

Redshift Cluster Creation:-

Cluster subnet group redshift-etl was create successfully

Amazon Redshift > Clusters > Create cluster

Create cluster [Info](#)

Cluster configuration

Cluster identifier
This is the unique key that identifies a cluster.

redshift-cluster-1-lokesh

The identifier must be from 1-63 characters. Valid characters are a-z (lowercase only) and - (hyphen).

What are you planning to use this cluster for?

☒ **Production**
Configure for fast and consistent performance at the best price.

☐ **Free trial**
Configure for learning about Amazon Redshift. This configuration is free for a limited time if your organization has never created an Amazon Redshift cluster.

Choose the size of the cluster

Node type [Info](#)
Choose a node type that meets your CPU, RAM, storage capacity, and drive type requirements.

dc2.large

Number of nodes
Enter the number of nodes that you need.

2

Range (1-32)

Search [Alt+S]

Enter sample data for your Redshift cluster to start using the query editor to query data.

Database configurations

Admin user name
Enter a login ID for the admin user of your DB instance.

Lokesh

The name must be 1-128 alphanumeric characters, and it can't be a reserved word [?](#)

☐ **Auto generate password**
Amazon Redshift can generate a password for you, or you can specify your own password.

Admin user password
Must be 8-64 characters long. Must contain at least one uppercase letter, one lowercase letter and one number. Can be any printable ASCII character except "/", "*", or "@".

☐ Show password

Cluster permissions

[?](#) Create an IAM role as the default for this cluster that has the [AmazonRedshiftAllCommandsFullAccess](#) policy attached. This policy includes permissions to run SQL commands to COPY, UNLOAD, and query data with Amazon Redshift. The policy also grants permissions to run SELECT statements for related services, such as Amazon S3, Amazon CloudWatch logs, Amazon SageMaker, and AWS Glue.

Associated IAM roles (0) [Info](#)

Create, associate, or remove an IAM role. You can associate up to 50 IAM roles. You can also choose an IAM role and set it as the default for this cluster.

Search

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N. Virginia

voclabs/user2099175=sampatharaoloke

modify these settings now.

board

nt

▼ Network and security [Info](#)

Virtual private cloud (VPC)
This VPC defines the virtual networking environment for this cluster.

project-vpc
vpc-02a7a5c464e3515ad

You can't change the VPC associated with this cluster after the cluster has been created. [Learn more](#) X

VPC security groups
This VPC security group defines which subnets and IP ranges the cluster can use in the VPC.

Choose one or more security groups

default
sg-021bbe7315eb73968 X

Cluster subnet group
Choose the Amazon Redshift subnet group to launch the cluster in.

redshift-etl

Availability Zone
Specify the Availability Zone to create the cluster in. Otherwise, Amazon Redshift chooses an Availability Zone for you.

No preference

Enhanced VPC routing
Enabling this option routes network traffic between your cluster and data repositories through a VPC, instead of through the Internet. [Learn more](#)

☒ Turn off
☐ Turn on

Publicly accessible
☐ Turn on Publicly accessible
Allow public connections to Amazon Redshift.

Search

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voclabs/user2099175=sampatharaoloke

It can take about ten minutes for one setting to change and connections to succeed.

rs dashboard

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gement

▼ Database configurations

Database name
Specify a database name to create an additional database.

dev

The name must be 1-64 alphanumeric characters (lowercase only), and it can't be a reserved word.

Database port
Port number where the database accepts inbound connections. You can't change the port after the cluster has been created.

6042

The port must be numeric (1150-65535).

Parameter groups
Defines database parameter and query queues for all the databases.

Encryption
Encrypt all data on your cluster.

☒ Disabled
☐ Use AWS Key Management Service (AWS KMS)
☐ Use a hardware security module (HSM)

► Maintenance

► Monitoring

[Alt+S]

N. Virginia▼voclabs/user2099175-sampatharaoIokesh03@gmail.com @ 1797-1632

redshift-etl

DeleteModify

Cluster subnet group details

VPC ID

Description

Status

vpc-02a7a6c464e3515ad

redshift code

Complete

Attached clusters

This subnet group has no attached clusters

Subnets (1)

Search

<1>

Availability Zone

Subnet ID

CIDR block

us-east-1a

subnet-0b02fcb1cda14c5f7

10.0.128.0/20

Tags (0)

Manage tags

Key

Value

No tags

No tags are associated with this cluster.

Add tags

in the new Unified Settings

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ch

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Load sample data to your Redshift cluster to start using the query editor to query data.

Database configurations

Admin user name

Enter a login ID for the admin user of your DB instance.

lokesh

The name must be 1-128 alphanumeric characters, and it can't be a reserved word

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Cluster permissions

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Associated IAM roles (1) info

Create, associate, or remove an IAM role. You can associate up to 50 IAM roles. You can also choose an IAM role and set it as the default for this cluster.

