### Creation of a RedShift Cluster

**Screenshots of the configuration of the RedShift cluster that you have created:**

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### Setting up a database in the RedShift cluster and running queries to create the dimension and fact tables

**Queries to create the various dimension and fact tables with appropriate primary and foriegn keys:**

**create table bankatm\_schema.card\_type(**

**card\_type\_id SMALLINT not null distkey sortkey,**

**card\_type VARCHAR(50),**

**);**

**create table bankatm\_schema.atm(**

**atm\_id SMALLINT not null distkey sortkey,**

**atm\_number VARCHAR(50),**

**atm\_manufacturer VARCHAR(100),**

**atm\_location\_id INTEGER**

**);**

**create table bankatm\_schema.location(**

**location\_id SMALLINT not null distkey sortkey,**

**location VARCHAR(80),**

**streetname VARCHAR(255),**

**street\_number VARCHAR(20),**

**zipcode INTEGER,**

**latitude DECIMAL(10,3),**

**longitude DECIMAL(10,3)**

**);**

**create table bankatm\_schema.date(**

**date\_id SMALLINT not null distkey sortkey,**

**full\_date\_time TIMESTAMP,**

**year INTEGER,**

**month VARCHAR(20),**

**day SMALLINT,**

**hour SMALLINT,**

**weekday VARCHAR(20)**

**);**

**create table bankatm\_schema.atm\_trans(**

**trans\_id BIGINT not null distkey sortkey,**

**atm\_id INTEGER,**

**weather\_loc\_id INTEGER,**

**date\_id INTEGER,**

**card\_type\_id INTEGER,**

**atm\_status VARCHAR(20),**

**currency VARCHAR(10),**

**service VARCHAR(20),**

**transaction\_amount INTEGER,**

**message\_code VARCHAR(255),**

**message\_text VARCHAR(255),**

**rain\_3h DECIMAL(10,3),**

**clouds\_all INTEGER,**

**weather\_id INTEGER,**

**weather\_main VARCHAR(50),**

**weather\_description VARCHAR(255)**

**);**

### Loading data into a RedShift cluster from Amazon S3 bucket

**Queries to copy the data from S3 buckets to the RedShift cluster in the appropriate tables**

copy bankatm\_schema.card\_type

from ‘s3://reshift-mashok-upgrad/card\_type\_dim/part-00000-e61d5a27-2118-43d8-9a16-0193cd74d712-c000.csv’

iam\_role 'arn:aws:iam::906014733927:role/Redshift0s3\_fullaccess'

delimiter ','

