**TEAM-8**

**ART GALLERY MANAGEMENT SYSTEM**

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**Problem Statement**:

To create an efficient database management system for an Art Gallery.

**Introduction:**

This project primarily deals with managing details of paintings, employees, customers and other stakeholders. We can maintain a record of the paintings present in the gallery, details of customers who buy these paintings. We can also enter new paintings available for sale. We can also record the details of the employees who work there.

**A few assumptions of our dbms model:**

* The mini world is a single gallery
* An exhibition can hold only one auction but the same painting can be put up on several auctions if it’s unsold. And in each auction only one painting is sold
* NULL value in the price\_fetched column of auction refers to unsold.

**Justification for the usage of PostgreSQL as the DBMS software:**

* Open Source DBMS
* Diverse indexing techniques
* Flexible Full-text search
* Diverse kinds of replication
* Diversified extension functions
* Supports ACID(Atomicity, Consistency, Isolation, Durability) and Transaction

Artist

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| A\_Id | A\_FName | A\_MName | A\_LName | A\_Email | A\_Ph\_No | A\_Gender | A\_Address |

Customer

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| C\_Id | C\_FName | C\_MName | C\_LName | C\_Email | C\_Ph\_No | C\_Gender | C\_Address |

Paintings

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| P\_Id | P\_Name | P\_Price | A\_Id | C\_Id |

Employee

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E\_Id | E\_FName | E\_MName | E\_LName | Date\_of\_join | E\_Ph\_No | E\_Gender | E\_DOB | E\_Age |
| D\_No | E\_Salary | E\_Address |

Department

|  |  |  |
| --- | --- | --- |
| D\_No | D\_Name | Head\_Id |

Exhibition

|  |  |  |  |
| --- | --- | --- | --- |
| Ex\_Id | Ex\_Start\_date | Ex\_End\_date | Ex\_Name |

Auction

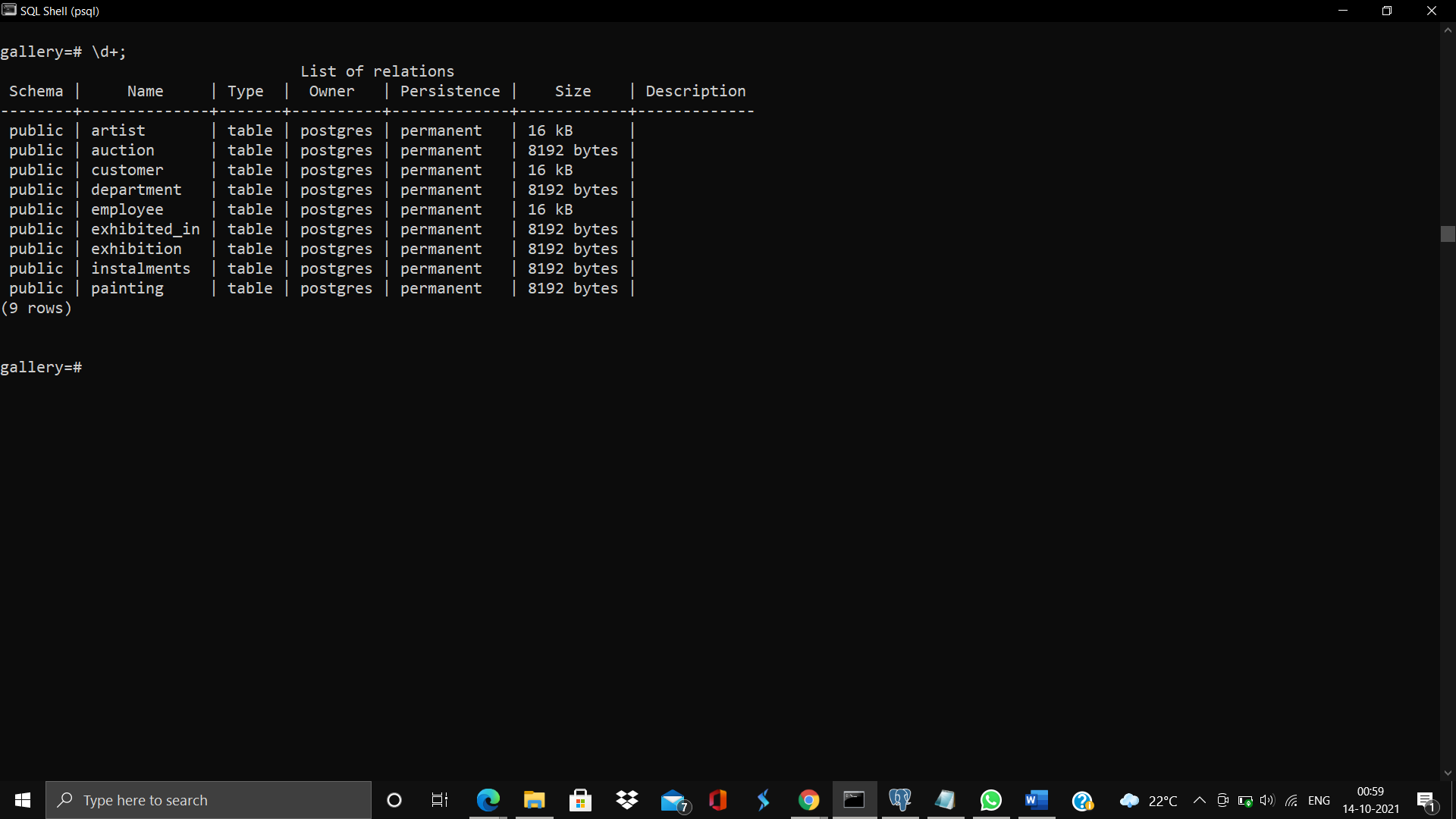
|  |  |
| --- | --- |
| Ex\_Id | P\_Id |

Instalments

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| I\_no | P\_Id | Pay\_date | Due\_date | Amount | C\_Id |

**Creation and Insertion of relations in PostgreSQL:**

**List of relations:**



**Creating statements:**

**Artist:**

create table artist(

a\_id varchar(30) not null unique primary key,

a\_fname varchar(30) not null default ‘None’,

a\_mname varchar(30),

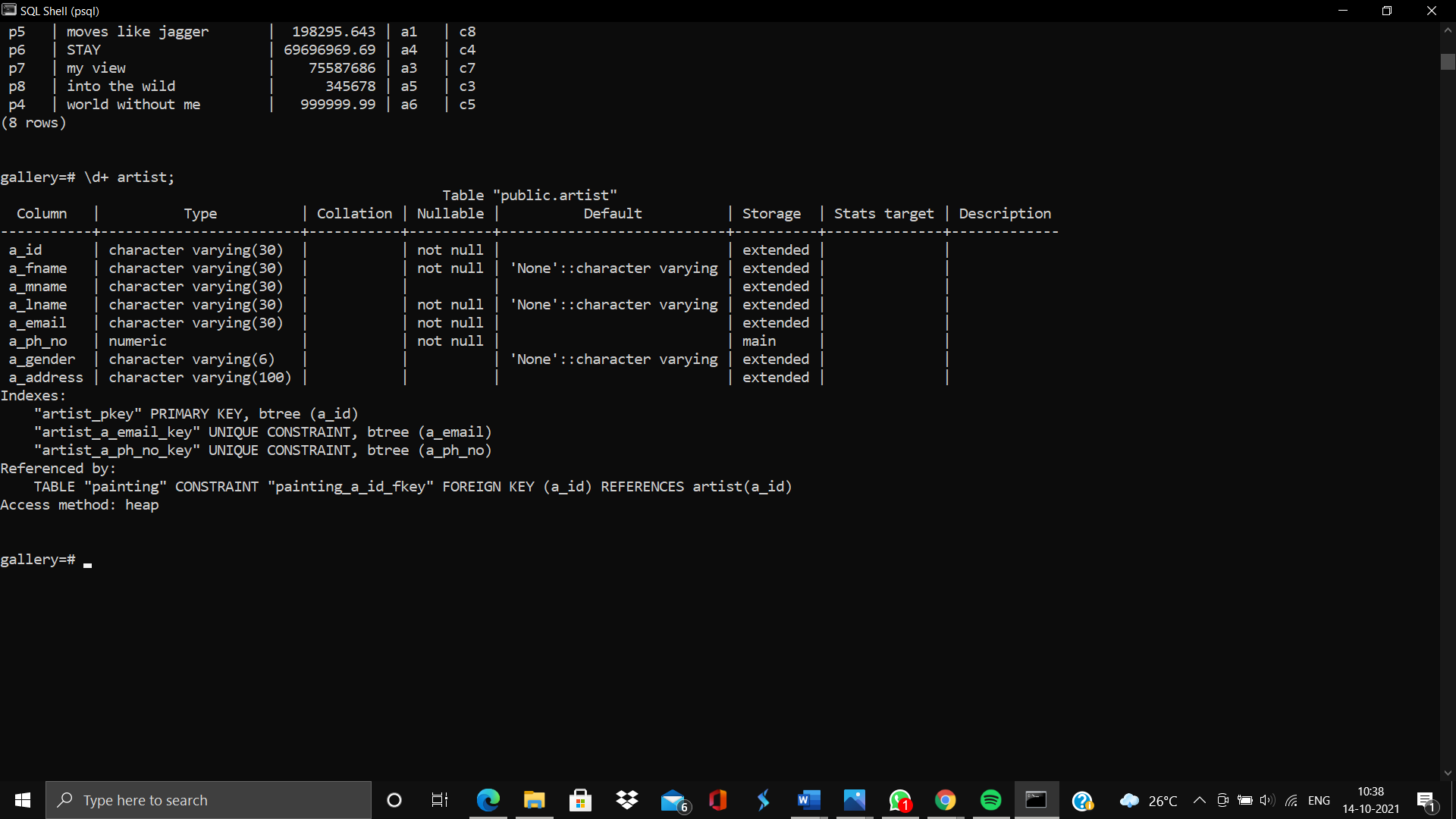
a\_lname varchar(30) not null default ‘None’,

a\_email varchar(30) not null unique,

a\_ph\_no numeric not null unique,

a\_gender varchar(6) default ‘None’,

a\_address varchar(100));



