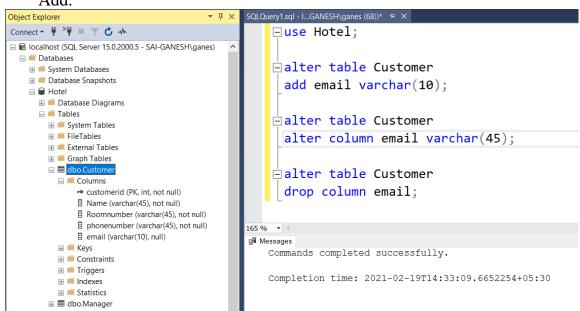
DBMS LAB ASSIGNEMT

NAME: K.Sai Ganesh

REG.: 19BCS055

1.) Add, Modify and Delete column using alter command.

Add:



Modify:

```
Object Explore
Connect ▼ * ♥ ■ ▼ 🖒 - №
                                             □use Hotel;

☐ Iocalhost (SQL Server 15.0.2000.5 - SAI-GANESH\ganes)

                                             ∃alter table Customer

    ■ Database Snapshots

                                               add email varchar(10);
   ⊟ Hotel
     🖪 📁 Database Diagrams
     alter table Customer

⊞ ≡ FileTables

                                               alter column email varchar(45);

    External Tables

      ⊟alter table Customer
        ☐ Columns
                                               drop column email;
           customerid (PK, int, not null)
           ■ Name (varchar(45), not null)
           ☐ Roomnumber (varchar(45), not null)
           目 phonenumber (varchar(45), not null)
                                         165 % 🔻 🖪
           email (varchar(45), null)
        ⊞ 📕 Keys
                                            Commands completed successfully.
        Completion time: 2021-02-19T14:40:15.9388972+05:30
```

Delete:

```
Object Explore
Connect ▼ ¥ ¥ ■ ▼ C →
                                           □use Hotel;

		☐ Iocalhost (SQL Server 15.0.2000.5 - SAI-GANESH\ganes)

    □ ■ Databases

                                           ∃alter table Customer
   add email varchar(10);
   ⊨alter table Customer
      System Tables
      alter column email varchar(45);

    dbo.Custo
                                          ⊟alter table Customer

    □ Columns

                                             drop column email;
           customerid (PK, int, not null)
           ■ Name (varchar(45), not null)

    ■ Roomnumber (varchar(45), not null)

    □ phonenumber (varchar(45), not null)

                                      165 % - 4

    Messages

       Commands completed successfully.
       Completion time: 2021-02-19T14:46:27.3283846+05:30

    ⊞ dbo.Manager
```

2.) Insert 20 employees Data into all the tables.

```
□use Hotel;
insert into Customer(customerid, Name, Roomnumber, phonenumber)
 values (1, 'peter', '001', '8754321987');
insert into Customer(customerid, Name, Roomnumber, phonenumber)
 values (2, 'chen', '002', '9514863258');
insert into Customer(customerid, Name, Roomnumber, phonenumber)
 values (3, 'rosy', '003', '7531598526');
insert into Customer(customerid, Name, Roomnumber, phonenumber)
 values (4, 'gill', '004', '8524569631');
insert into Customer(customerid, Name, Roomnumber, phonenumber)
 values (5, 'rio', '005', '7896321456');
insert into Customer(customerid, Name, Roomnumber, phonenumber)
 values (6, 'professor', '006', '8426957130');
insert into Customer(customerid, Name, Roomnumber, phonenumber)
 values (7, 'langford', '007', '7254796318');
insert into Customer(customerid, Name, Roomnumber, phonenumber)
 values (8, 'justin', '008', '9571536293');
insert into Customer(customerid, Name, Roomnumber, phonenumber)
 values (9, 'bobby', '009', '7564218930');
insert into Customer(customerid, Name, Roomnumber, phonenumber)
 values (10, 'bob', '010', '9658741230');
```

```
insert into Customer
   values (11, 'cristen', '011', '7895621301');
 insert into Customer into
   values (12, 'kamal', '012', '4862159735');
 insert into Customer ⊟
   values (13, 'dinesh', '013', '6547893215');
 insert into Customer
   values (14, 'abcd', '014', '2589641375');
 insert into Customer into
   values (15, 'mona', '015', '1258974631');
 insert into Customer
   values (16, 'raj', '016', '1589746238');
 insert into Customer into
   values (17, 'kumar', '017', '8459761238');
 insert into Customer
   values (18, 'edfh', '018', '4879635428');
 insert into Customer
   values (19, 'mahesh', '019', '8796532485');
 insert into Customer into
   values (20, 'dhoni', '020', '4897563215');
Output:
        select * from Customer;
 136 % 🔻 🔻
  customerid Name
                     Roomnumber phonenumber
             peter
     1
                     001
                               8754321987
                     002
                               9514863258
                     003
                               7531598526
      3
              rosy
                     004
                               8524569631
                     005
      5
              rio
                               7896321456
      6
                    006
                               8426957130
              professor
              langford
                     007
                               7254796318
  8
      8
              justin
                     800
                               9571536293
              bobby
                     009
                               7564218930
  10
      10
              bob
                     010
                               9658741230
  11
      11
                     011
                               7895621301
              cristen
  12
      12
              kamal
                     012
                               4862159735
  13
      13
              dinesh
                     013
                               6547893215
      14
              abcd
                     014
                               2589641375
  14
      15
              mona
                     015
                               1258974631
```

