DBMS LAB ASSIGNMENT

NAME: DATLA TARUN ANJANEYA VARMA

REG NO: 19BCS036

GROUP NO: 2

Q) Add, Modify and Delete Column using Alter Command
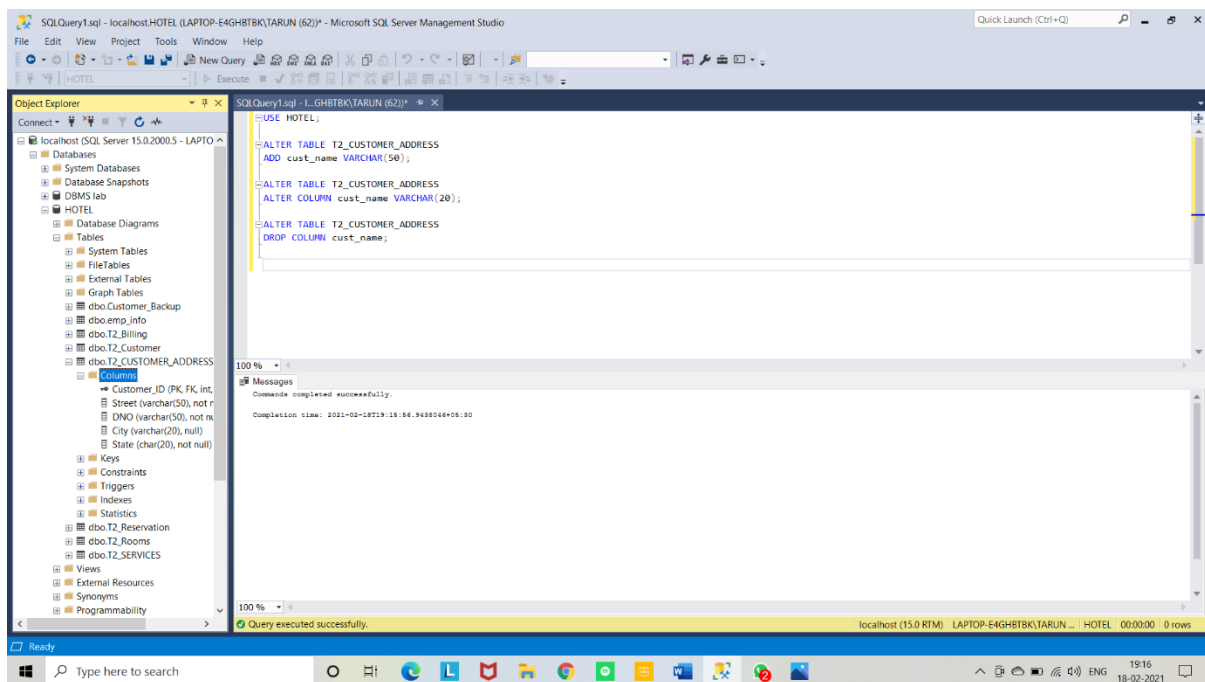
QUERY:

ALTER TABLE T2_CUSTOMER_ADDRESS
ADD cust_name VARCHAR(50);

ALTER TABLE T2_CUSTOMER_ADDRESS
ALTER COLUMN cust_name VARCHAR(20);

ALTER TABLE T2_CUSTOMER_ADDRESS
DROP COLUMN cust_name;

OUTPUT:

Q2) Insert 20 Employees Data into all the tables.