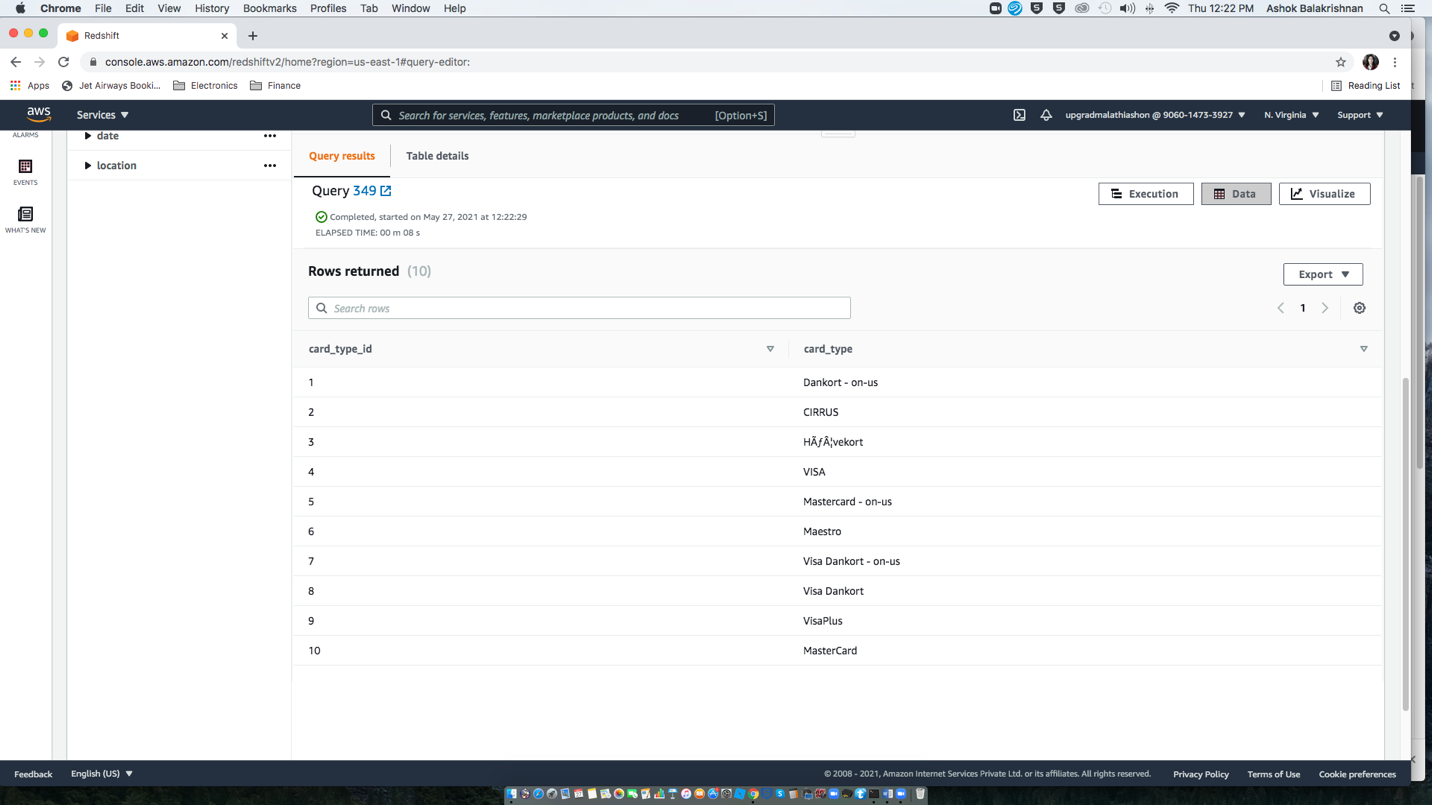
region 'us-east-1'

csv

IGNOREHEADER 1;

Listing the top 10 rows of the ‘bankatm\_schema.card\_type’ table

select \* from bankatm\_schema.card\_type order by card\_type\_id limit 10;



copy bankatm\_schema.atm

from ‘s3://reshift-mashok-upgrad/atm\_dim/part-00000-d2480681-cbac-4bef-ae8f-fc60928780c4-c000.csv’

iam\_role 'arn:aws:iam::906014733927:role/Redshift0s3\_fullaccess'

delimiter ','

