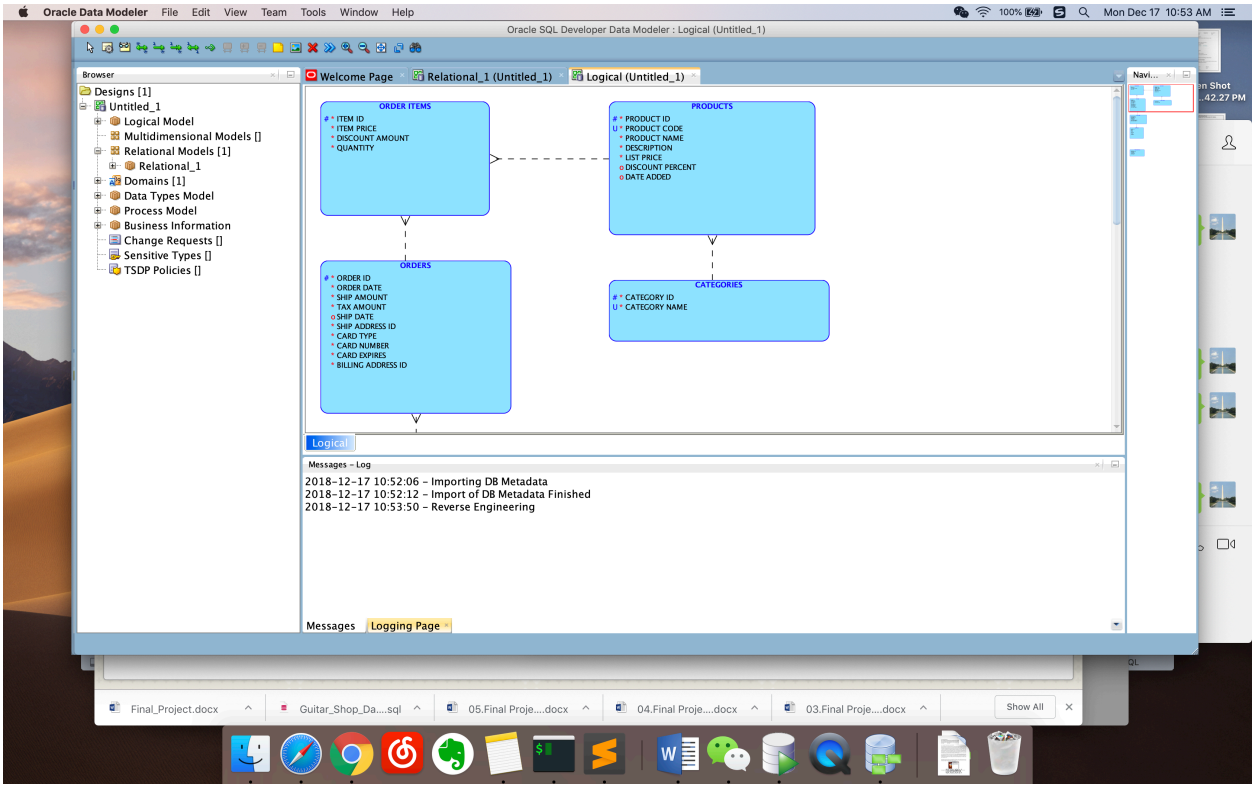
Run the script


Welcome Page
DB instance identifier
Worksheet
Query Builder
ript creates the schema Guitar Shop
anonymous PL/SQL script to
l tables and sequences in the current schema and
s any error messages that may displayed
e objects don't exist
IMMEDIATE 'DROP SEQUENCE category_id_seq';
IMMEDIATE 'DROP SEQUENCE product_id_seq';
IMMEDIATE 'DROP SEQUENCE customer_id_seq';
IMMEDIATE 'DROP SEQUENCE address_id_seq';
IMMEDIATE 'DROP SEQUENCE order_id_seq';
IMMEDIATE 'DROP SEQUENCE item_id_seq';
IMMEDIATE 'DROP SEQUENCE admin_id_seq';
IMMEDIATE 'DROP TABLE administrators';
IMMEDIATE 'DROP TABLE order_items';
IMMEDIATE 'DROP TABLE orders';
IMMEDIATE 'DROP TABLE products';
IMMEDIATE 'DROP TABLE categories';
Script Output
Task completed in 0.089 seconds
Commit complete.

Connect to data modeler







Summary:

From this lab, I learned how to deploy an AWS RDS instance and how to connect data modeler to RDS.