QUERY:

```
USE HOTEL;
INSERT INTO T2_Customer
```

```sql
VALUES('1','Lofflin','8688543748','Nagpur','MP','534201','loff@gmail.com');

INSERT INTO T2_Customer
VALUES('2','Ram','8688543744','hyderabad','TN','534204','Ram@gmail.com');

INSERT INTO T2_Customer
VALUES('3','Mahesh','8688543746','Lucknow','UP','534205','mah@gmail.com');

INSERT INTO T2_Customer
VALUES('4','Prabha','8688543766','Bengaluru','Karnataka','534201','prab@gmail.com');



INSERT INTO T2_CUSTOMER_ADDRESS(Customer_ID,Street,DNO,City,State)
VALUES('1','RP NAGAR','7-11','Nagpur','Madhya pradesh');

INSERT INTO T2_CUSTOMER_ADDRESS(Customer_ID,Street,DNO,City,State)
VALUES('2','Sriram nagar','9-12','hyderabad','Telengana');

INSERT INTO T2_CUSTOMER_ADDRESS(Customer_ID,Street,DNO,City,State)
VALUES('3','JS Nagar','7-13','Lucknow','Utter pradesh');

INSERT INTO T2_CUSTOMER_ADDRESS(Customer_ID,Street,DNO,City,State)
VALUES('4','Indira NAGAR','7-8-12','Bengaluru','Karnataka');

INSERT INTO Customer_Backup SELECT * FROM T2_Customer;

INSERT INTO emp_info
VALUES('1','Max','1999/03/21');
INSERT INTO emp_info
VALUES('2','Jax','1959/04/5');
INSERT INTO emp_info
VALUES('3','Nax','1992/07/7');

INSERT INTO T2_Billing
VALUES('1','2000','1234567891','2021/09/5','1');

INSERT INTO T2_Billing
VALUES('2','5000','9876543211','2021/05/5','2');

INSERT INTO T2_Billing
VALUES('3','6000','1234987655','2021/09/30','3');

INSERT INTO T2_Billing
VALUES('4','3000','5546666666','2021/12/11','4');

INSERT INTO T2_Rooms
VALUES('1','Deluxe','block-2','2','2');

INSERT INTO T2_Rooms
VALUES('2','Economic','block-1','3','1');

INSERT INTO T2_Rooms
VALUES('3','Deluxe','block-2','1','4');



INSERT INTO T2_Reservation
VALUES('1','1999/02/3','1999/02/22','5','1999/02/1','2','1');

INSERT INTO T2_Reservation
VALUES('2','1999/02/3','1999/02/22','4','1999/02/3','1','2');
```

```sql
INSERT INTO T2_Reservation
VALUES('3','1999/04/3','1999/04/4','2','1999/04/1','4','3');

INSERT INTO T2_SERVICES
VALUES('1','Food','3000','1');

INSERT INTO T2_SERVICES
VALUES('2','Transport','8000','3');

INSERT INTO T2_SERVICES
VALUES('3','Room','4000','2');
```

OUTPUT:

Q3) Show Violation of Primary Key, Unique Not Null and default key constraints through insertion.

QUERY:
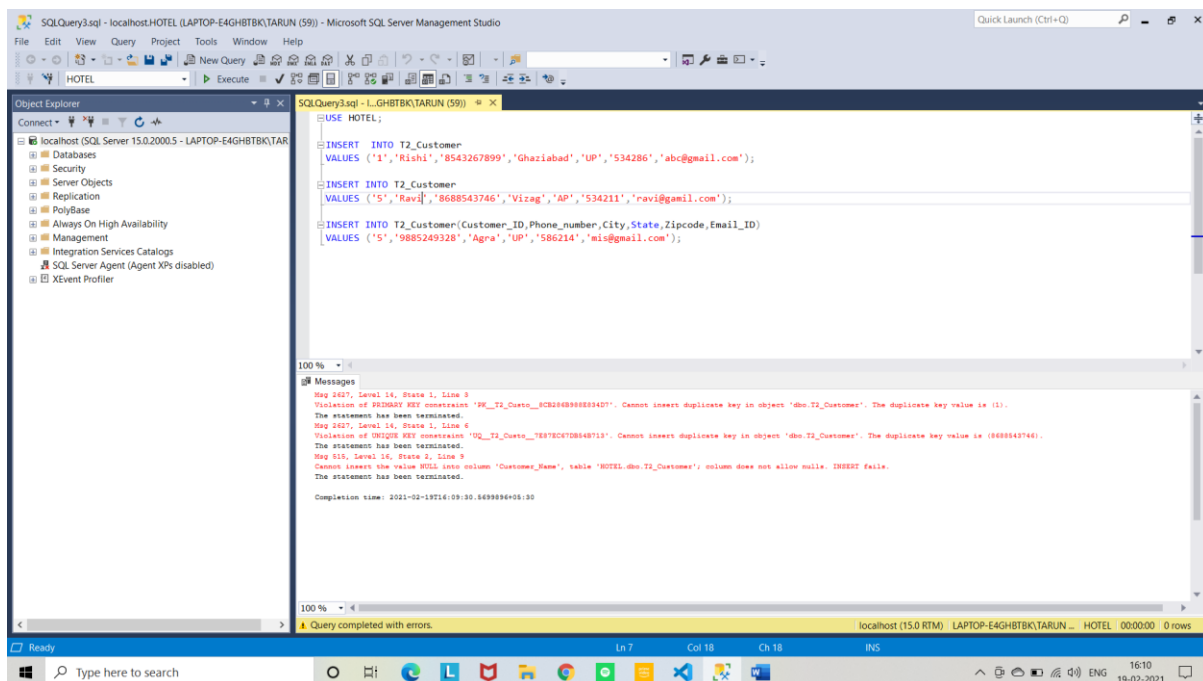
```
USE HOTEL;

INSERT  INTO T2_Customer
VALUES ('1','Rishi','8543267899','Ghaziabad','UP','534286','abc@gmail.com');

INSERT INTO T2_Customer
VALUES ('5','Ravi','8688543746','Vizag','AP','534211','ravi@gamil.com');

INSERT INTO T2_Customer(Customer_ID,Phone_number,City,State,Zipcode,Email_ID)
VALUES ('5','9885249328','Agra','UP','586214','mis@gmail.com');
```

