**References and Result**

For this challenge, I used a EC2 Linux Instance and setup followings on EC2 instance

* Docker
* Git
* A docker container with PostgreSQL DB
* Psql to connect to PostgreSQL DB and create schema, tables and a View.
* A docker container with Python 3.8 environment
* A Python script to load data from Postgresql and create csv file for each record.

All the steps used to perform above actions are committed in below github and docker public repository

<https://github.com/manudu20/crmRepo.git>

<https://hub.docker.com/repository/docker/manudu20/crmrepo>

Following websites were referenced during the assignment.

* To install postgresql on docker

<https://docs.docker.com/samples/postgresql_service/>

1. To clear psycopg2 dependencies

<https://stackoverflow.com/questions/62715570/failing-to-install-psycopg2-binary-on-new-docker-container>

Steps Performed

1. Setup Linux EC2 Instance on AWS cloud with. pem key pair for connection from local machine.
2. Install docker on Linux EC2 instance.
3. Install git to push code to github repository.
4. Create a docker container for PostgreSQL DB with a master username and password.
5. Setup psql client on postgresqlDB container to connect to DB
6. Created a user cms
7. Created schema cms
8. Created a table Blogs within schema cms.

create table cms.Blogs(ID SERIAL PRIMARY KEY,

AUTHOR VARCHAR(200) NOT NULL,

PUBLISHED\_ON TIMESTAMP NOT NULL,

BLOG\_TEXT VARCHAR(500) NOT NULL,

CREATED\_ON TIMESTAMP );

1. Inserted 3 records in cms.Blogs table

insert into cms.Blogs(id,AUTHOR,PUBLISHED\_ON,BLOG\_TEXT,CREATED\_ON) values (1, 'Holly Lisle','10-01-2021','Pocket Full of Words','01-01-2021');

insert into cms.Blogs(id,AUTHOR,PUBLISHED\_ON,BLOG\_TEXT,CREATED\_ON) values (2, 'Lee Goldberg','10-03-2021','A Writer Life','10-03-2021');

insert into cms.Blogs(id,AUTHOR,PUBLISHED\_ON,BLOG\_TEXT,CREATED\_ON) values (3, 'Lee Goldberg',current\_date,'Pocket Full',current\_date);

1. Create view crm\_Blogs in cms schema with a publish\_month derived columns

CREATE VIEW cms.cms\_view AS

SELECT id,AUTHOR,PUBLISHED\_ON,BLOG\_TEXT,CREATED\_ON,extract(month from CREATED\_ON) created\_month

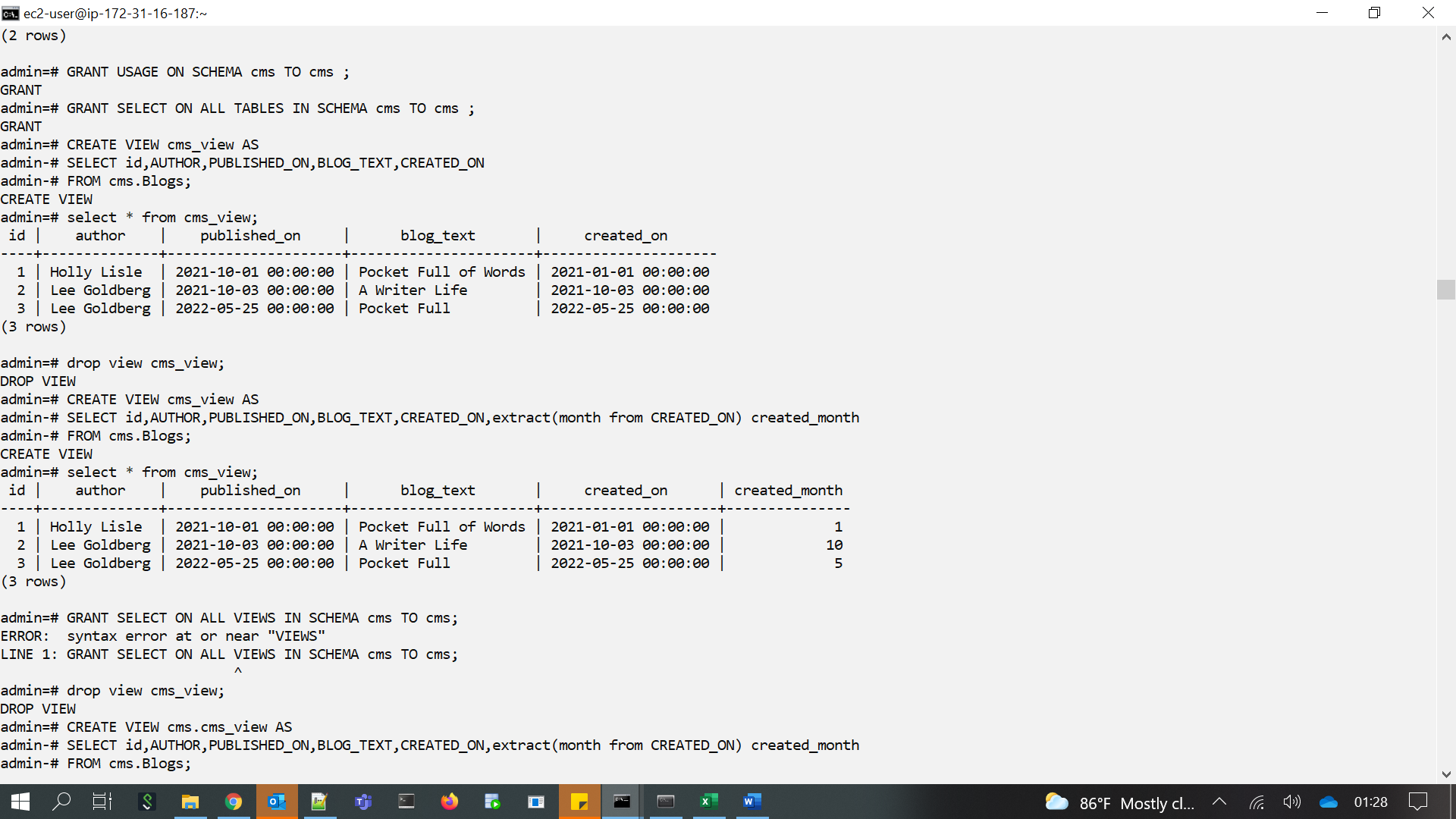
FROM cms.Blogs;