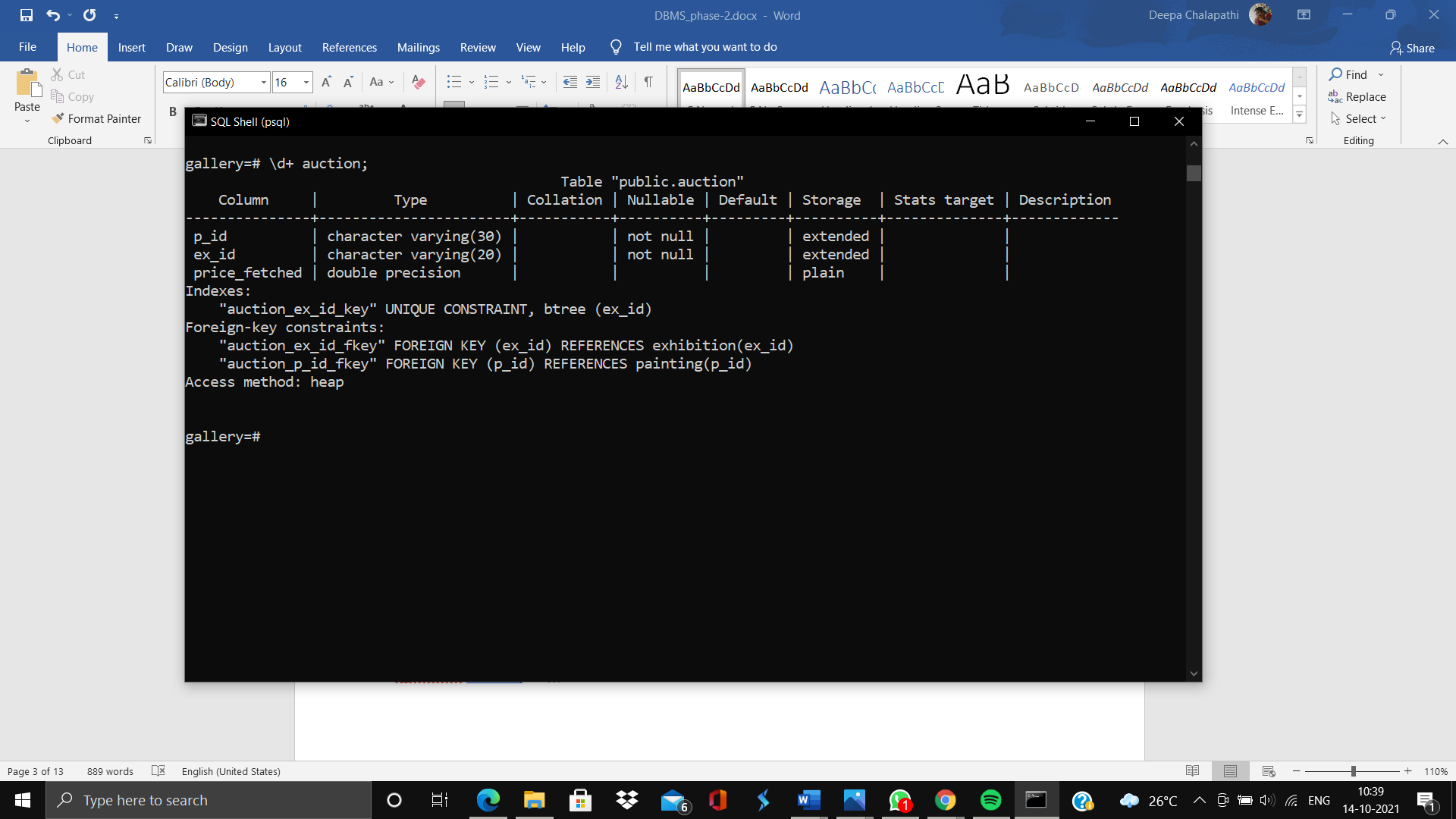
**Auction:**

create table Auction(

p\_id varchar(30) not null;

ex\_id varchar(20) not null unique,

price\_fetched float);



**Customer:**

create table customer(

c\_id varchar(30) not null unique primary key,

c\_fname varchar(30) not null default ‘None’,

c\_mname varchar(30),

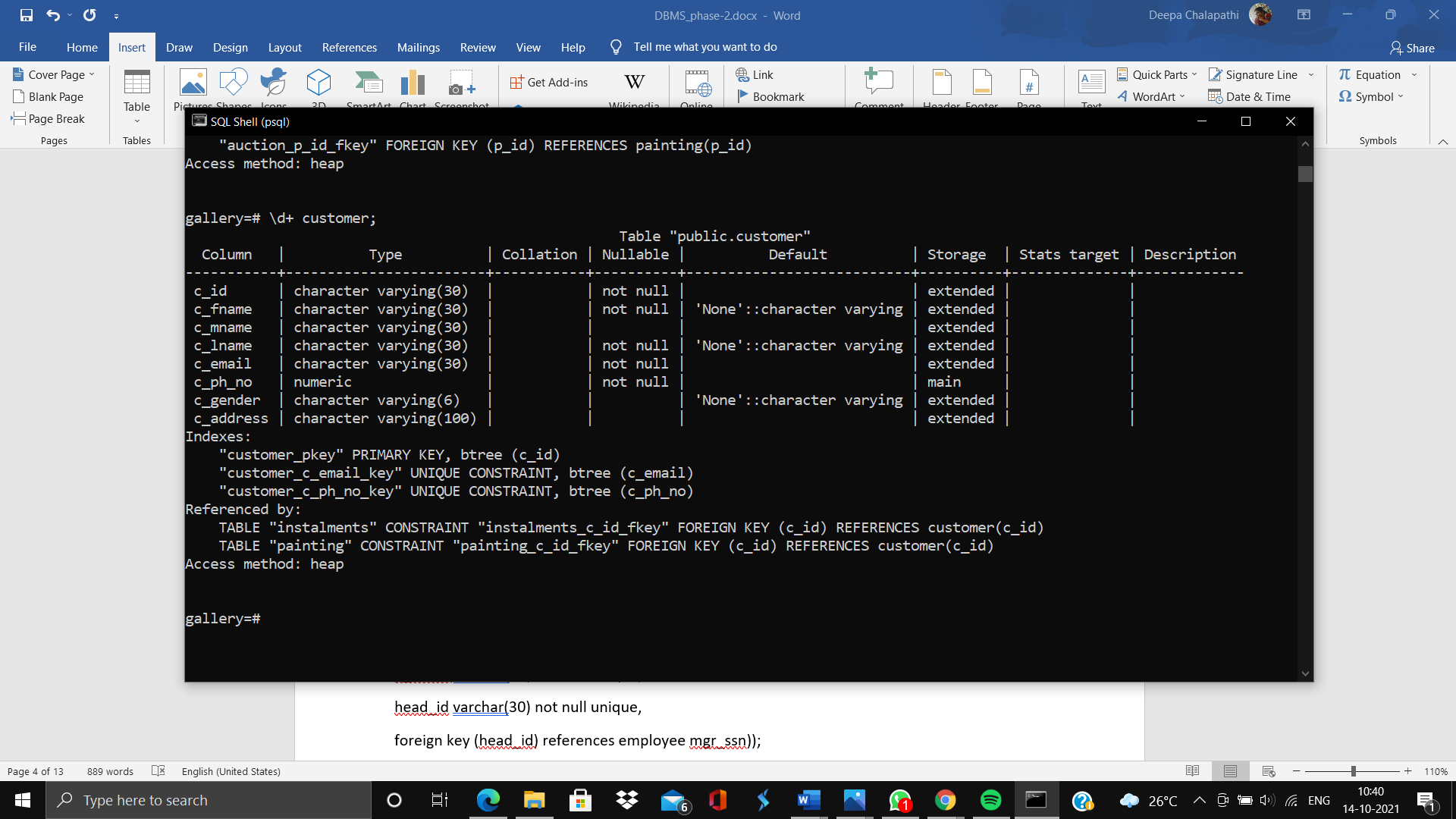
c\_lname varchar(30) not null default ‘None’,

c\_email varchar(30) not null unique,

c\_ph\_no numeric not null unique,

c\_gender varchar(6) default ‘None’,

c\_address varchar(100));



**Department:**

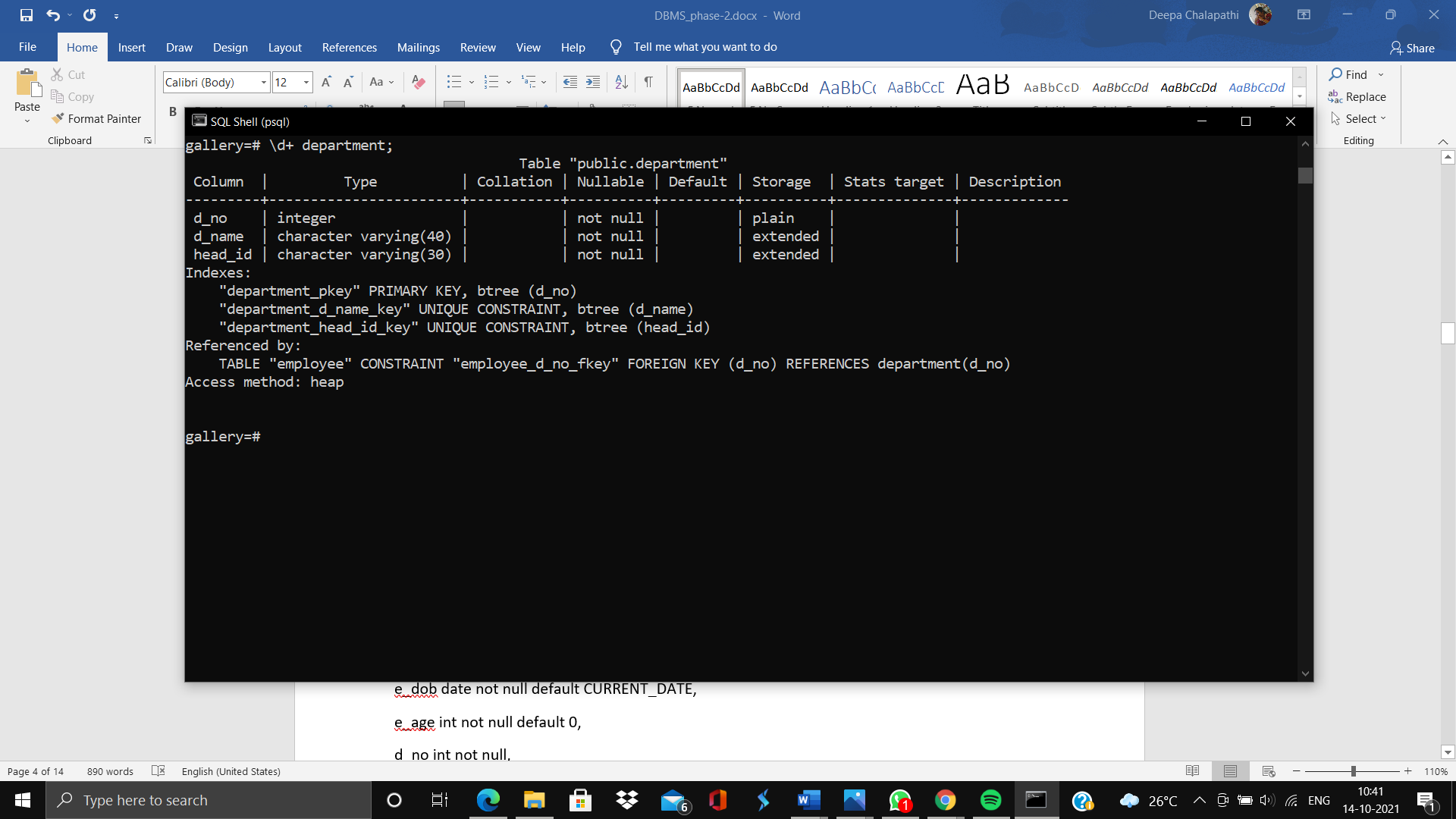
create table department(

d\_no int unique not null primary key,

d\_name varchar(40) not null unique,

head\_id varchar(30) not null unique,

foreign key (head\_id) references employee mgr\_ssn));