OUTPUT:

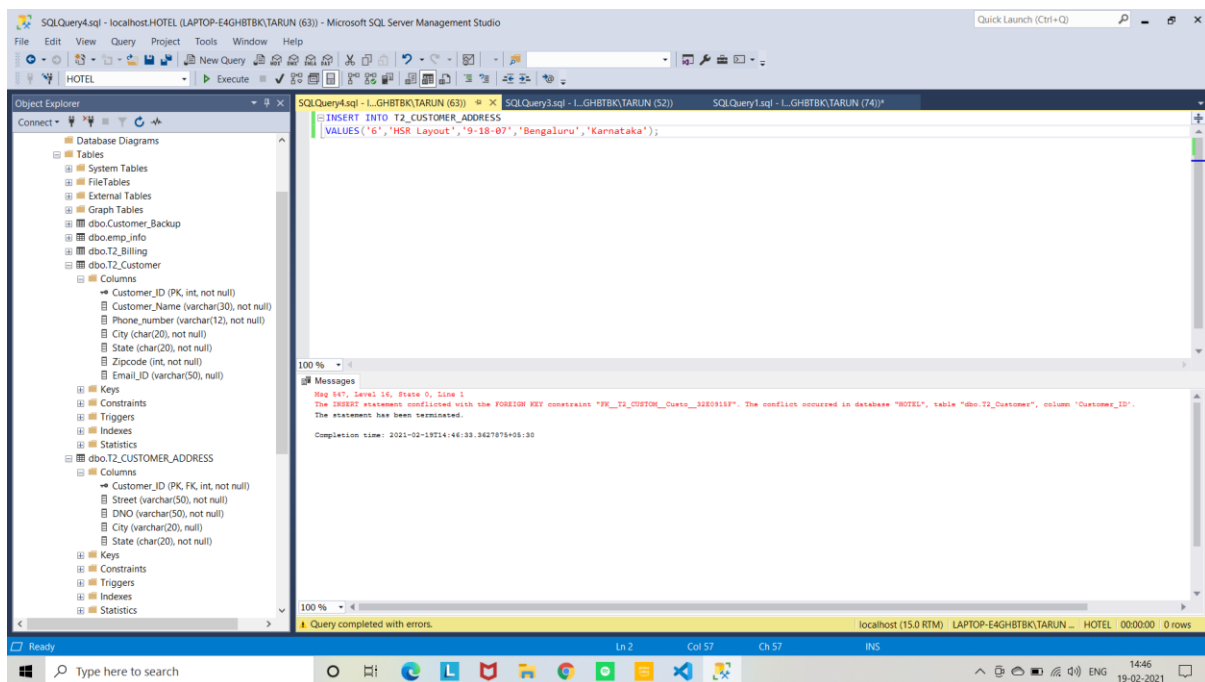
Q4) Insert tuples into the table and see how foreign key constraint works if you try to insert into dependent table first.