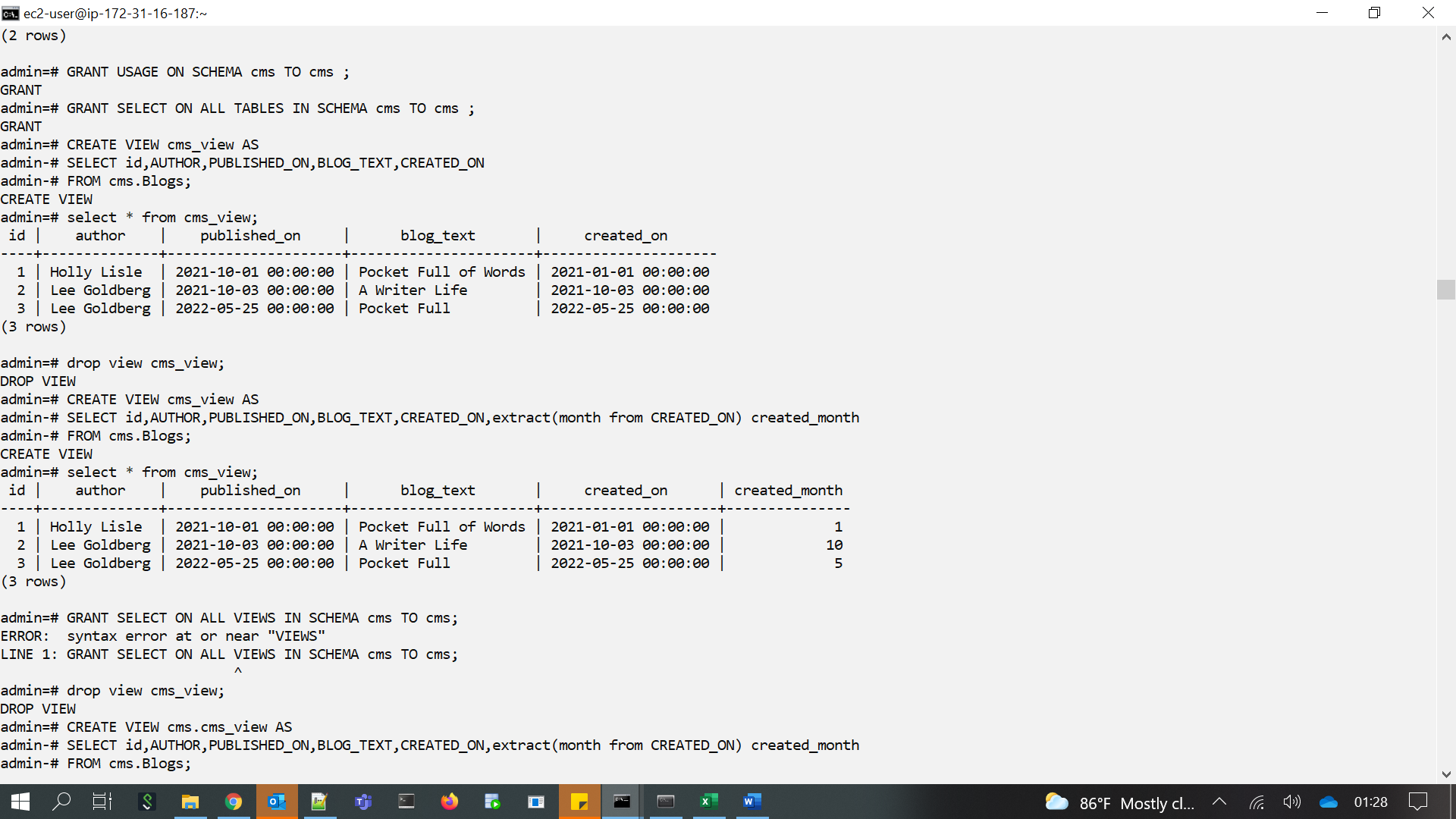
1. Granted select privilege on view to user cms

GRANT SELECT ON cms.cms\_view TO cms;

1. A python script [DatafromBlogs.py](https://github.com/manudu20/crmRepo/blob/master/DatafromBlogs.py) to load data from PostgreSQL and select data from view and create separate files for each record.

**Below is the Results of Table and View of Blogs**





**The result of python script**