**Employee:**

create table employee(

e\_id varchar(30) not null unique primary key,

e\_fname varchar(30) not null default ‘None’,

e\_mname varchar(30),

e\_lname varchar(30) not null default ‘None’,

date\_of\_join date not null default CURRENT\_DATE,

e\_gender varchar(6) default ‘None’,

e\_dob date not null default CURRENT\_DATE,

e\_age int not null default 0,

d\_no int not null,

e\_salary float not null default 0.0,

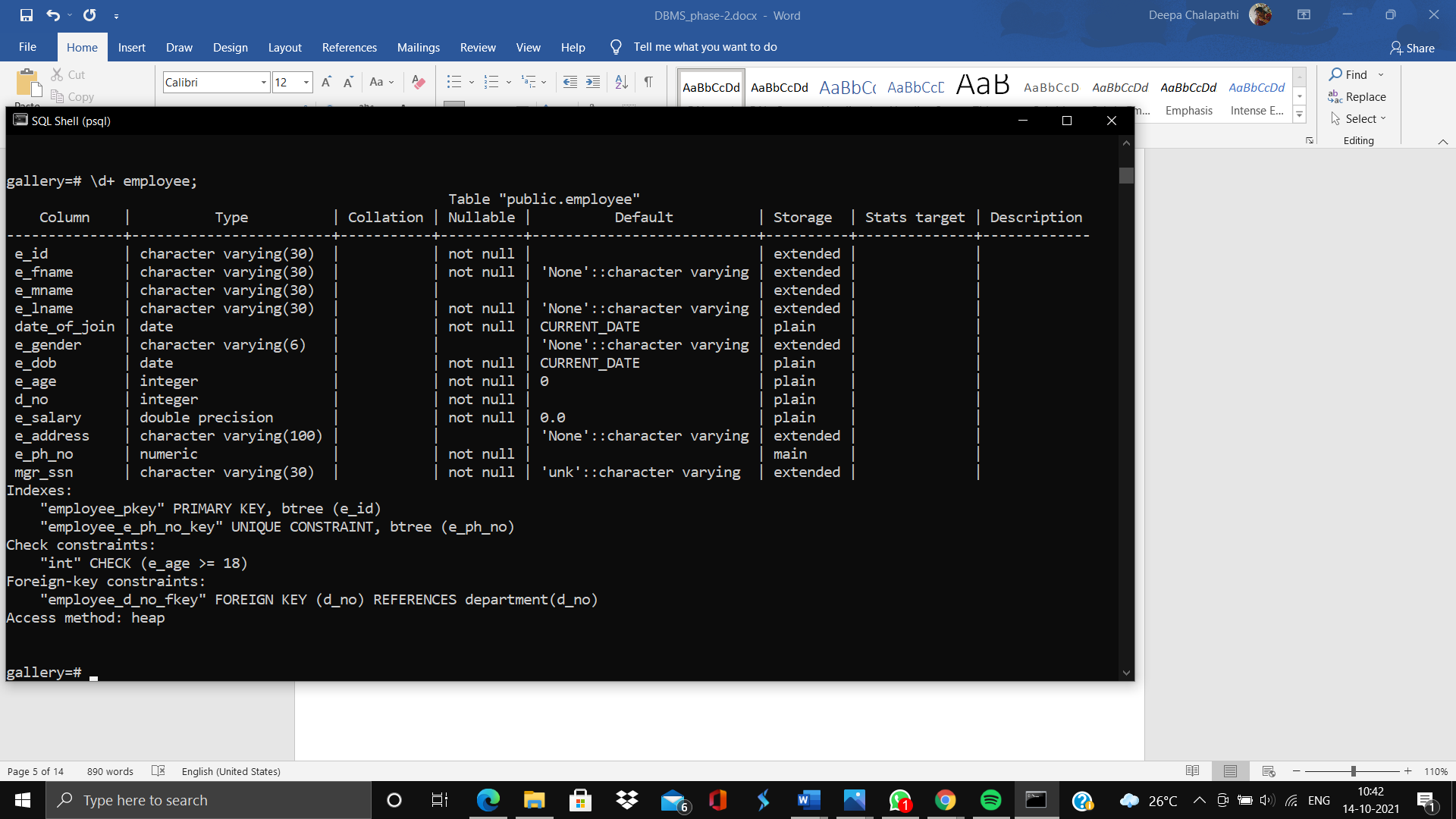
e\_address varchar(100),

e\_ph\_no numeric not null unique,

mgr\_ssn varchar(30) not null,

foreign key(d\_no) references department (d\_no));

alter table employee add constraint check(age>=18);



**Exhibited\_in:**

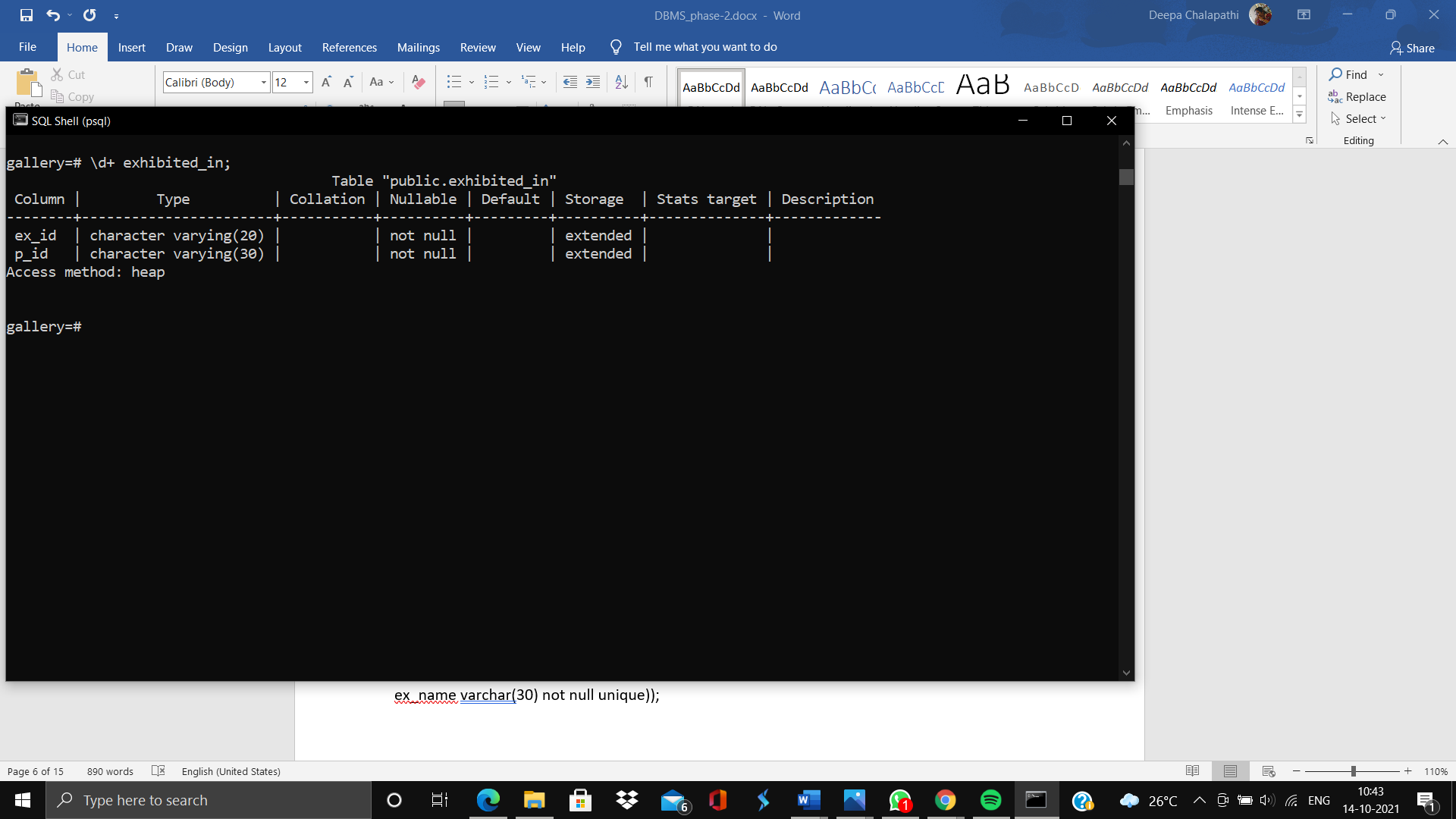
create table exhibited\_in(

ex\_id not null,

p\_id not null,

foreign key (ex\_id) references exhibition (ex\_id),

foreign key (p\_id) references painting(p\_id));