QUERY:

```
INSERT INTO T2_CUSTOMER_ADDRESS
VALUES('6','HSR Layout','9-18-07','Bengaluru','Karnataka');
```
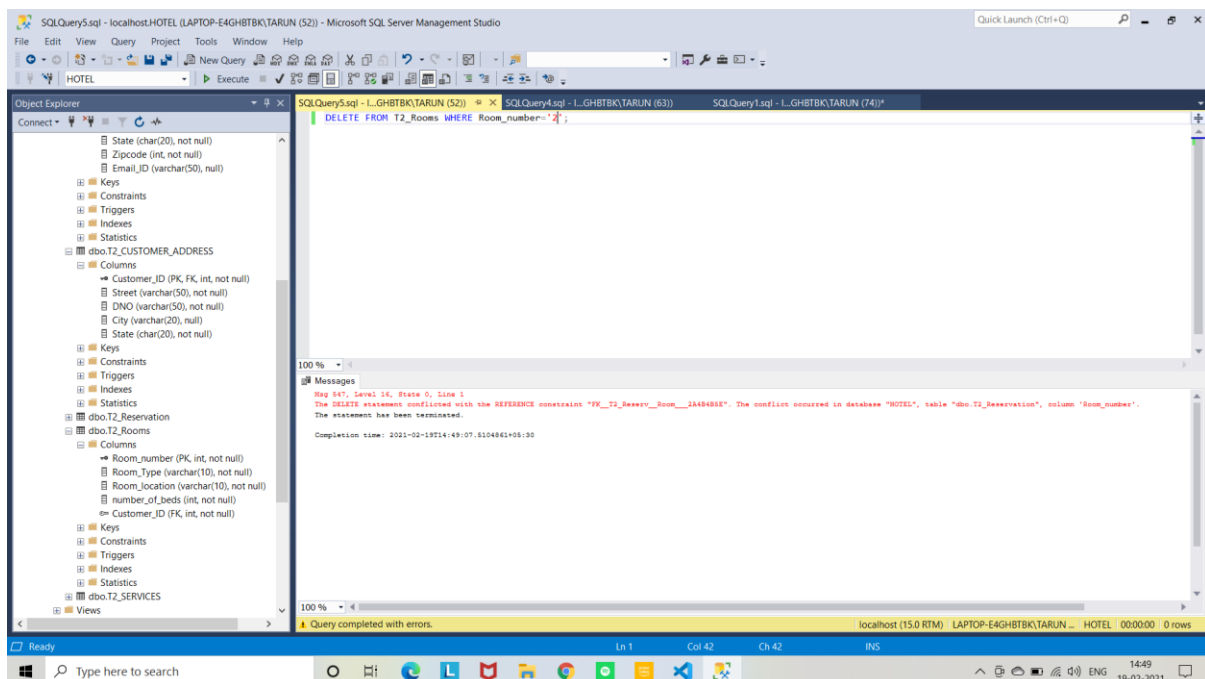
OUPUT:

Q5) Show Violation of Foreign Key Constraint when you try to delete from a base table. If you get an error explain why deletion gives an error