Set default

Manage IAM roles

action? Find it in the new Unified Settings

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Stop sharingHide

Show all

[Alt+S]

show password

N. Virginia

voclabs/user2099175-sampatharaolokesh03@gmail.com @ 1797-1632

Cluster permissions

ⓘ Create an IAM role as the default for this cluster that has the [AmazonRedshiftAllCommandsFullAccess](#) policy attached. This policy includes permissions to run SQL commands to COPY, UNLOAD, and query data with Amazon Redshift. The policy also grants permissions to run SELECT statements for related services, such as Amazon S3, Amazon CloudWatch logs, Amazon SageMaker, and AWS Glue.

Associated IAM roles (1) [Info](#)

Create, associate, or remove an IAM role. You can associate up to 50 IAM roles. You can also choose an IAM role and set it as the default for this cluster.

Set default Manage IAM roles

Search for associated IAM role by name, status, or role type < 1 >

<input type="checkbox"/>	IAM roles	Status	Role type
<input type="checkbox"/>	myRedshiftRole	Not applied	--

Additional configurations ☒ Use defaults

These configurations are optional, and default settings have been defined to help you get started with your cluster. Turn off "Use defaults" to modify these settings now.

▶ Network and security [Info](#)

and it in the new Unified Settings

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[Alt+S]

Turn on Publicly accessible

Allow public connections to Amazon Redshift.

ⓘ It can take about ten minutes for the setting to change and connections to succeed.

▼ Database configurations

Database name

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Parameter groups

Defines database parameter and query queues for all the databases.

Encryption

Encrypt all data on your cluster.

☒ Disabled

☐ Use AWS Key Management Service (AWS KMS)

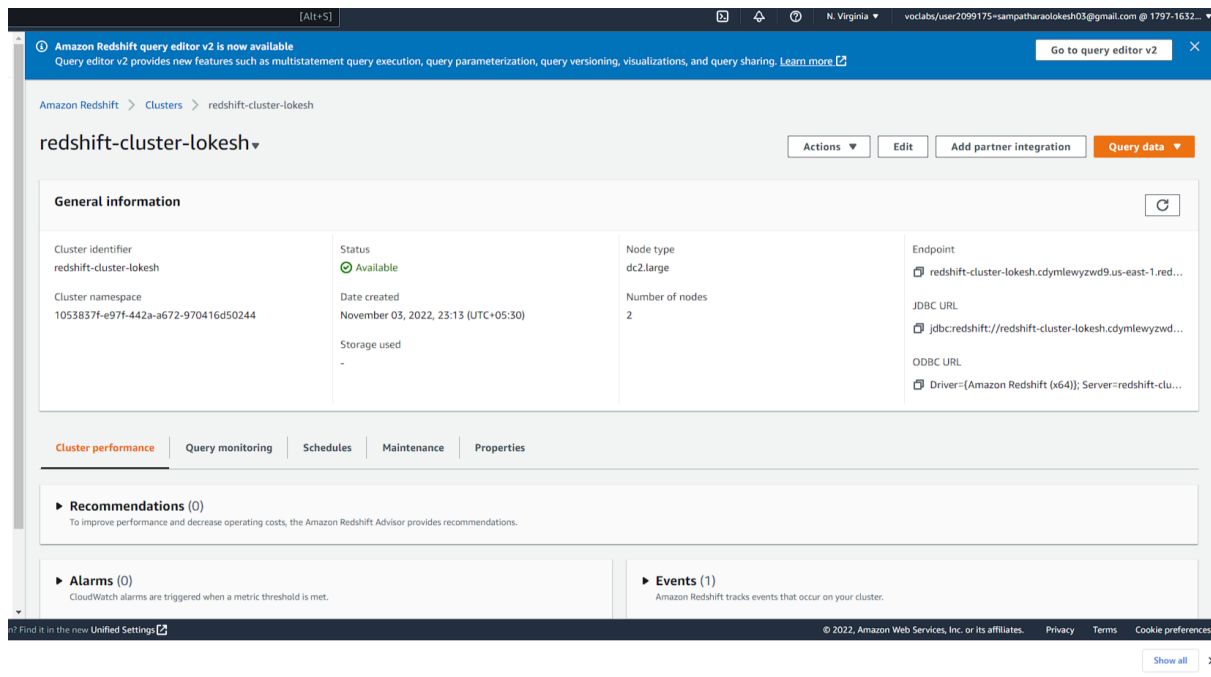
☐ Use a hardware security module (HSM)