**Exhibition:**

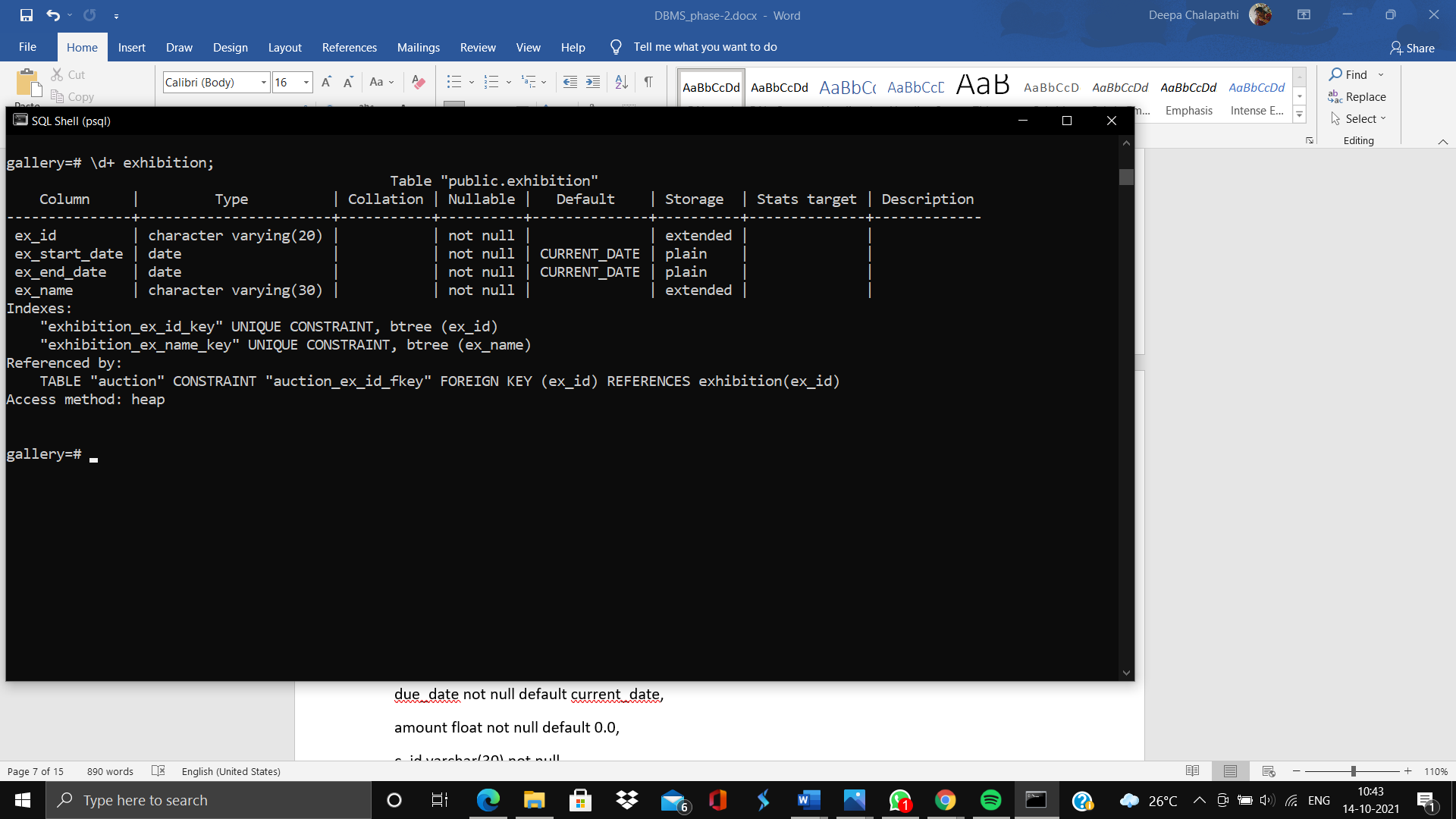
create table exhibition(

ex\_id varchar(20) not null unique;

ex\_start\_date date not null default CURRENT\_DATE,

ex\_end\_date date not null default CURRENT\_DATE,

ex\_name varchar(30) not null unique));



**Instalments:**

create table instalments(

i\_no int not null default 0,

p\_id not null,

pay\_date date not null default current\_date,

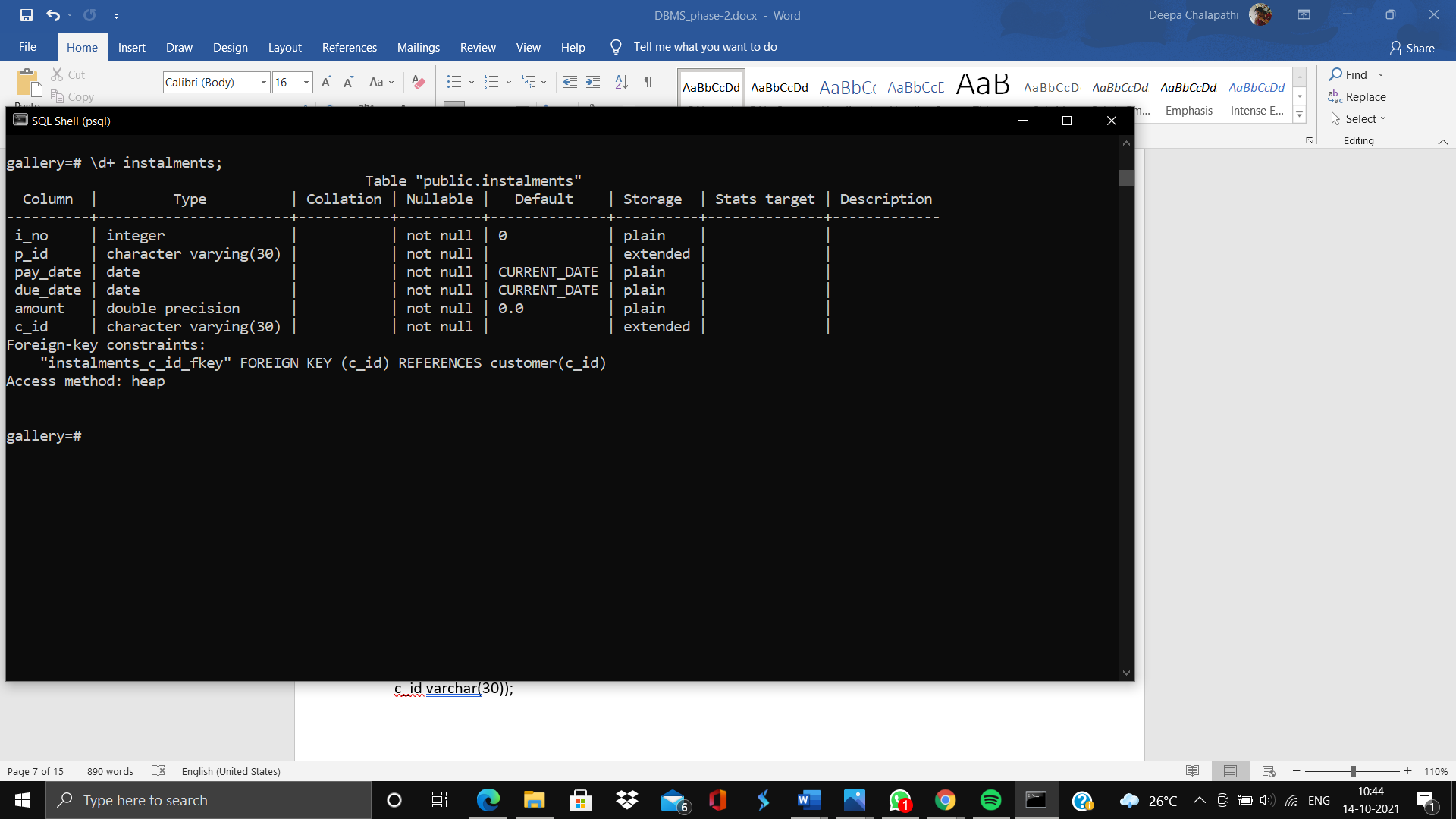
due\_date not null default current\_date,

amount float not null default 0.0,

c\_id varchar(30) not null,

foreign key(p\_id ) references painting(p\_id),

foreign key(c\_id) references customer(c\_id));



**Painting:**

create table painting(

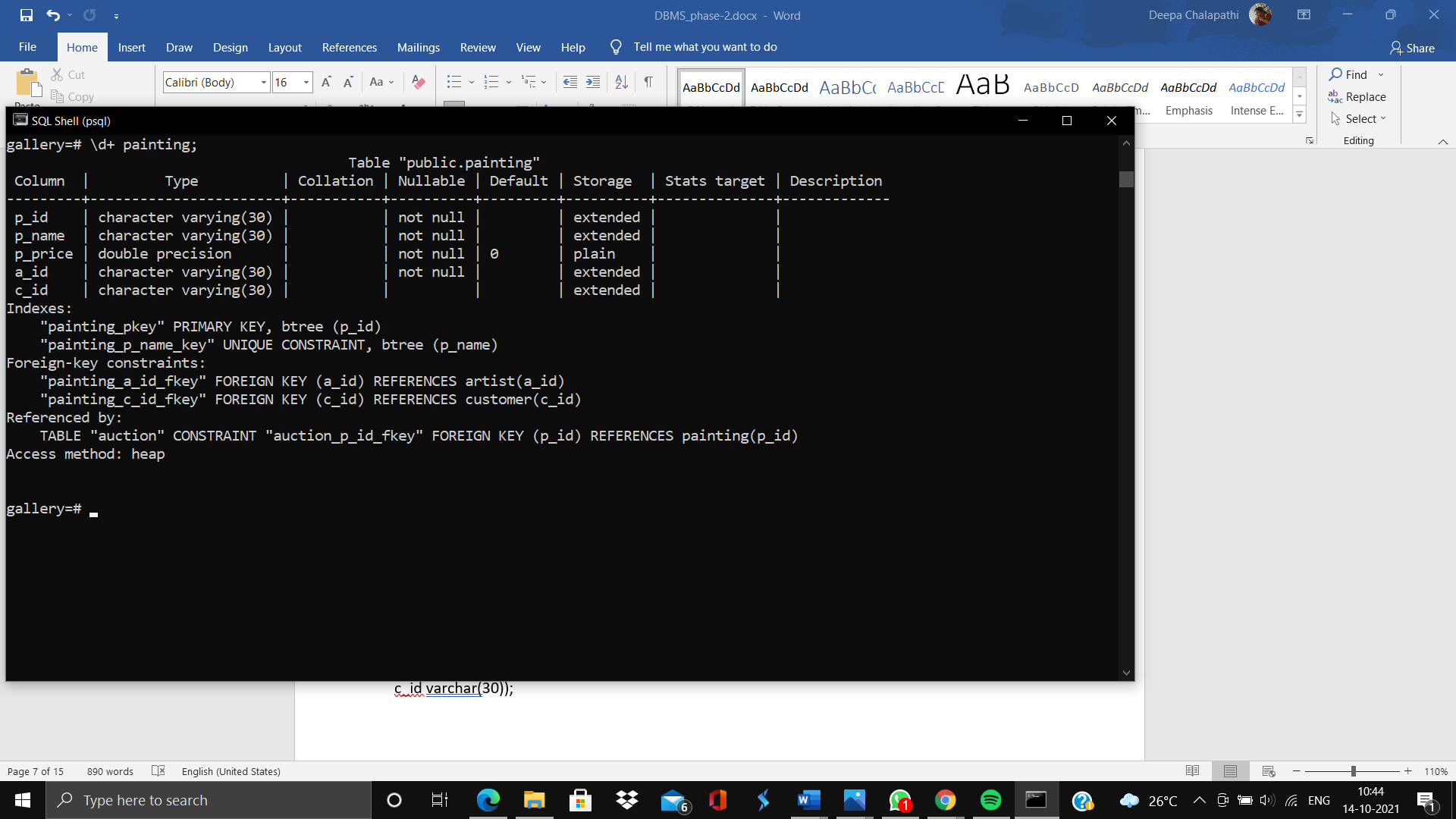
p\_id varchar(30) not null unique primary key,

p\_name varchar(30) not null unique,

p\_price float not null default 0.0,

a\_id varchar(30) not null,

c\_id varchar(30));