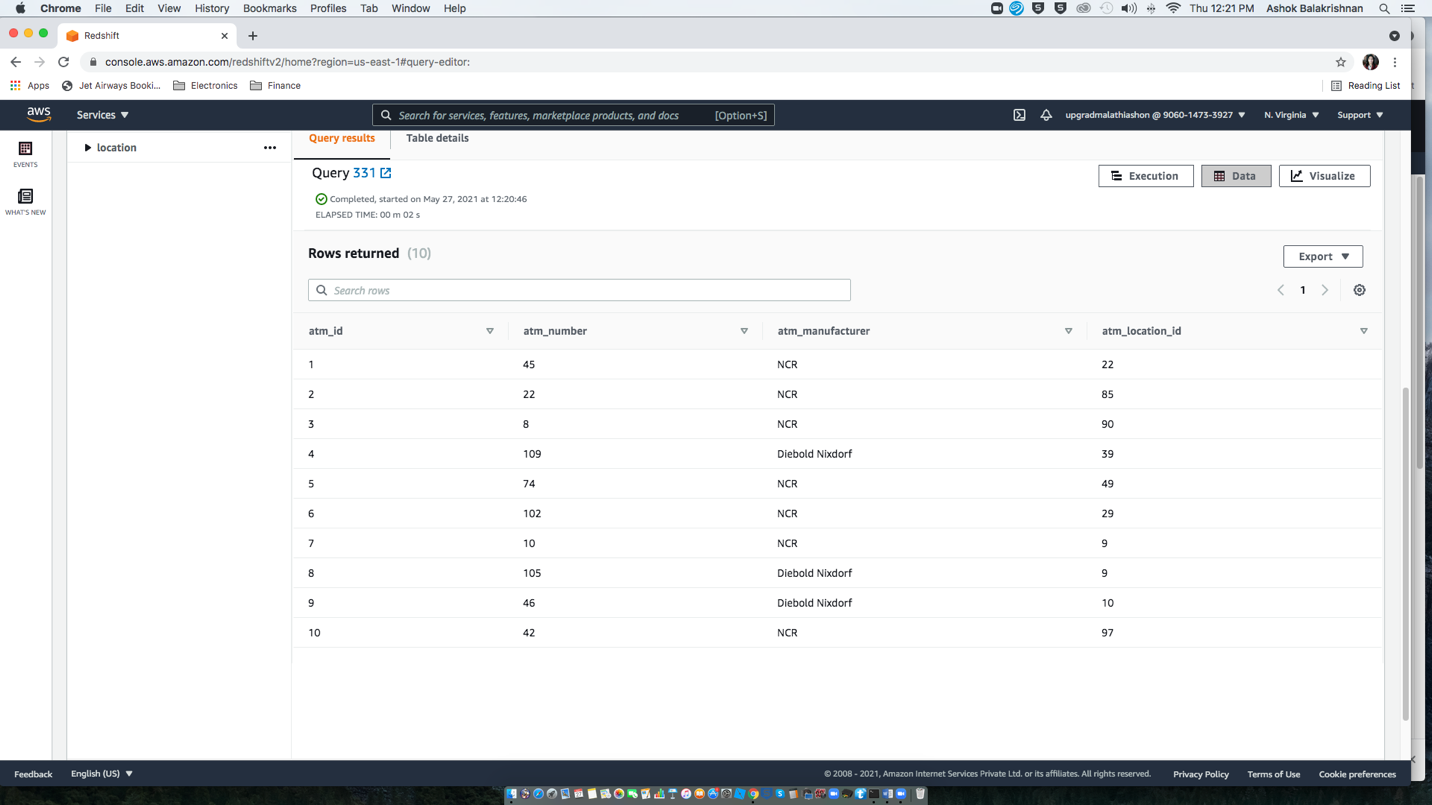
region 'us-east-1'

csv

IGNOREHEADER 1;

Listing the top 10 rows of the ‘bankatm\_schema.atm’ table

select \* from bankatm\_schema.atm order by atm\_id limit 10;



copy bankatm\_schema.location

from ‘s3://reshift-mashok-upgrad/location\_dim/part-00000-54cf7ea6-bcd3-4172-af8b-15797df04977-c000.csv’

iam\_role 'arn:aws:iam::906014733927:role/Redshift0s3\_fullaccess'

delimiter ','