▶ Maintenance

it in the new Unified Settings

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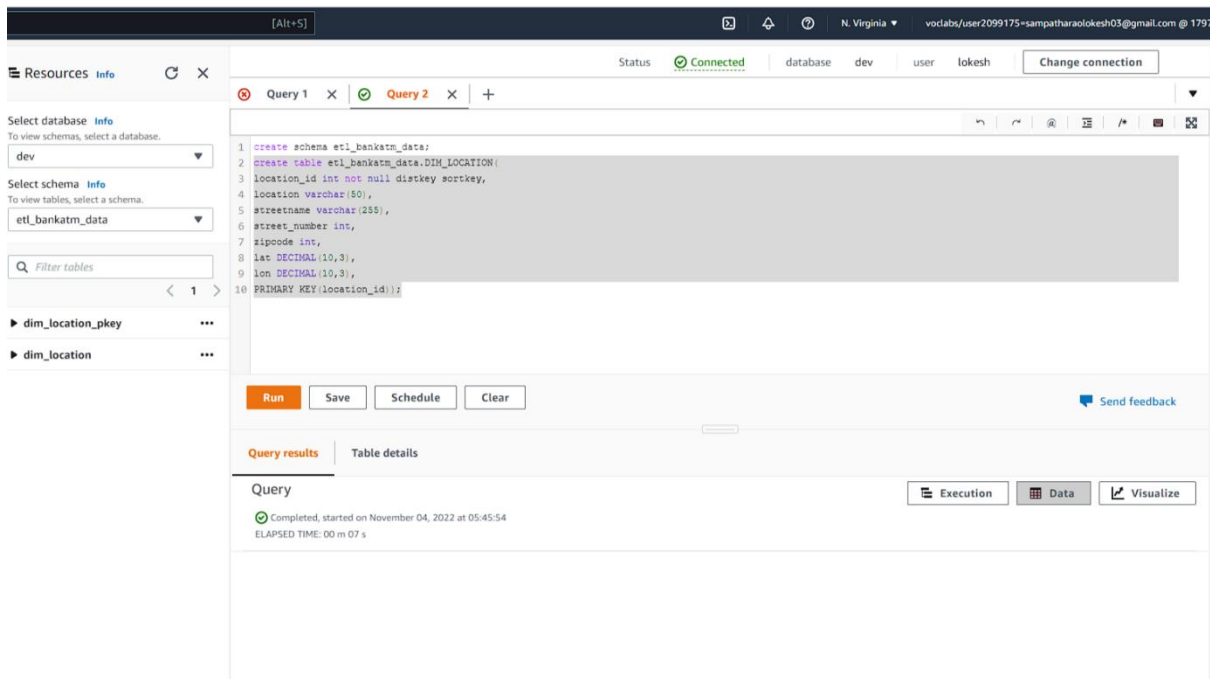
Redshift Cluster creation and queries to create dimension and fact tables:-



1st and 2nd query):-

```
create schema etl_bankatm_data;
create table etl_bankatm_data.DIM_LOCATION(
location_id int not null distkey sortkey,
location varchar(50),
streetname varchar(255),
street_number int,
zipcode int,
lat DECIMAL(10,3),
lon DECIMAL(10,3),
PRIMARY KEY(location_id));
```

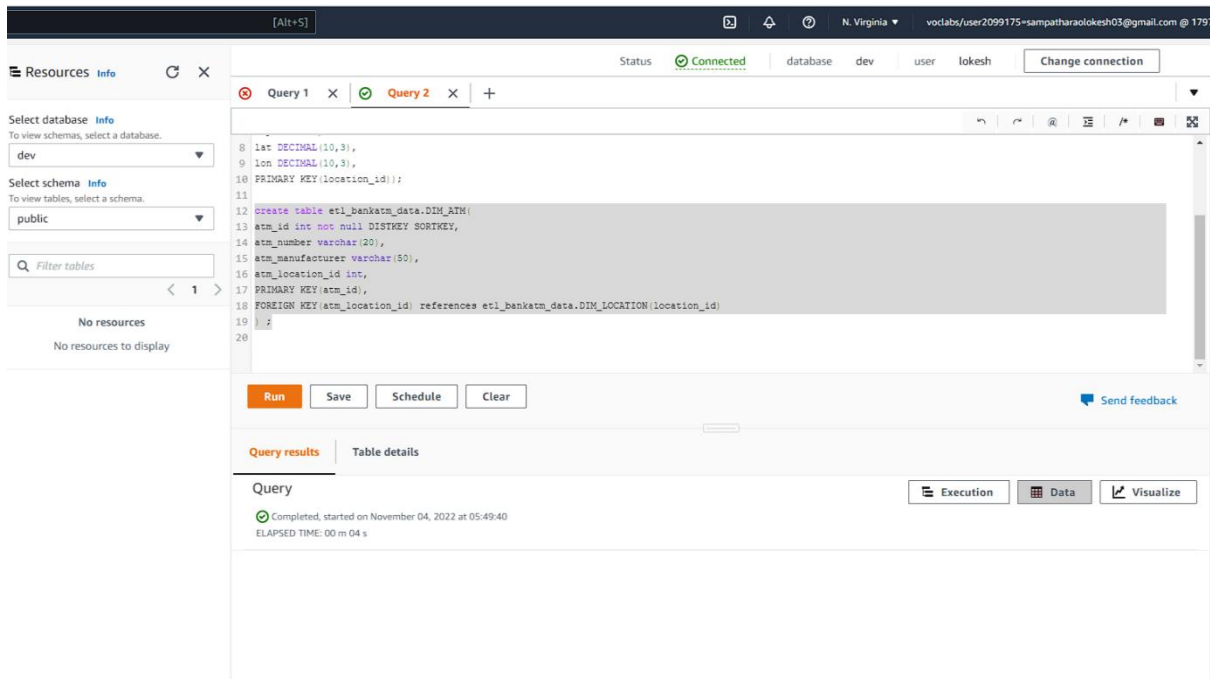
Screenshot of 1st and 2nd query)