**Insert statements:**

**Artist:**

insert into artist values ('a1,'john','von','neumann','john@gmail.com',123098765,'Male','432,Langner street,London');

insert into artist values('a2','joanne','','wagner','joanne@gmail.com',7893209842,'Female','#52,Baker street,LA');

insert into artist values('a3','karen','jane','baker','karen@gmail.com',1236894985,'Female','#52,Runner street,Moscow');

insert into artist values ('a4','deekshitha','','sharma','deekshitha@gmail.com',9808832877,'Female','#852,Red Fort street,Delhi');

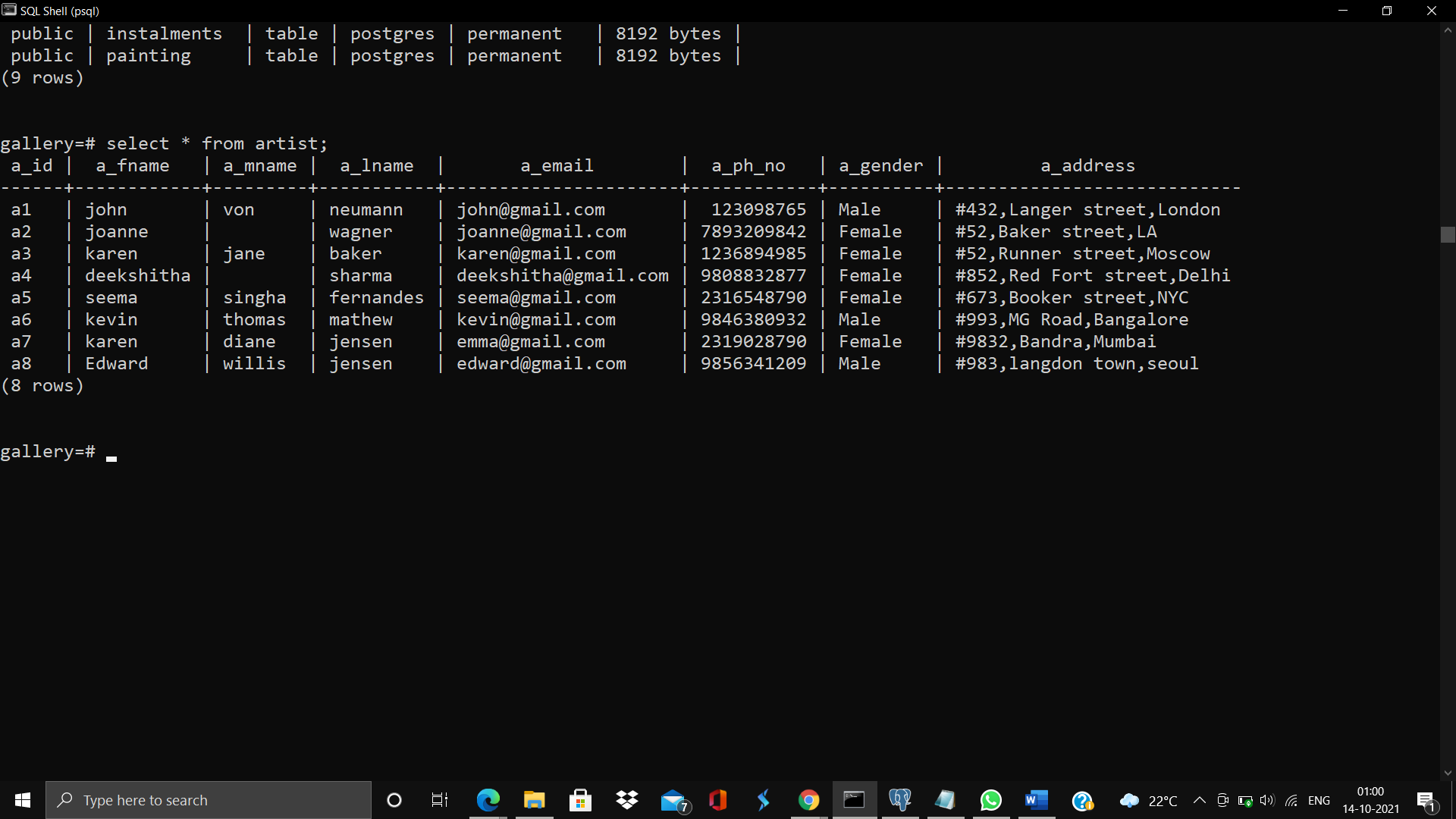
insert into artist values('a5','seema','singha','fernandes','seema@gmail.com',2316548790,'Female','#673,Booker street,NYC');

insert into artist values('a5','seema','singha','fernandes','seema@gmail.com',2316548790,'Female','#673,Booker street,NYC');

insert into artist values('a6','kevin','thomas','mathew','kevin@gmail.com',9846380932,'Male','#993,MG Road,Bangalore');

insert into artist values('a7','karen','diane','jensen','emma@gmail.com',2319028790,'Female','#9832,Bandra,Mumbai');

insert into artist values('a8','Edward','willis','jensen','edward@gmail.com',9856341209,'Male','#983,langdon town,seoul');



**Auction:**

insert into auction values(‘p7’,’ex2’);

insert into auction values(‘p7’,’ex8’, 5000000);

insert into auction values(‘p3’,’ex5’);

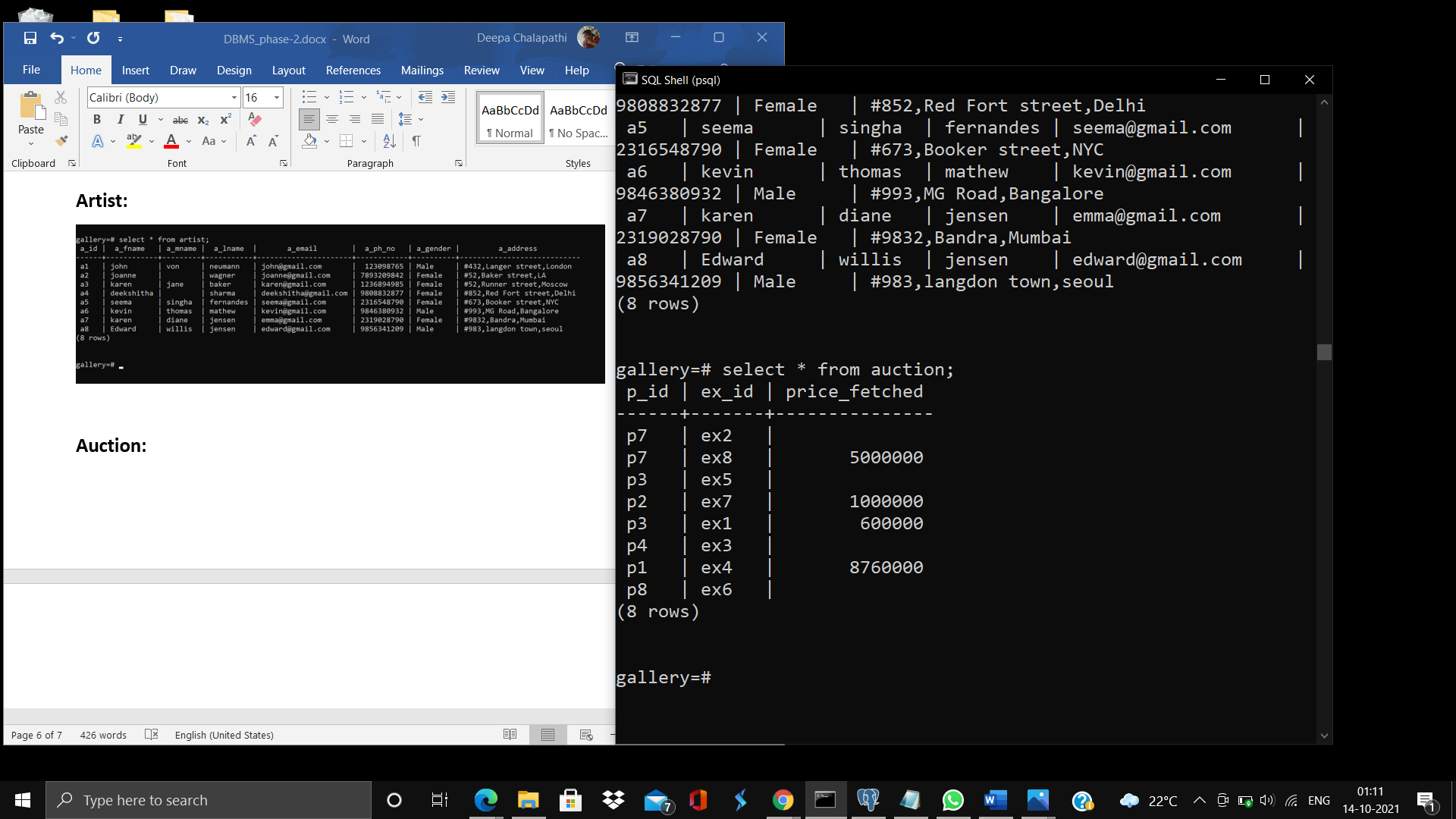
insert into auction values(‘p2’,’ex7’,1000000);

insert into auction values(‘p3’,’ex1’,600000);

insert into auction values(‘p4’,’ex3’);

insert into auction values(‘p1’,’ex4’);

insert into auction values(‘p8’,’ex6’,8760000);

****

**Customer:**

insert into customer values('c1','maddie',NULL,'gomez','maddie@hotmail.com',1239087569,'Female');

insert into customer values('c2','niels','atom','bohr','niel@hotmail.com',90837322284,'Male'

);

insert into customer values('c3','ariana','grande','butera','thunderbolt@gmail.com',9879459654,'Male','#545,7th street,NewJersey');