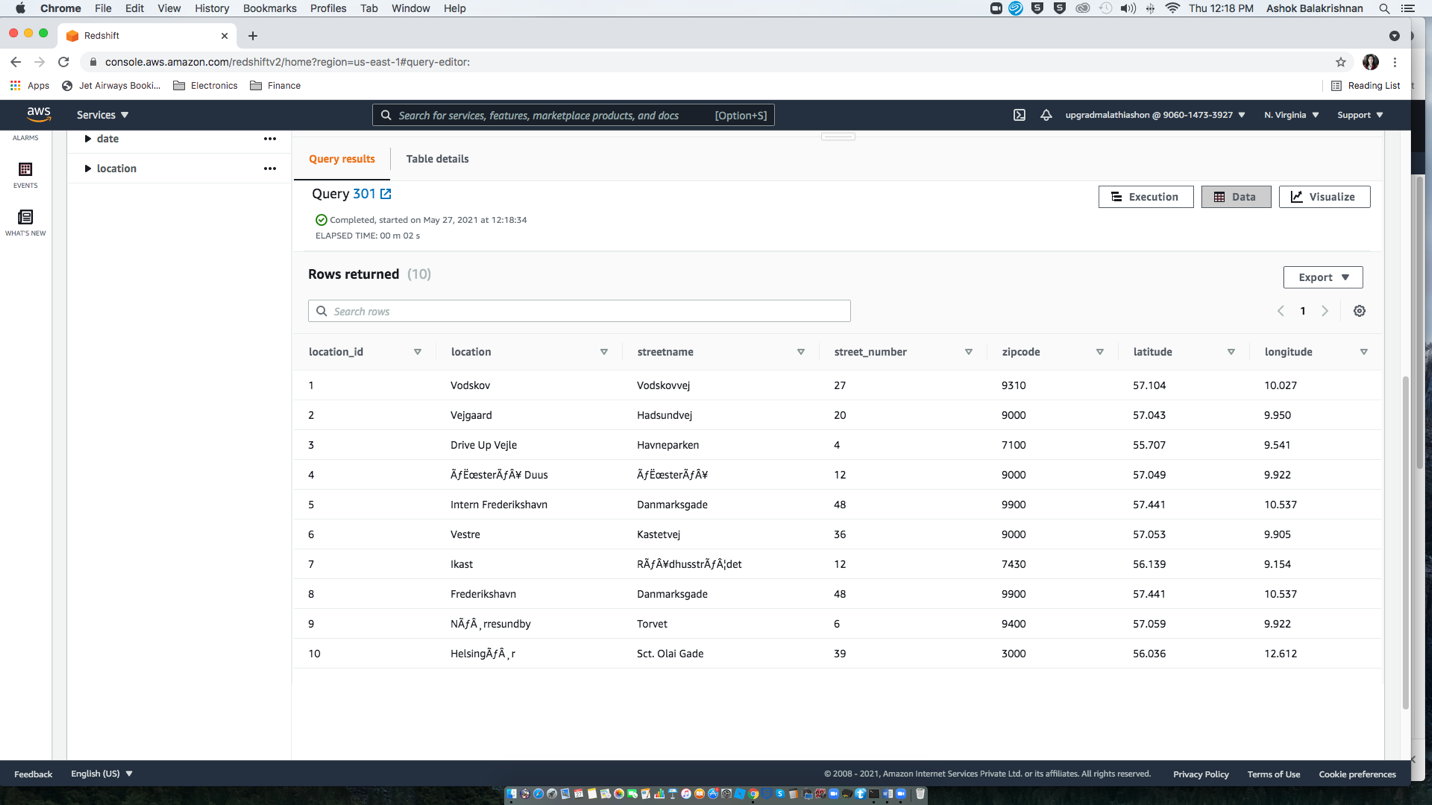
region 'us-east-1'

csv

IGNOREHEADER 1;

Listing the top 10 rows of the ‘bankatm\_schema.location’ table

select \* from bankatm\_schema.location order by location\_id limit 10;



copy bankatm\_schema.date

from 's3://reshift-mashok-upgrad/date\_dim/part-00000-d185c6ea-caf0-4c11-a01d-81816505c4af-c000.csv'

iam\_role 'arn:aws:iam::906014733927:role/Redshift0s3\_fullaccess'

delimiter ','

region 'us-east-1'