QUERY:

```
DELETE FROM T2_Rooms WHERE Room_number='2';
```
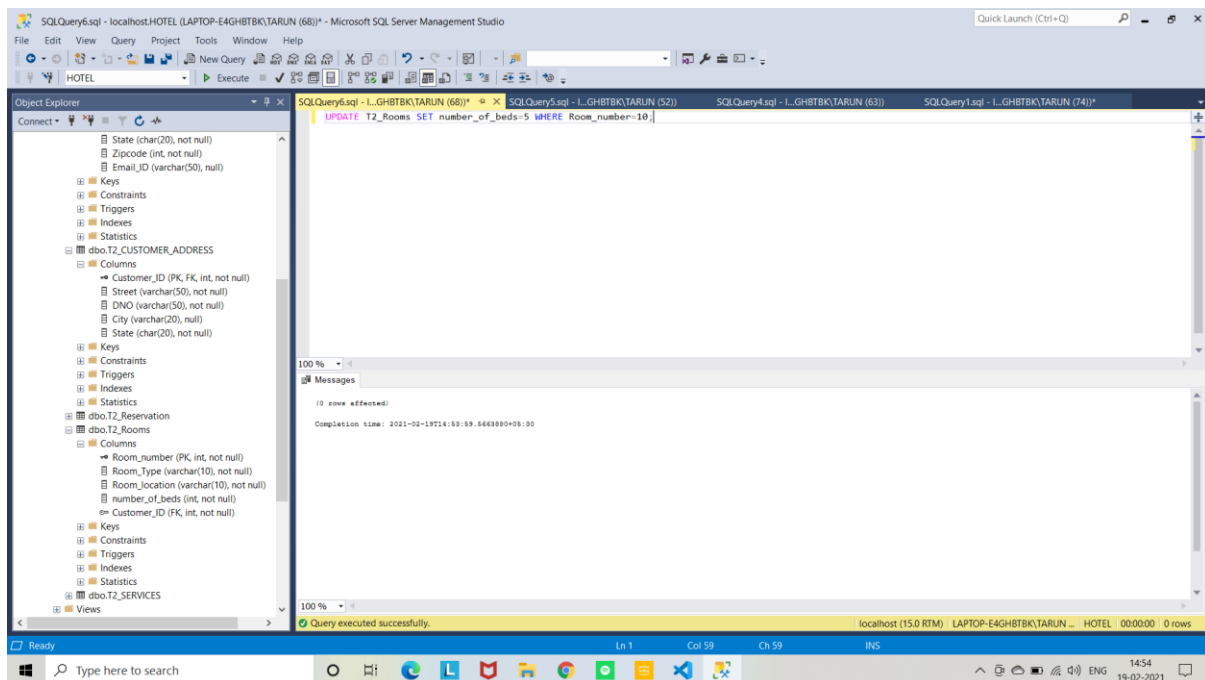
OUTPUT:

The error occurs because when we delete a record from the base table, we should make sure that all the related dependent tables records are deleted prior. Otherwise, there will be redundant data all over the database.

Q6) Try to update a non-existing entity data and check for error.

QUERY:

```sql
UPDATE T2_Rooms SET number_of_beds=5 WHERE Room_number=10;
```
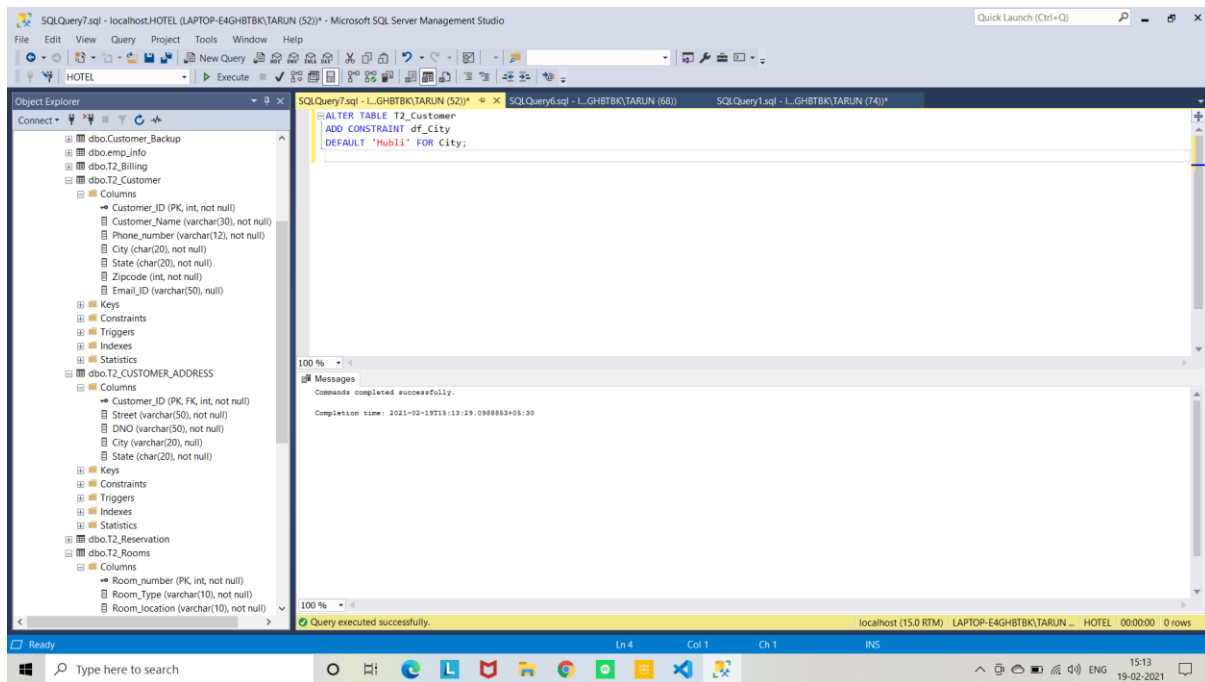
OUTPUT:

Q7) Add a column which has default value.