3rd query:

```
create table etl_bankatm_data.DIM_ATM(
atm_id int not null DISTKEY SORTKEY,
atm_number varchar(20),
atm_manufacturer varchar(50),
atm_location_id int,
PRIMARY KEY(atm_id),
FOREIGN KEY(atm_location_id) references
etl_bankatm_data.DIM_LOCATION(location_id)
);
```

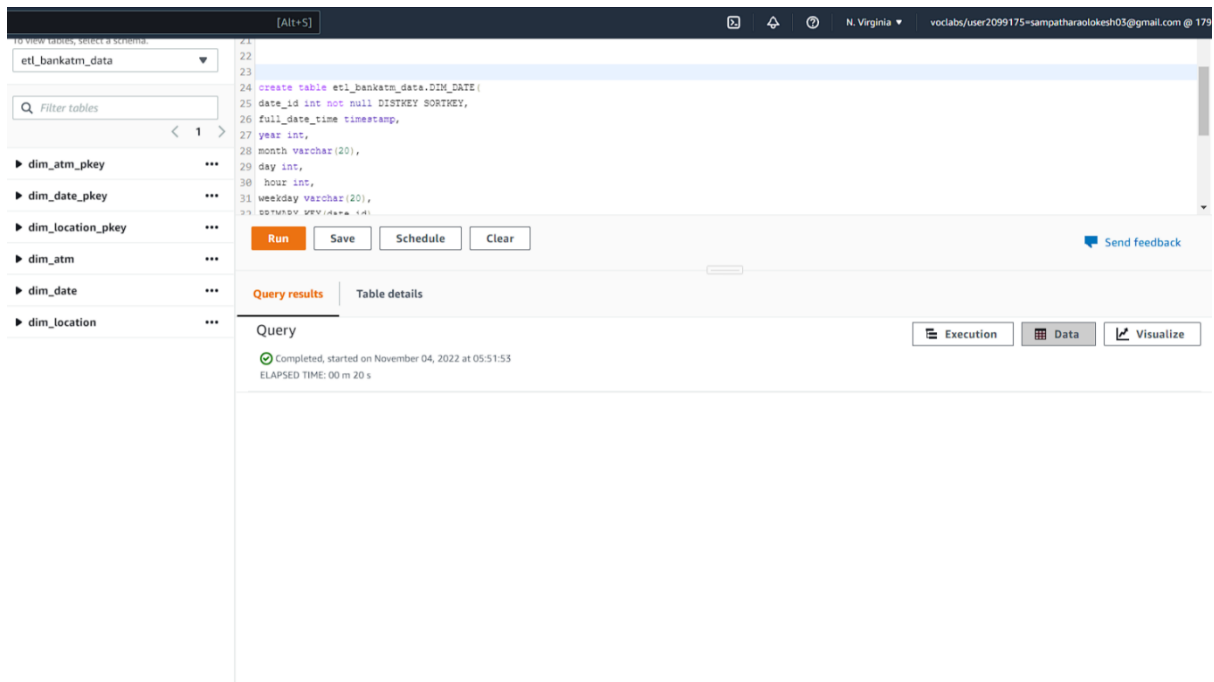
Screenshot of 3rd query



4th query:

```
create table etl_bankatm_data.DIM_DATE(  
date_id int not null DISTKEY SORTKEY,  
full_date_time timestamp,  
year int,  
month varchar(20),  
day int,  
hour int,  
weekday varchar(20),  
PRIMARY KEY(date_id)  
);
```

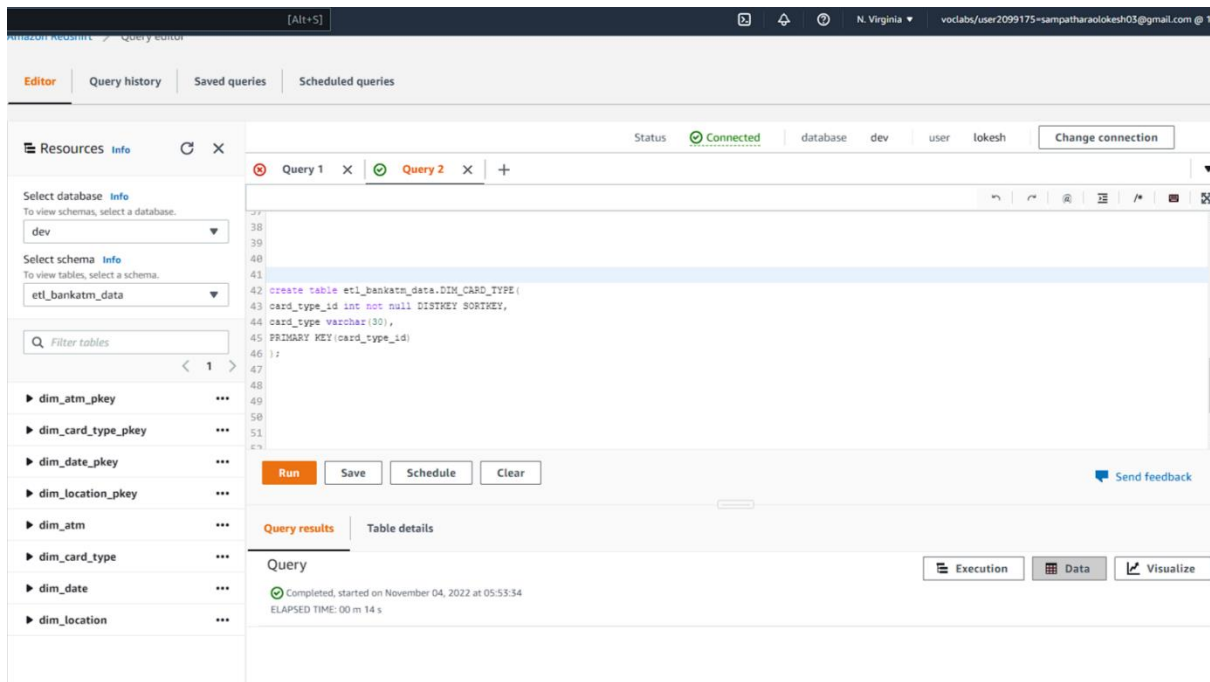
Screenshot:



5th query:

```
create table etl_bankatm_data.DIM_CARD_TYPE(
card_type_id int not null DISTKEY SORTKEY,
card_type varchar(30),
PRIMARY KEY(card_type_id)
);
```

Screenshot:



6th query:

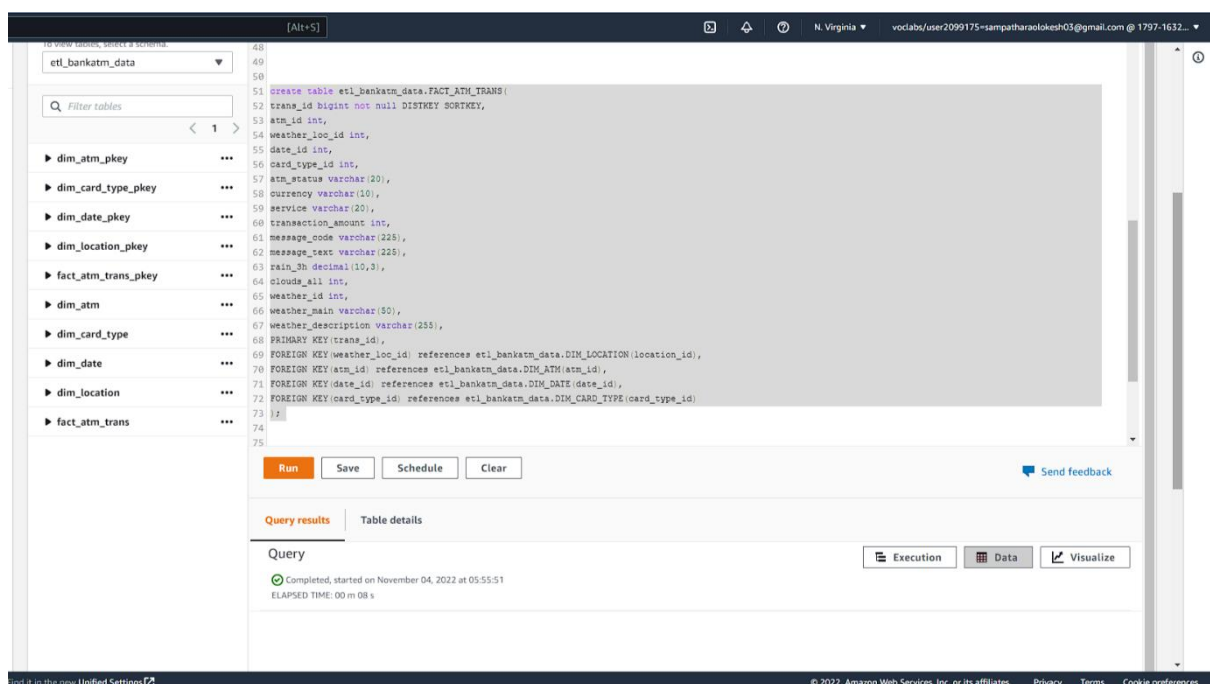
```
create table etl_bankatm_data.FACT_ATM_TRANS(
trans_id bigint not null DISTKEY SORTKEY,
atm_id int,
weather_loc_id int,
date_id int,
card_type_id int,
atm_status varchar(20),
currency varchar(10),
service varchar(20),
transaction_amount int,
message_code varchar(225),
message_text varchar(225),
rain_3h decimal(10,3),
clouds_all int,
weather_id int,
weather_main varchar(50),
```

```

weather_description varchar(255),
PRIMARY KEY(trans_id),
FOREIGN KEY(weather_loc_id) references
etl_bankatm_data.DIM_LOCATION(location_id),
FOREIGN KEY(atm_id) references
etl_bankatm_data.DIM_ATM(atm_id),
FOREIGN KEY(date_id) references
etl_bankatm_data.DIM_DATE(date_id),
FOREIGN KEY(card_type_id) references
etl_bankatm_data.DIM_CARD_TYPE(card_type_id)
);

```

Screenshot:



Queries to load data into Redshift Cluster from Amazon S3 bucket:

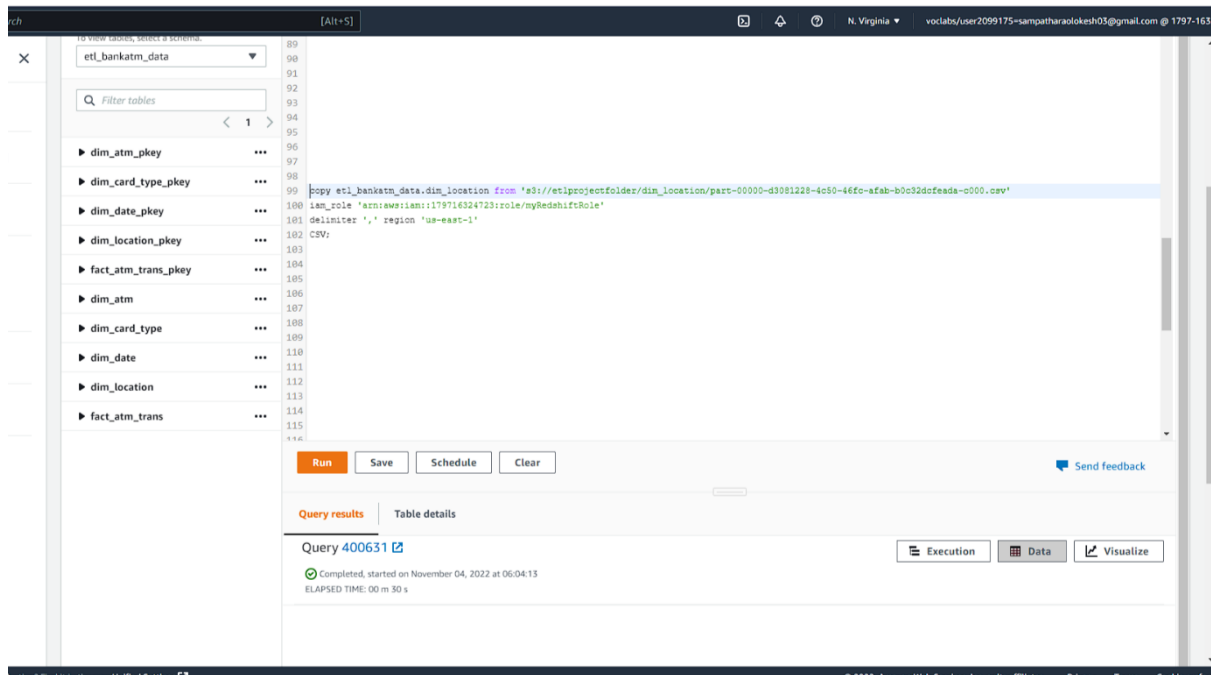
1st query:- copy etl_bankatm_data.dim_location from
's3://etlprojectfolder/dim_location/part-00000-d3081228-4c50-46fc-afab-b0c32dcfeada-c000.csv'

iam_role 'arn:aws:iam::179716324723:role/myRedshiftRole'

delimiter ',' region 'us-east-1'

CSV;

Screenshot:-



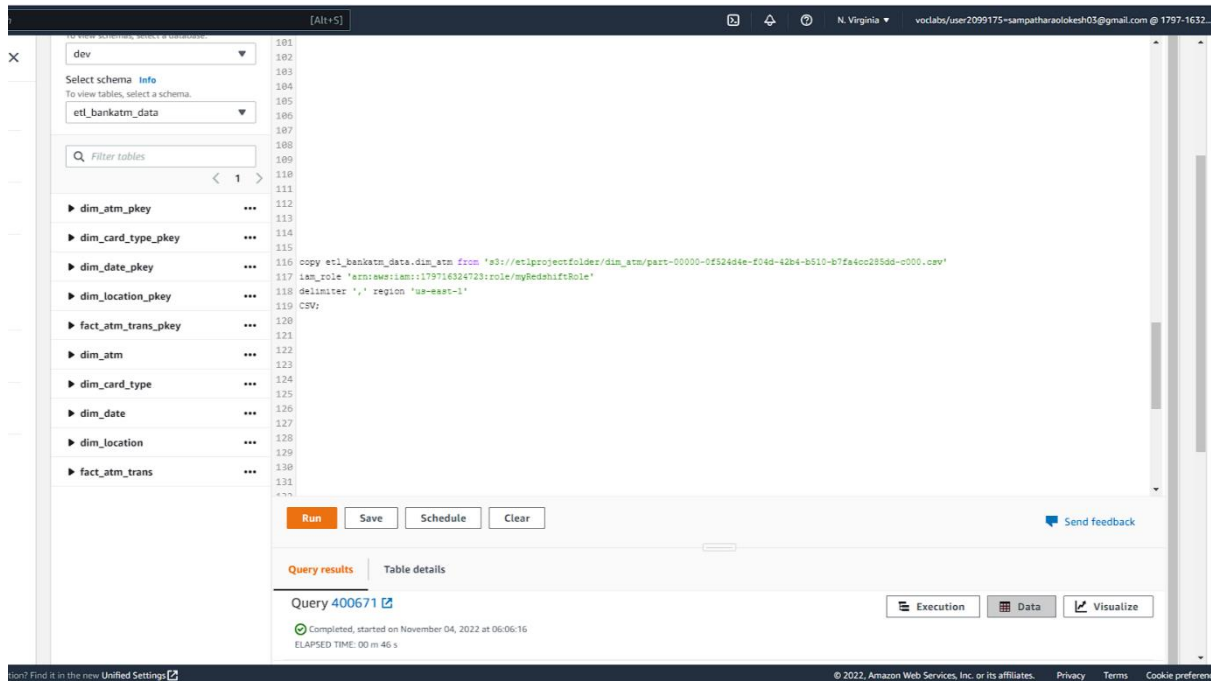
2nd query:-

copy etl_bankatm_data.dim_atm from
's3://etlprojectfolder/dim_atm/part-00000-0f524d4e-f04d-42b4-b510-b7fa4cc285dd-c000.csv'

iam_role 'arn:aws:iam::179716324723:role/myRedshiftRole'

delimiter ',' region 'us-east-1'

CSV;



3rd query:-

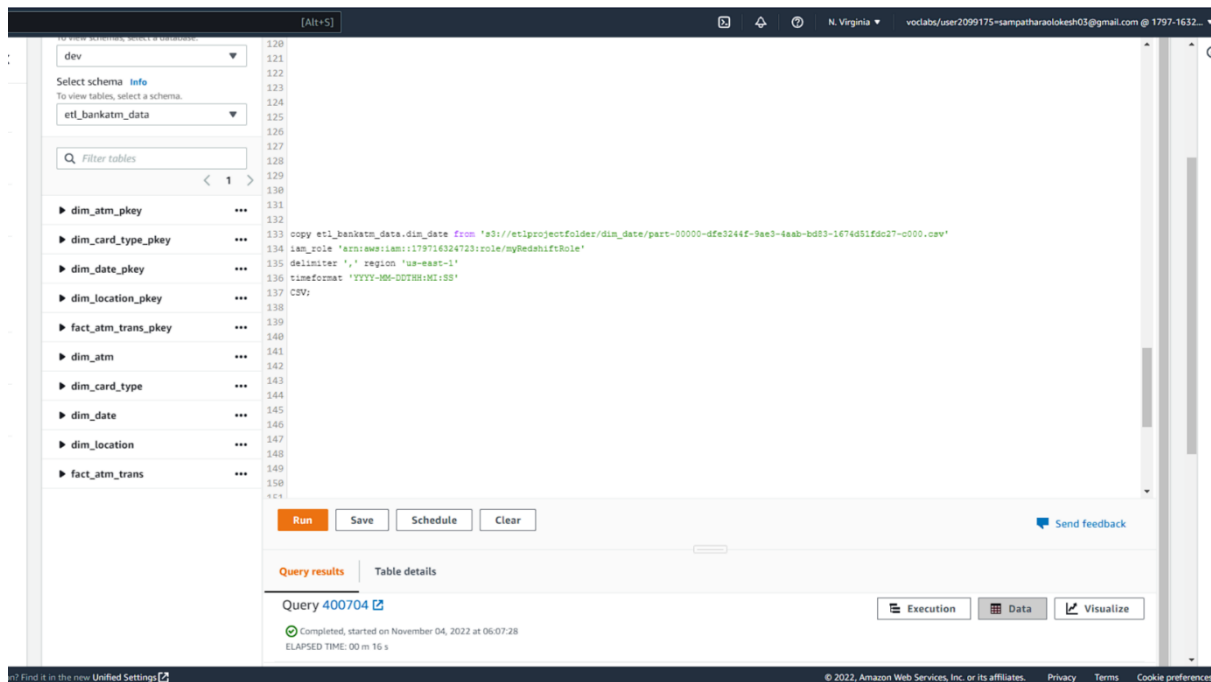
copy etl_bankatm_data.dim_date from
's3://etlprojectfolder/dim_date/part-00000-dfe3244f-9ae3-4aab-bd83-1674d51fdc27-c000.csv'

iam_role 'arn:aws:iam::179716324723:role/myRedshiftRole'

delimiter ',' region 'us-east-1'

timeformat 'YYYY-MM-DDTHH:MI:SS'

CSV;



4th query:-

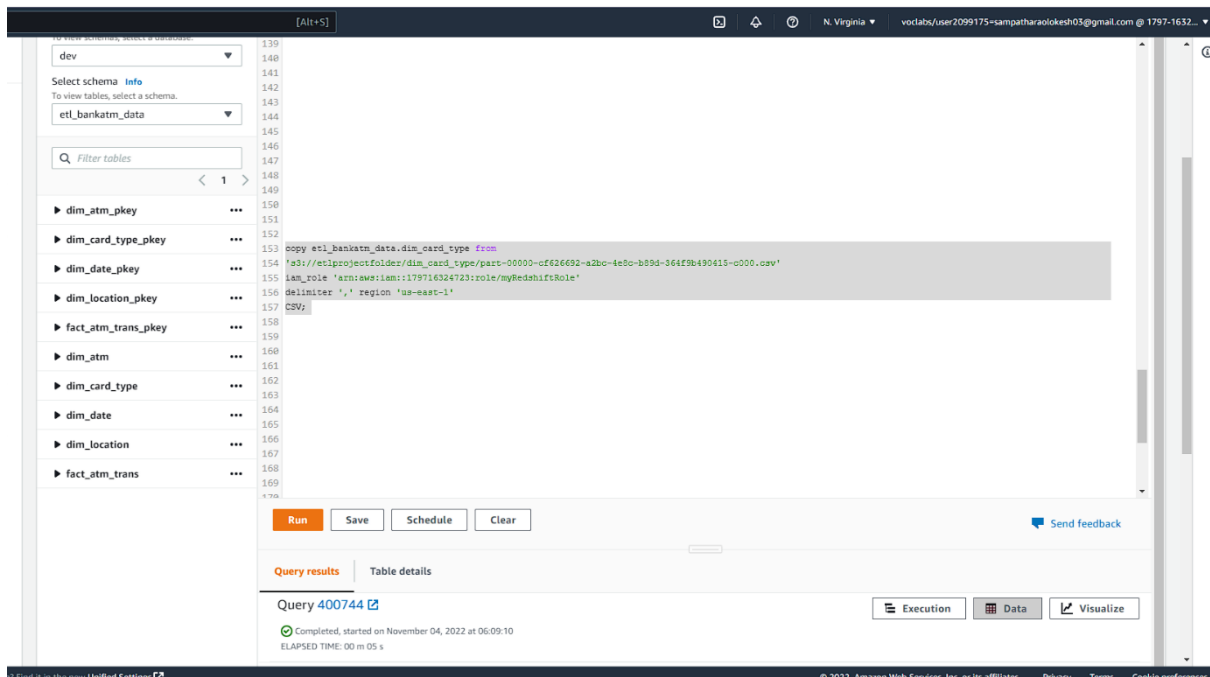
copy etl_bankatm_data.dim_card_type from

's3://etlprojectfolder/dim_card_type/part-00000-cf626692-a2bc-4e8c-b89d-364f9b490415-c000.csv'

iam_role 'arn:aws:iam::179716324723:role/myRedshiftRole'

delimiter ',' region 'us-east-1'

CSV;



5th query:-

copy etl_bankatm_data.fact_atm_trans from

's3://etlprojectfolder/fact_atm_trans/part-00000-c74fc6e1-8615-45cc-a1a2-9095d01be4df-c000.csv'

iam_role 'arn:aws:iam::179716324723:role/myRedshiftRole'

delimiter ',' region 'us-east-1'

CSV;

To view schemas, select a database.
dev

Select schema [Info](#)
To view tables, select a schema.
etl_bankatm_data

Filter tables
1

► dim_atm_pkey

► dim_card_type_pkey

► dim_date_pkey

► dim_location_pkey

► fact_atm_trans_pkey

► dim_atm

► dim_card_type

► dim_date

► dim_location

► fact_atm_trans

157: COPY;
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174 copy etl_bankatm_data.fact_atm_trans from
175 's3://etlprojectfolder/fact_atm_trans/part-00000-c74fc6e1-0615-450c-a1a2-9095d01be4df-c000.csv'
176 iam_role 'arn:aws:iam::179716324723:role/myRedshiftRole'
177 delimiter ',' region 'us-east-1'
178 COPY;
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186

Run Save Schedule Clear

[Send feedback](#)

Query results Table details

Query [400775](#)

Completed, started on November 04, 2022 at 06:10:13
ELAPSED TIME: 00 m 19 s

Execution

Data

Visualize

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