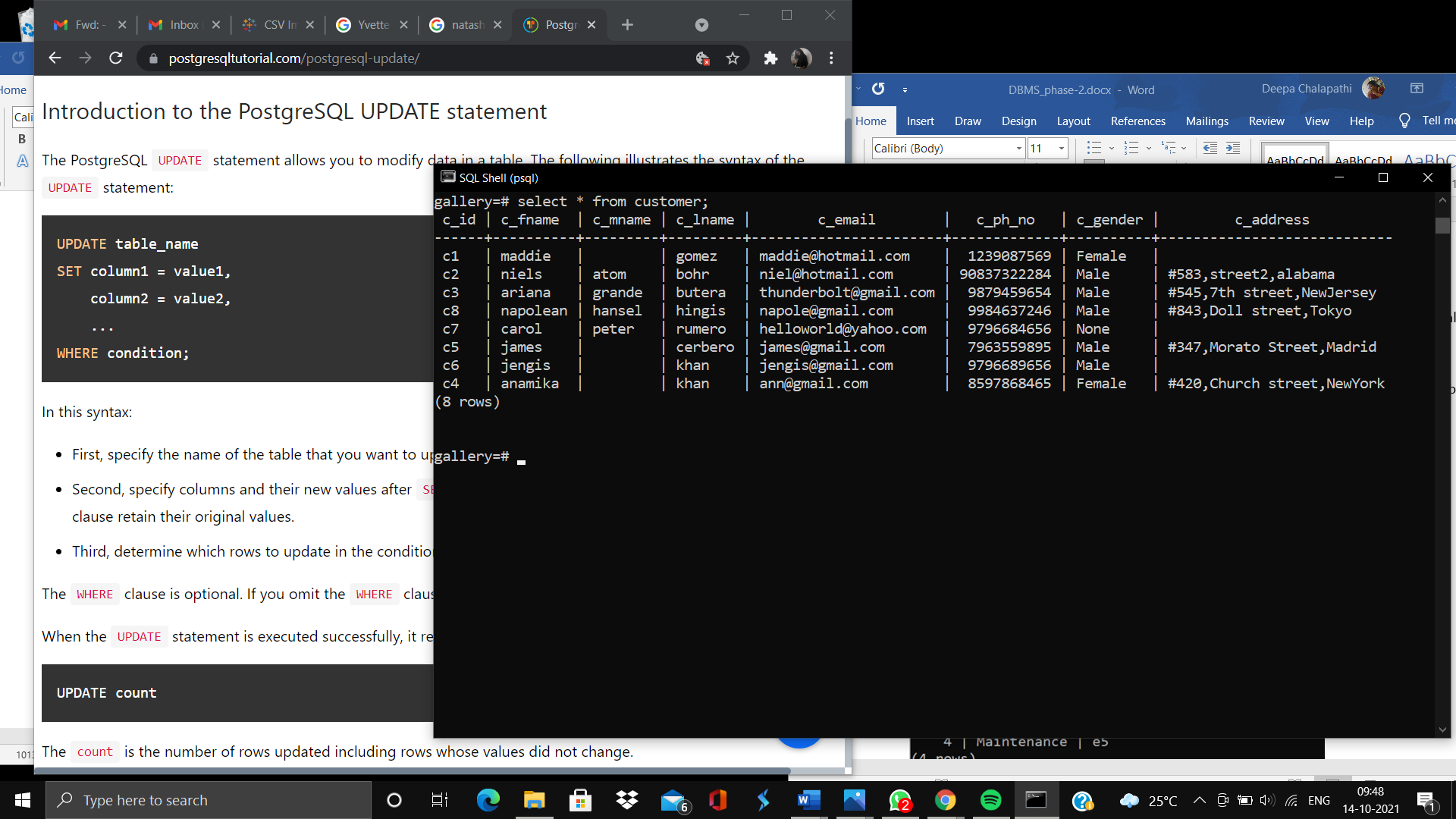
insert into customer values('c4','anamika','','khan','ann@gmail.com',8597868465,'Female','#420,Church street,NewYork');

insert into customer values('c5','james','','cerbero,'james@gmail.com',7963559895,'Male','#347,Morata street,Madrid');

insert into customer values('c6','jengis','','khan','jengis@gmail.com',9796689656,'Male','');

insert into customer values('c7','carol','peter','rumero','helloworld@yahoo.com',9796684656);

insert into customer values('c8','napolean','hansel','hingis','napole@gmail.com',9984637246,'Male','#843,Doll street,Tokyo');



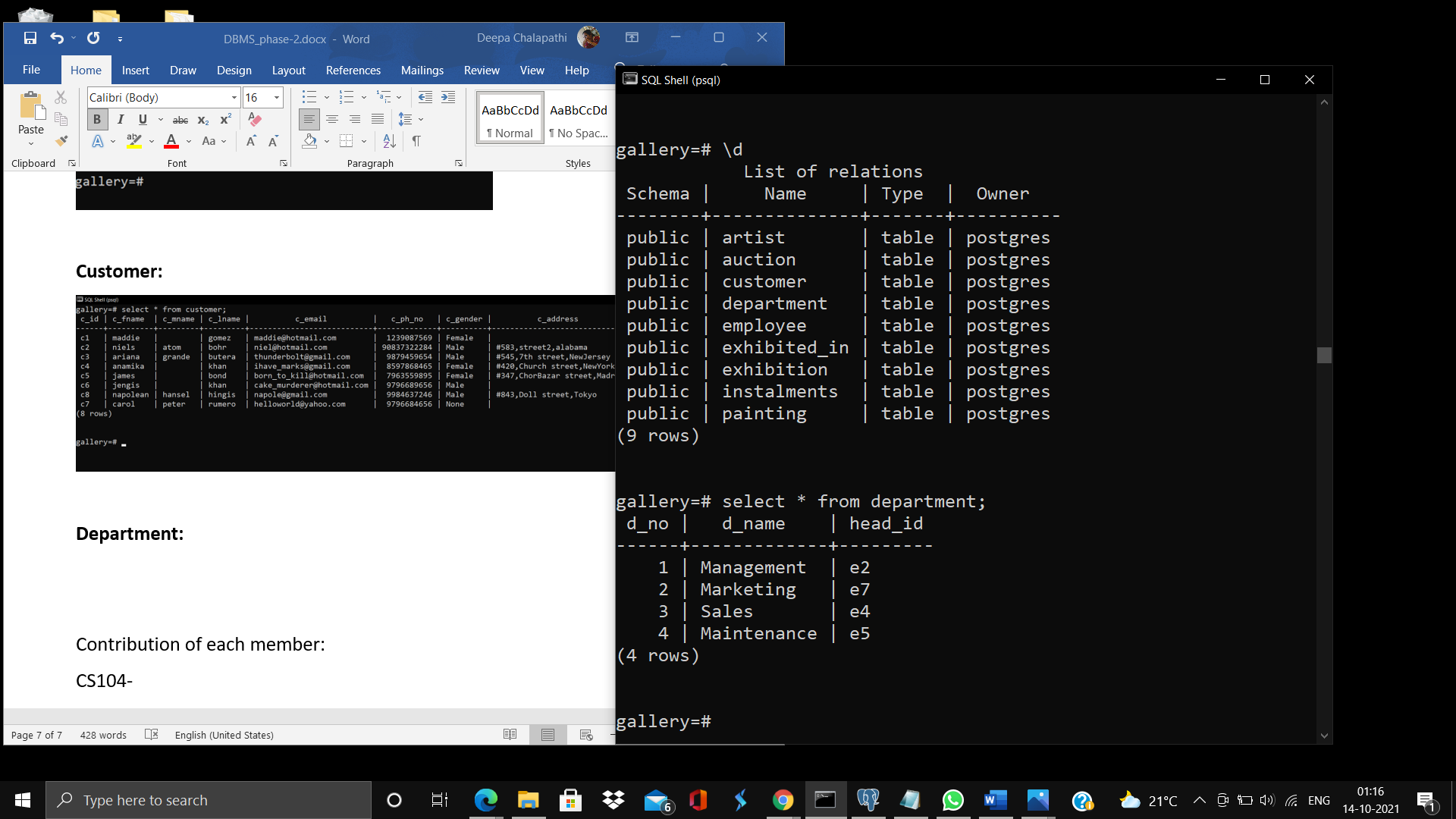
**Department:**

insert into department values(1,’Management’,’e2’);

insert into department values(2,’Marketing’,’e7);

insert into department values(3,’Sales’,’e4);

insert into department values(4,’Maintainance’,’e5’)

****

**Employee:**

insert into employee values('e1','helen','','saleste','12-08-2020','Female','12-9-2000',21,01,190000,'#456,Langdon town,Bangalore',1234567899);

insert into employee values(‘e2’,’bhoomika’,’P’,’sharma’,’2001-08-12’,’female,36,1,200000,’#46 Richmond Circle, Bangalore’);

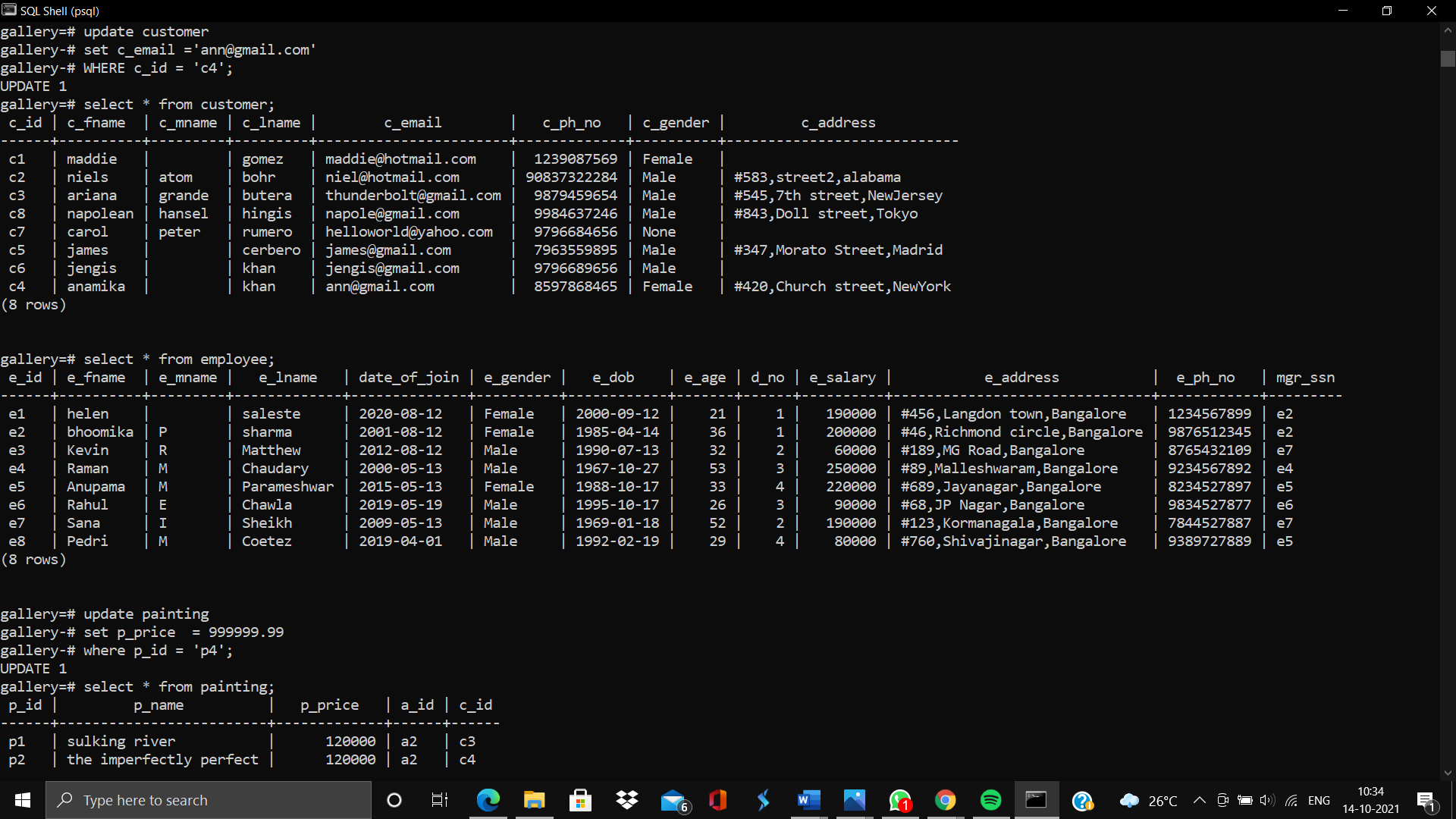
insert into employee values(‘e3’,‘Kevin ‘,’R ‘,‘Matthew ‘,‘2012-08-12’,’ Male ‘,’1990-07-13’, 32, 2 ,60000 , ‘#189,MG Road,Bangalore ‘,8765432109 ,‘e7’)

insert into employee values(e4, ‘Raman ‘,‘M’, ‘Chaudary’, ‘2000-05-13 ‘,‘Male,’1967-10-27’, 53,3 ,250000 ,‘#89,Malleshwaram,Bangalore’ ,9234567892, ‘e4’)

insert into employee values(‘e5‘,‘Anupama’ ,‘M ‘,‘Parameshwar’,’2015-05-13’,‘Female’,‘1988-10-17 ‘,33 ,4 ,220000, ,‘#689,Jayanagar,Bangalore’,8234527897 ,‘e5’);

insert into employee values (‘e6 ‘,‘Rahul’,‘E ‘,‘Chawla’,‘2019-05-19 ‘,‘Male’,‘1995-10-17’, 26 ,3, 90000, ‘#68,JP Nagar,Bangalore’, 9834527877, ‘e6’);

inset into employee values(‘e7 ,’Sana,’I’ , ‘Sheikh’ ,’2009-05-13’,‘Male’ ,‘1969-01-18’ ,52,2, 190000 ,‘#123,Kormanagala,Bangalore’,7844527887, ‘e7’);

****insert into employee values(‘e8’ , ‘Pedri’,‘M’ ,‘Coetez’ ,‘2019-04-01’,‘Male ‘,1992-02-19, 29,4,80000 , ‘e5’);

**Exhibited\_in:**

insert into exhibited\_in values(‘ex1’,’p2’);

insert into exhibited\_in values(‘ex3’,’p3’);

insert into exhibited\_in values(‘ex1’,’p3’);

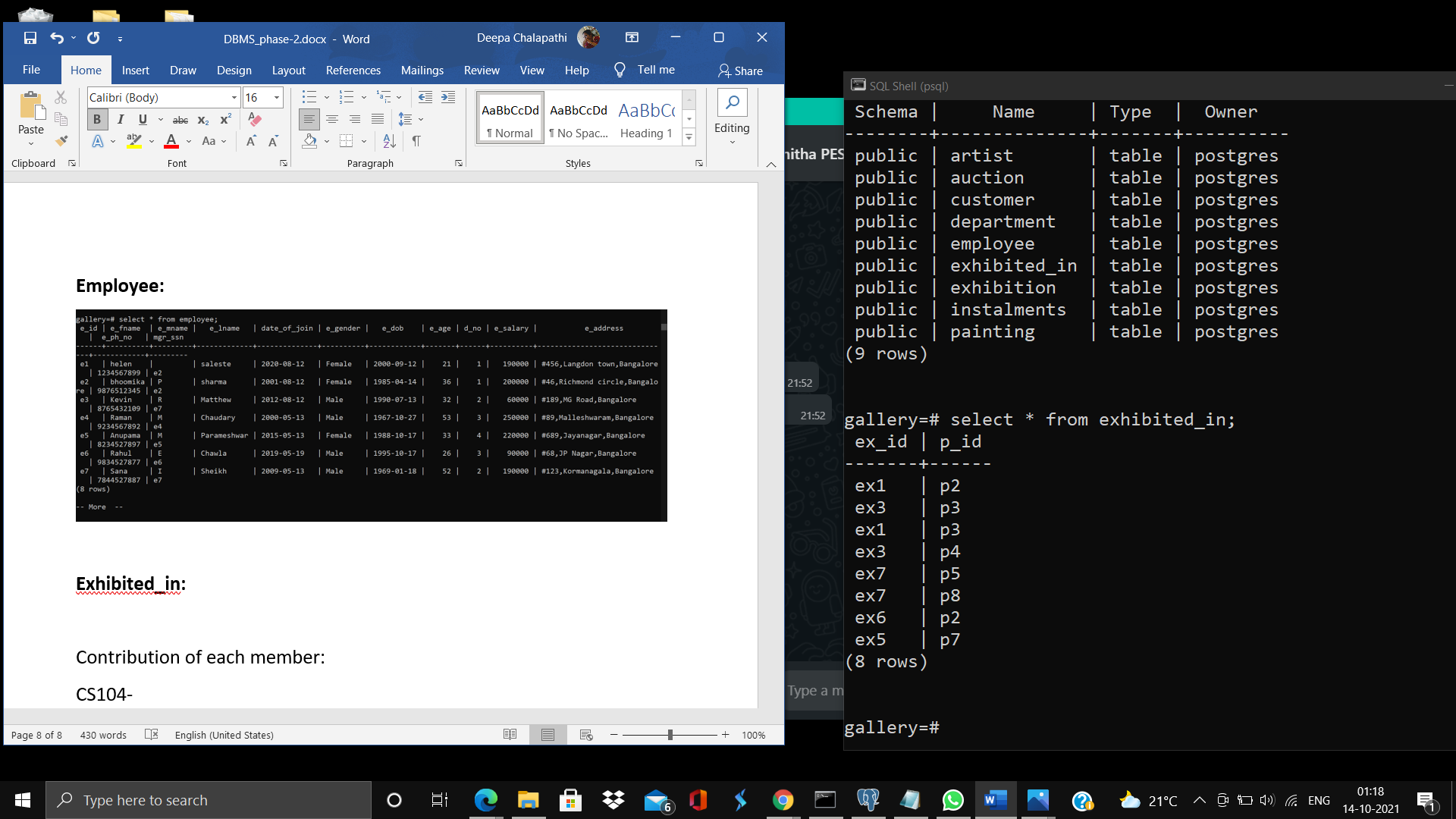
insert into exhibited\_in values(‘ex3’,’p4’);

insert into exhibited\_in values(‘ex7,’p5’);

insert into exhibited\_in values(‘ex7’,’p8’);

insert into exhibited\_in values(‘ex6’,’p2’);

insert into exhibited\_in values(‘ex5’,’p7’);

****

**Exhibition:**

insert into exhibition values('ex1','12-02-2019','14-02-2019','Nature and the Wild');

insert into exhibition values('ex2','12-08-2014','19-08-2014','Firing rage');

insert into exhibition values('ex3','20-01-2020','23-01-2020','View of the mind');

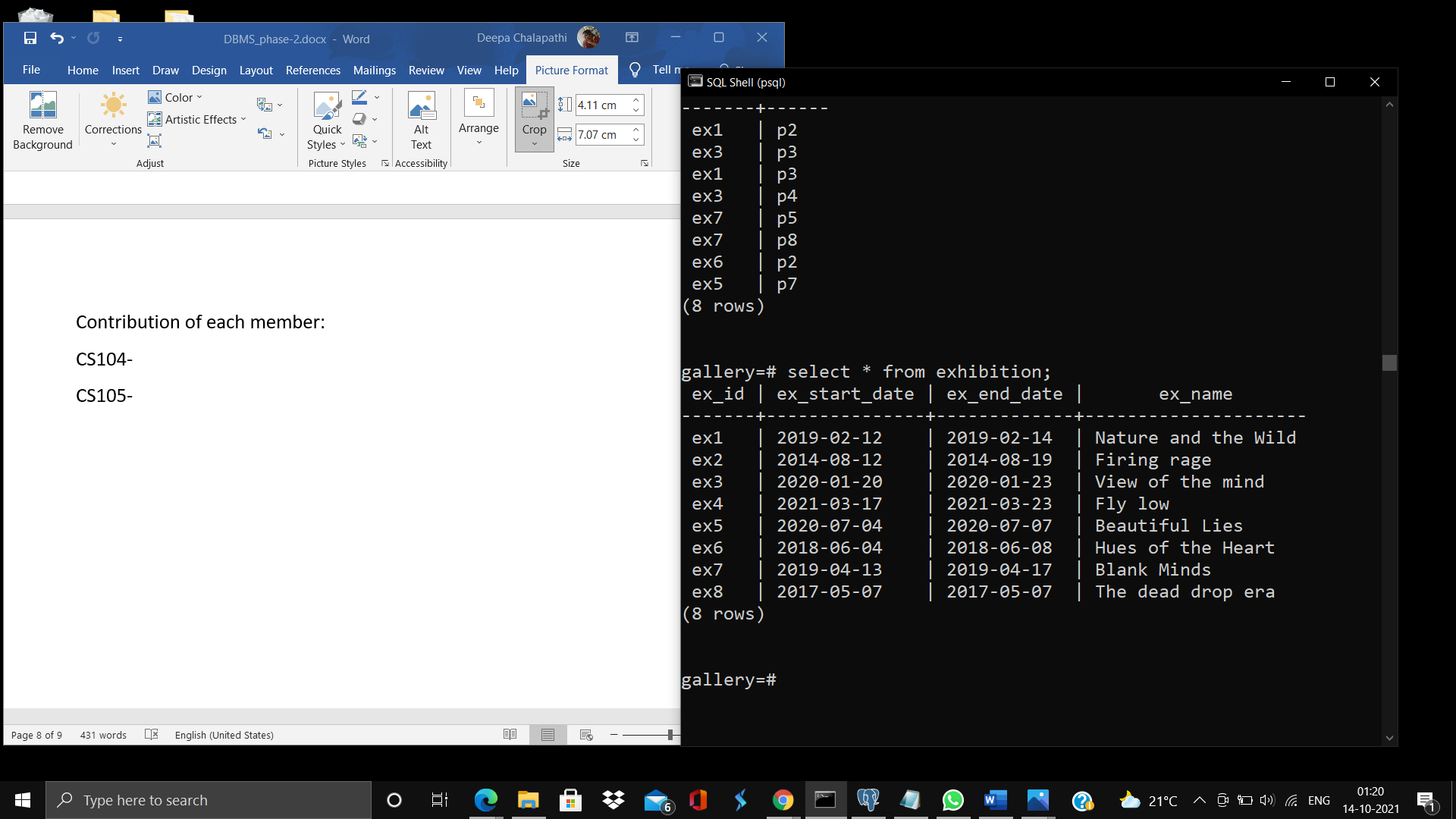
insert into exhibition values('ex4','17-03-2021','23-03-2021','Fly low');

insert into exhibition values('ex5','04-07-2020','07-07-2020','Beautiful Lies');

insert into exhibition values('ex6','04-06-2018','08-06-2018','Hues of the Heart');

insert into exhibition values('ex7','13-04-2019','17-04-2019','Blank Minds');

insert into exhibition values('ex8','7-05-2017','7-05-2017','The dead drop era');

****

**Instalments:**

insert into instalments values(1,'p1','12-02-2019','14-02-2019',10000,'c3');

insert into instalments values(2,'p1','14-02-2019','14-03-2019',10000,'c3');

insert into instalments values(1,'p5','17-07-2021','17-05-2021',30000.98,'c8');

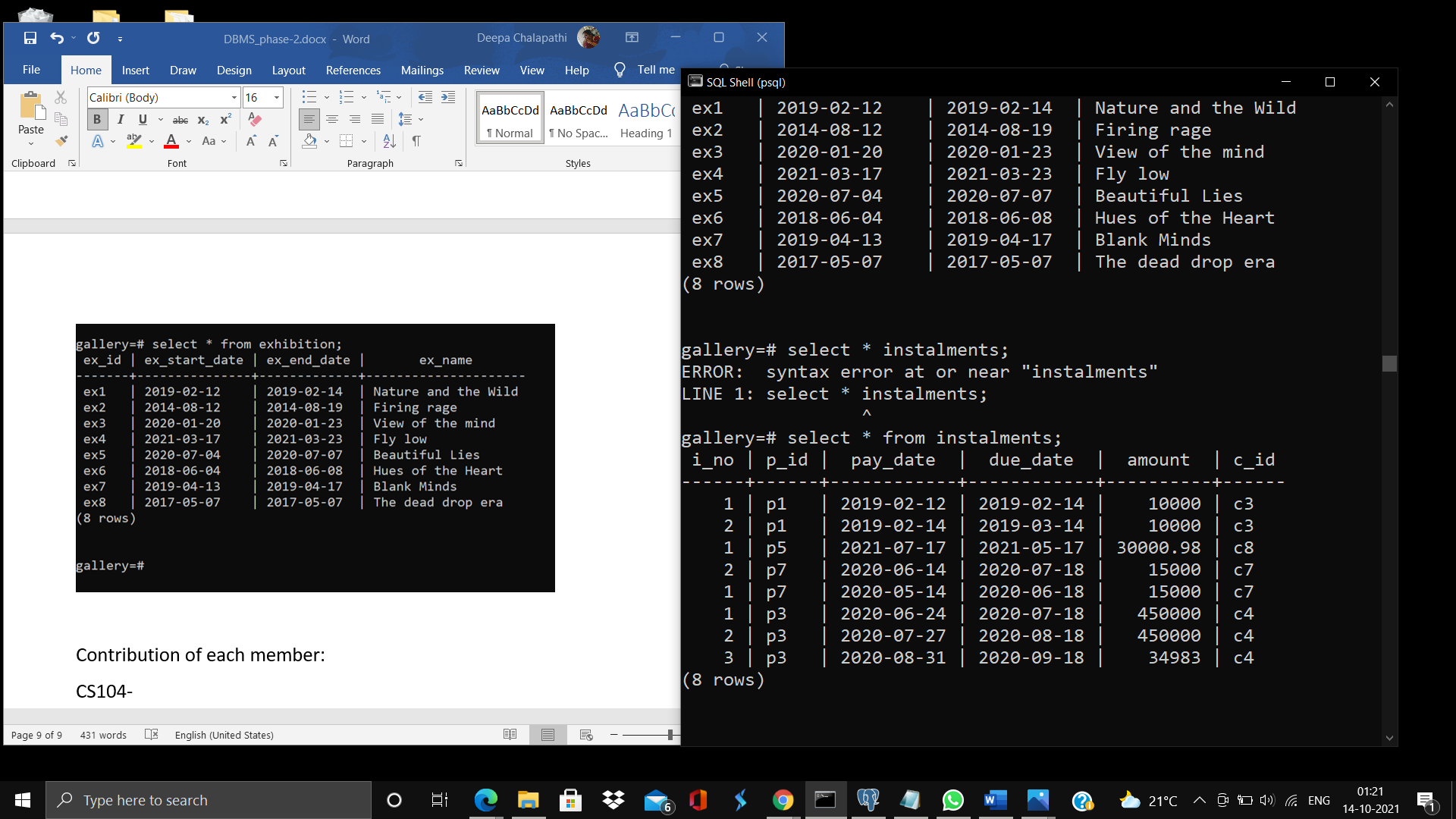
insert into instalments values(2,'p7','14-06-2020','18-07-2020',15000,'c7');

insert into instalments values(1,'p7','14-05-2020','18-06-2020',15000,'c7');

insert into instalments values(1,'p3','24-06-2020','18-07-2020',450000,'c4');

insert into instalments values(2,'p3','27-07-2020','18-08-2020',450000,'c4');

insert into instalments values(3,'p3','31-08-2020','18-09-2020',34983,'c4');

****

**Painting:**

insert into painting values('p1','sulking river',120000,'a2','c3');

insert into painting values('p2','the imperfectly perfect',120000,'a2','c4');

insert into painting values('p3','world though this eyes',934983,'a5','c4');

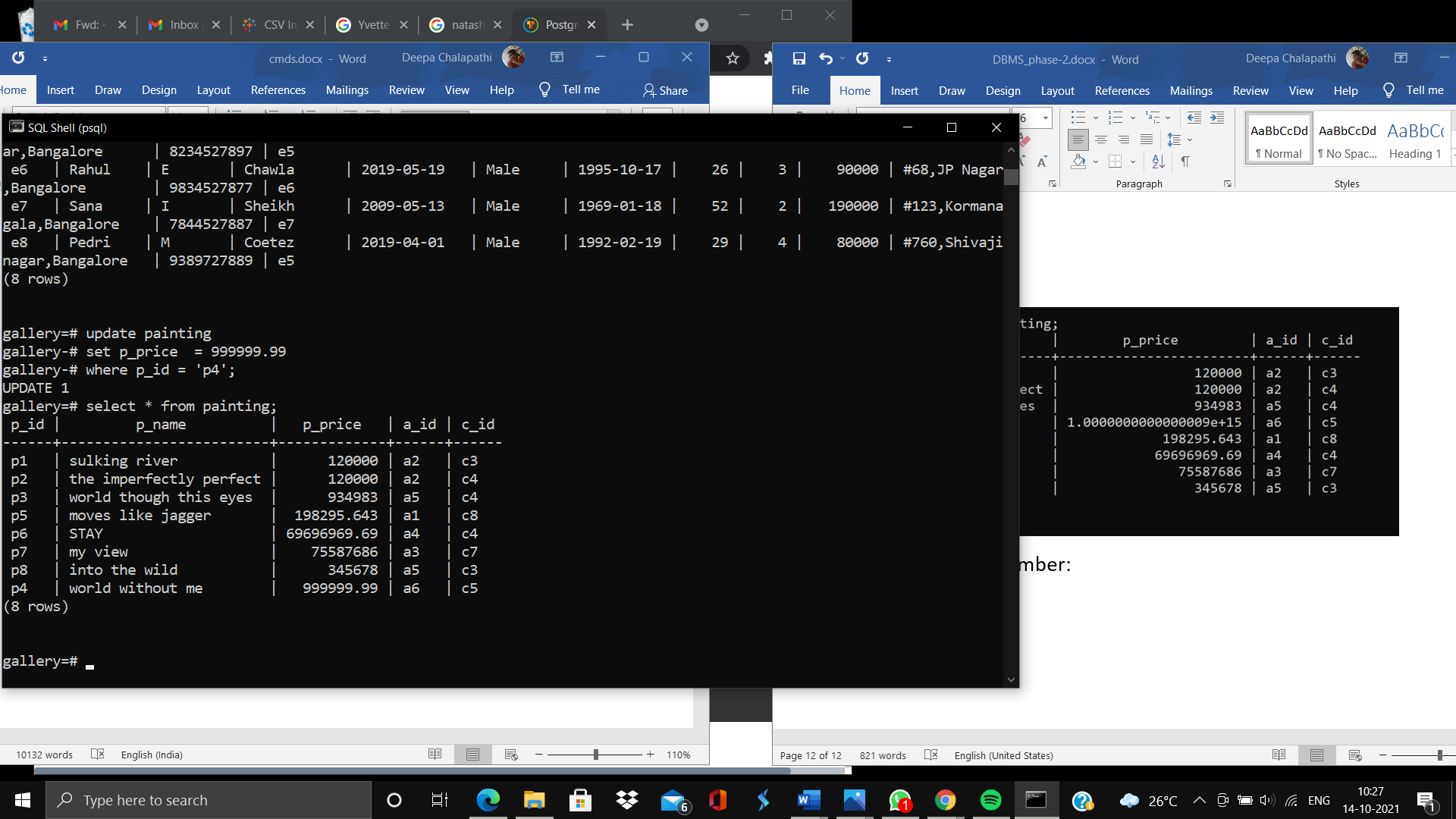
insert into painting values('p4','world without me',999999.99,'a6','c5');

insert into painting values('p5','moves like jagger',198295.643,'a1','c8');

insert into painting values('p6','STAY',69696969.69,'a4','c4');

insert into painting values('p7','my view',75587686,'a3','c7');

insert into painting values('p8','into the wild',345678,'a5','c3');

****

**Contribution of each member:**

Deekshitha- Relational diagram, Insert statements for customer relation, Report of the relational diagram

Deepa-Create and Insert commands, report for the insert and create statements