QUERY:
```sql
ALTER TABLE T2_Customer
ADD CONSTRAINT df_City
DEFAULT 'Hubli' FOR City;
```
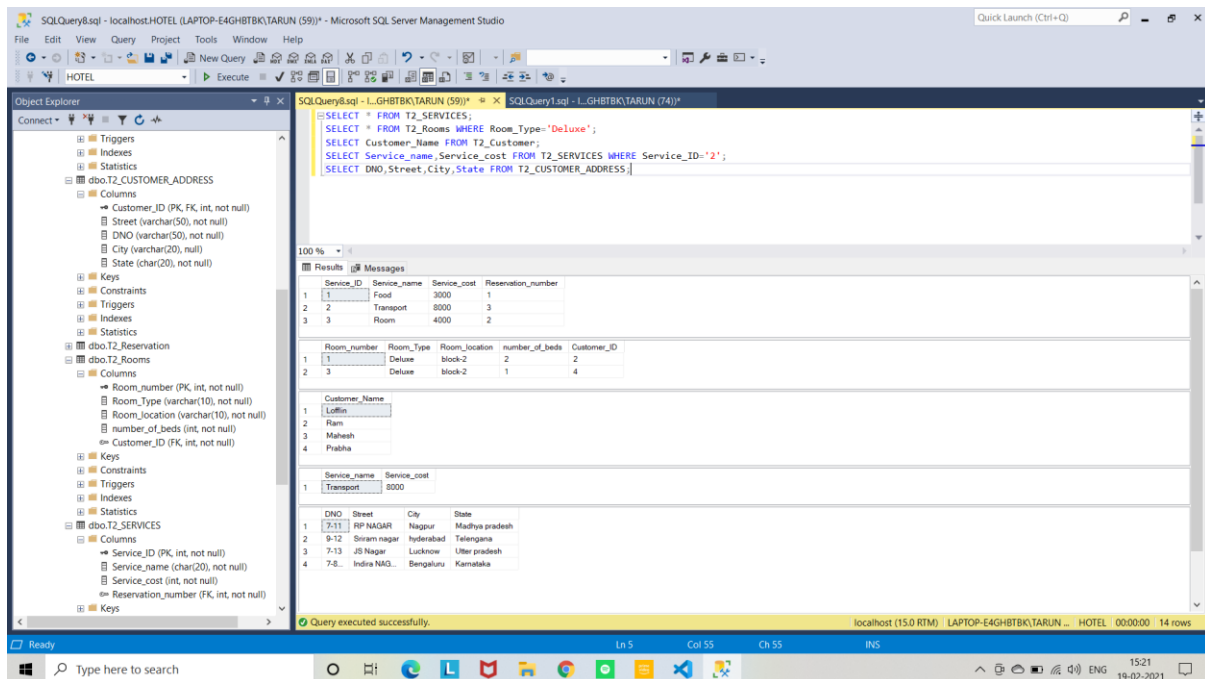
OUTPUT:

Q8) 5 Simple Select queries to retrieve data from your database.

QUERY:

```sql
SELECT * FROM T2_SERVICES;
SELECT * FROM T2_Rooms WHERE Room_Type='Deluxe';
SELECT Customer_Name FROM T2_Customer;
SELECT Service_name,Service_cost FROM T2_SERVICES WHERE Service_ID='2';
SELECT DNO,Street,City,State FROM T2_CUSTOMER_ADDRESS;
```

OUTPUT:

Q9) Show how Foreign key constraint effects Updating a dependent table when value is not existing and in Base table where the value is referred and you want to update it.

QUERY:

```sql
UPDATE T2_Rooms SET number_of_beds=1 WHERE Room_Type='Deluxe';
```

OUTPUT: