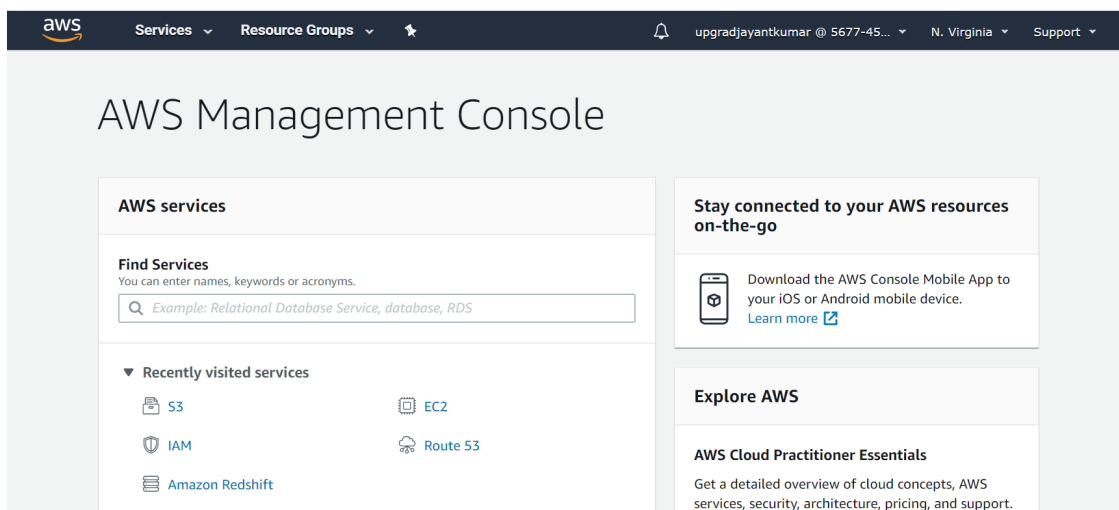
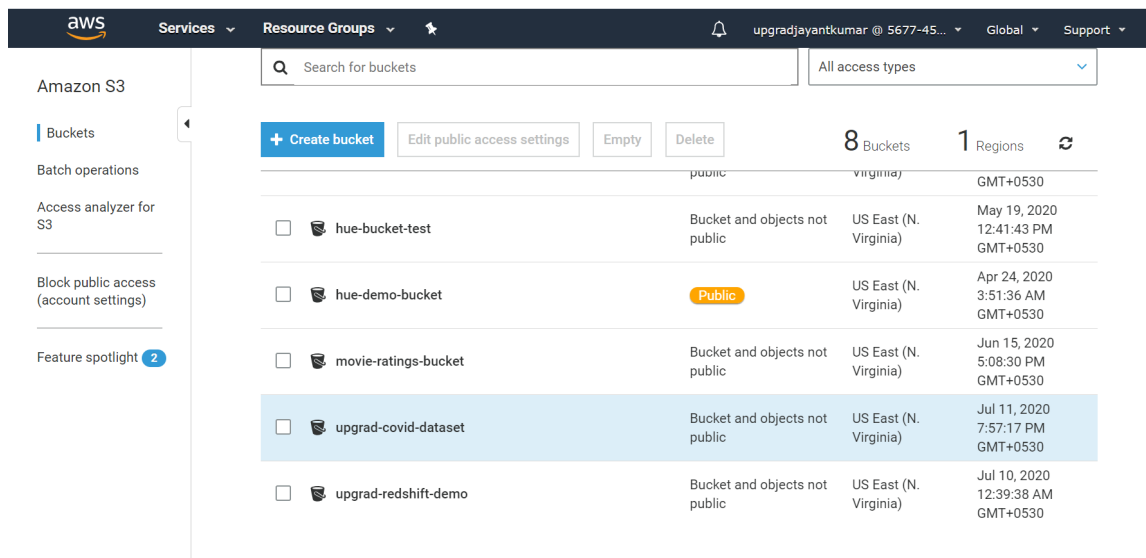


Steps for Loading data into Redshift cluster

1. Download data from below URL and save it into the local machine
<https://upgrad-covid19-dataset.s3.amazonaws.com/HospitalBedsIndia.csv>
<https://upgrad-covid19-dataset.s3.amazonaws.com/AgeGroupDetails.csv>
<https://upgrad-covid19-dataset.s3.amazonaws.com/ICMRTestingLabs.csv>
<https://upgrad-covid19-dataset.s3.amazonaws.com/IndividualDetails.csv>
<https://upgrad-covid19-dataset.s3.amazonaws.com/StatewiseTestingDetails.csv>
https://upgrad-covid19-dataset.s3.amazonaws.com/covid_19_india.csv
https://upgrad-covid19-dataset.s3.amazonaws.com/population_india_census2011.csv
2. Search S3 in Amazon dashboard



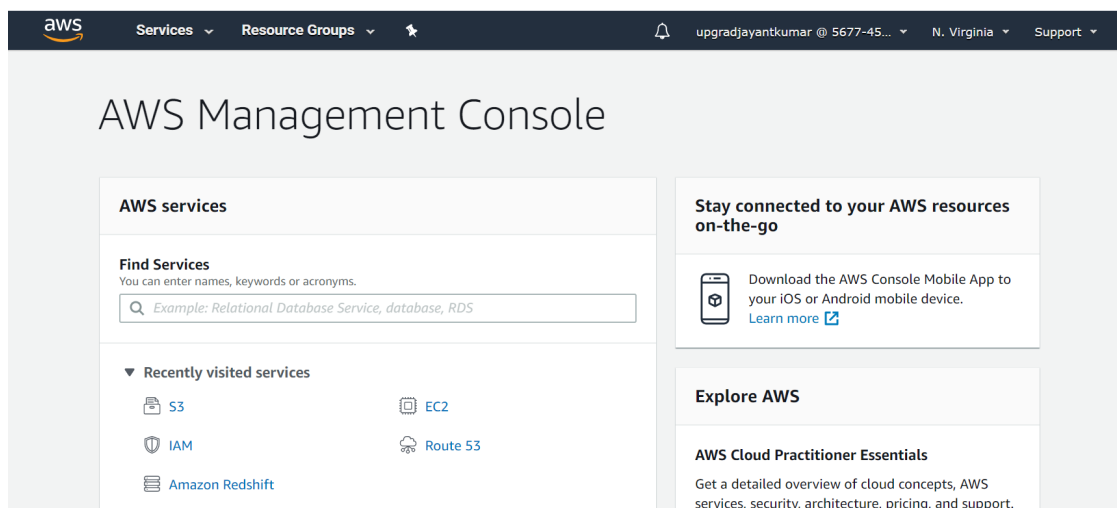
3. Create a new S3 bucket where you can upload these datasets



4. Upload datasets into newly created S3 bucket

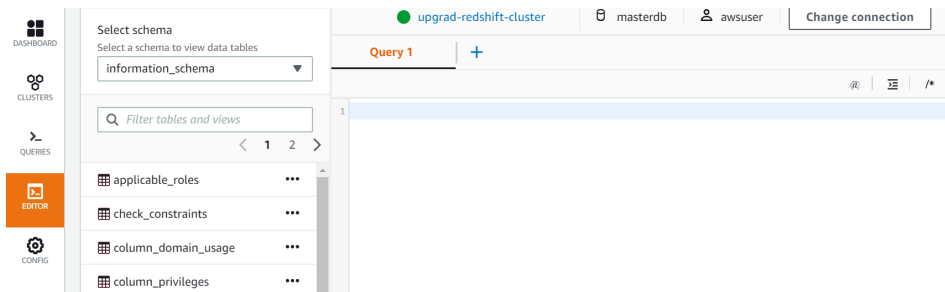
<div> <div>Upload</div> <div>Create folder</div> <div>Download</div> <div>Actions</div> </div>				US East (N. Virginia)	
✓ Name	Last modified	Size	Storage class		
✓  AgeGroupDetails.csv	Jul 11, 2020 8:05:08 PM GMT+0530	224.0 B	Standard		
✓  HospitalBedsIndia.csv	Jul 11, 2020 8:05:08 PM GMT+0530	2.2 KB	Standard		
✓  ICMRTestingLabs.csv	Jul 11, 2020 8:05:09 PM GMT+0530	54.4 KB	Standard		
✓  IndividualDetails.csv	Jul 11, 2020 8:05:10 PM GMT+0530	2.2 MB	Standard		
✓  StatewiseTestingDetails.csv	Jul 11, 2020 8:05:10 PM GMT+0530	117.2 KB	Standard		
✓  covid_19_india.csv	Jul 11, 2020 8:05:09 PM GMT+0530	186.0 KB	Standard		
✓  population_india_census2011.csv	Jul 11, 2020 8:05:09 PM GMT+0530	3.6 KB	Standard		

5. Again Go to Amazon Management Console and search 'Redshift'



The screenshot shows the AWS Management Console interface. At the top, there's a navigation bar with the AWS logo, 'Services', 'Resource Groups', and a user profile. The main heading is 'AWS Management Console'. Below this, the 'AWS services' section is visible, featuring a 'Find Services' search bar with the placeholder text 'Example: Relational Database Service, database, RDS'. Underneath the search bar, a 'Recently visited services' section lists several services: S3, EC2, IAM, Route 53, and Amazon Redshift. To the right of the main content, there are two side panels. The top one is titled 'Stay connected to your AWS resources on-the-go' and promotes the AWS Console Mobile App. The bottom one is titled 'Explore AWS' and features 'AWS Cloud Practitioner Essentials'.

- Go to the option **Editor**. Click on it and you will redirect to query editor
Note: Make sure your cluster should be on a running stage if it is in pause or stop then resume or create it.