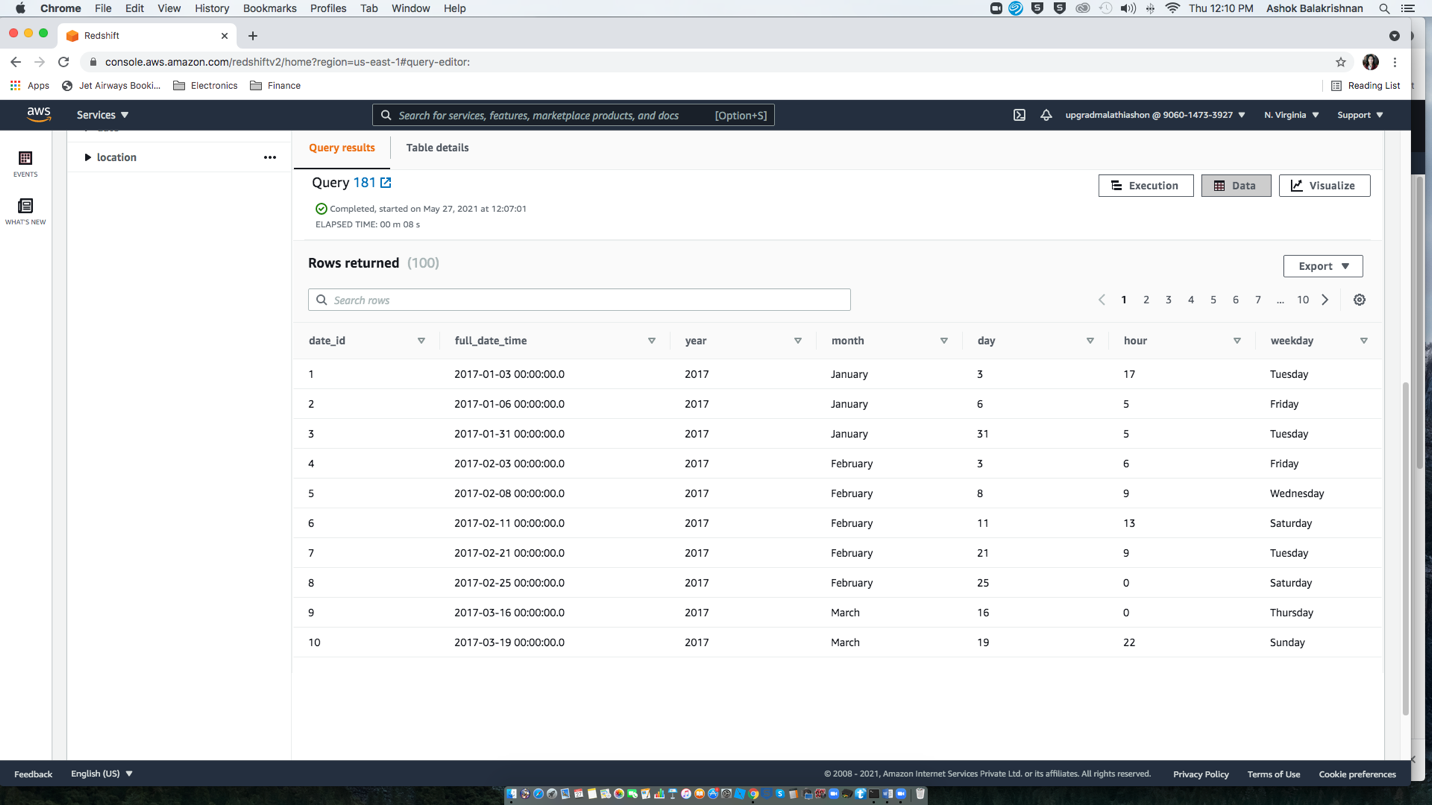
csv

IGNOREHEADER 1

TIMEFORMAT ‘auto’;

Listing the top 10 rows of the ‘bankatm\_schema.date’ table

select \* from bankatm\_schema.date order by date\_id limit 10;



copy bankatm\_schema.atm\_trans

from 's3://reshift-mashok-upgrad/bank\_fact/part-00000-fcd3f184-bb58-4bee-b5d8-f033cc37b86b-c000.csv'

iam\_role 'arn:aws:iam::906014733927:role/Redshift0s3\_fullaccess'

delimiter ','

region 'us-east-1'

csv

IGNOREHEADER 1;

Listing the top 10 rows of the ‘bankatm\_schema.atm\_trans’ table

select \* from bankatm\_schema.atm\_trans order by trans\_id limit 10;