- Create schema with **upgrad_covid_demo**;

```
create schema upgrad_covid_demo;
```

- Create a table **age_group_details**

```
create table upgrad_covid_demo.age_group_details (
  sno int,
  agegroup varchar(10),
  totalcases int,
  percentage varchar(5));
```

- Create a table **covid19_india_case**

```
create table upgrad_covid_demo.covid19_india_case (
  sno int,
  registereddate varchar(15),
  registeredtime varchar(15),
  state_ut varchar(50),
  confirmedindiannational int,
  confirmedforeignnational int,
  cured int,
  deaths int,
  confirmed int );
```

10. Create a table **statewise_testing_details**

```
create table upgrad_covid_demo.statewise_testing_details (  
    registereddate varchar(15),  
    state_name varchar(50),  
    totalsamples real,  
    negative_sample real,  
    positive_sample real );
```

11. Create a table **hospital_beds**

```
create table upgrad_covid_demo.hospital_beds(  
    sno int,  
    state_ut varchar(30),  
    primaryhealthcenters_hmis int,  
    communityhealthcenters_hmis int,  
    subdistricthospitals_hmis int,  
    districthospitals_hmis int,  
    totalpublichealthfacilities_hmis int,  
    publicbeds_hmis int,  
    ruralhospitals_nhp18 int,  
    ruralbeds_nhp18 int,  
    urbanhospitals_nhp18 int,  
    urbanbeds_nhp18 int );
```

12. Create table **icmrtestinglabs**

```
create table upgrad_covid_demo.icmrtestinglabs(  
    lab_name varchar(1000),  
    address varchar(1000),  
    pincode int,  
    state varchar(50),  
    type varchar(50) );
```

13. Create table **individual_details**

```
create table upgrad_covid_demo.individual_details(
  id int,
  government_id varchar(50),
  diagnosed_date varchar(10),
  age varchar(10),
  gender varchar(5),
  detected_city varchar(40),
  detected_dist varchar(40),
  detected_state varchar(40),
  nationality varchar(40),
  current_status varchar(30),
  status_change_date varchar(30),
  notes varchar(600));
```

14. Create a table **india_2011_population**

```
create table upgrad_covid_demo.india_2011_population (
  sno int,
  state_ut varchar(50),
  population bigint,
  ruralpopulation bigint,
  urbanpopulation bigint,
  area varchar(100),
  density varchar(100),
  gender_ratio int );
```

15. Now back to redshift query editor and start loading data into tables that we created above.

Please note to update your S3 Bucket name and the IAM_role ARN string in all of these COPY command.

16. Load data into **age_group_details**

```
copy upgrad_covid_demo.age_group_details
from 's3://upgrad-covid-dataset/AgeGroupDetails.csv'
iam_role 'arn:aws:iam::567745680952:role/upgrad-redshift-s3-access'
delimiter ',' region 'us-east-1'
CSV;
```

17. Load data into **covid19_india_case**

```
copy upgrad_covid_demo.covid19_india_case
from 's3://upgrad-covid-dataset/covid_19_india.csv'
iam_role 'arn:aws:iam::567745680952:role/upgrad-redshift-s3-access'
delimiter ',' region 'us-east-1'
CSV;
```

18. Load data into **hospital_beds**

```
copy upgrad_covid_demo.hospital_beds
from 's3://upgrad-covid-dataset/HospitalBedsIndia.csv'
iam_role 'arn:aws:iam::567745680952:role/upgrad-redshift-s3-access'
delimiter ',' region 'us-east-1'
CSV;
```

19. Load data into **icmrtestinglabs**

```
copy upgrad_covid_demo.icmrtestinglabs
from 's3://upgrad-covid-dataset/ICMRTestingLabs.csv'
iam_role 'arn:aws:iam::567745680952:role/upgrad-redshift-s3-access'
delimiter ',' region 'us-east-1'
CSV;
```

20. Load data into **individual_details**

```
copy upgrad_covid_demo.individual_details
from 's3://upgrad-covid-dataset/IndividualDetails.csv'
iam_role 'arn:aws:iam::567745680952:role/upgrad-redshift-s3-access'
delimiter ',' region 'us-east-1'
CSV;
```

21. Load data into **statewise_testing_details**

```
copy upgrad_covid_demo.statewise_testing_details
from 's3://upgrad-covid-dataset/StatewiseTestingDetails.csv'
iam_role 'arn:aws:iam::567745680952:role/upgrad-redshift-s3-access'
delimiter ',' region 'us-east-1'
CSV;
```

22. Load data into **india_2011_population**

```
copy upgrad_covid_demo.india_2011_population
from 's3://upgrad-covid-dataset/population_india_census2011.csv'
iam_role 'arn:aws:iam::567745680952:role/upgrad-redshift-s3-access'
delimiter ',' region 'us-east-1'
CSV;
```

23. Finally, the table is created and data also loaded into it. Now start exploring data and find the answers to all questions.