16 16

17

18 18

19 19

20 20

17

016

017

018

019

020

raj

kumar

mahesh

edfh

1589746238

8459761238

4879635428

8796532485

4897563215

3.) Show Violation of primary key, Unique not null and default key constraints through insertion.

Primary key violation:

Completion time: 2021-02-19T15:53:43.3520069+05:30

```
Busset into Customer(customerid, Name, Roomnumber, phonenumber)

values (1, 'steve', '51', '9876543210');

bussages

Neg 2627, Level 14, State 1, Line 3

Vicilation of PSHAMY REF constraint 'NF_Customer_861E077594288BA1', Cannot insert duplicate key in object 'dbo.Customer'. The duplicate key value

The statement has been terminated.

Completion time: 2021-02-1971514(149.1809528-05:30)

Null key violation:

/* null key voilation */

Einsert into Customer(customerid, Name, Roomnumber, phonenumber)

values (22, null, '150', '8796541230');

select * from Customer;

%6 -4

Wessages

Meg 515, Level 16, State 2, Line 7

Cannot insert the value WULL into column 'Name', table 'Hotel.dbo.Customer'; column does not allow nulls. INSERT fails.

The statement has been terminated.
```

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

```
Wessages
Messages
Messages
Messages
Messages
Messages
Messages
Completion time: 2021-02-19716:38:35.4984113+05:30
```

5.) 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.

```
Use Hotel;

delete from Stock where stockid = 2;

select * from Stock;

150 % * 4

IR Results (M Messages Mag 547, Level 16, State 0, Line 3

The DELETE statement has been terminated.

The statement has been terminated.
```

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

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

```
Messages

(0 rows affected)

Completion time: 2021-02-19T17:00:27.7906657+05:30
```

7.) Add a column which has default value.

```
use Hotel;

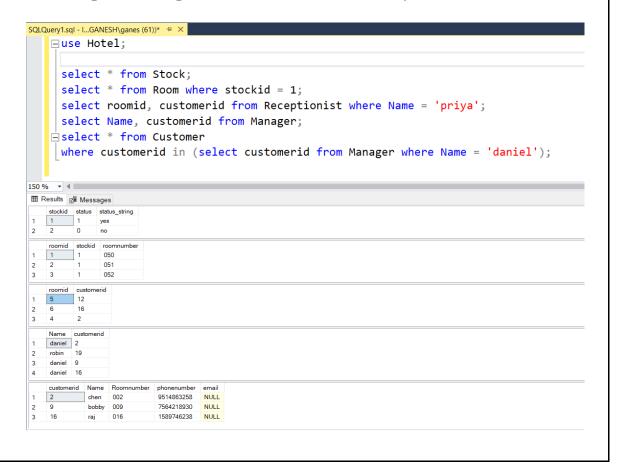
alter table Customer
add email varchar(45) default 'test@gmail.com';

insert into Customer(customerid, Name, Roomnumber, phonenumber)
values (21, 'bobby', '021', '7896541230');

select * from Customer where customerid = 21;
```



8.) 5 Simple select queries to retrieve data from your database.



9.) Show how foriegn key constraint effects updating a dependent table when value not existing and in base table where the value is referred and you want to update it.

```
update Room set stockid = 1 where roomid = 7;

update Room set stockid = 1 where roomid = 7;

Messages

(0 rows affected)

Completion time: 2021-02-20T13:40:02.3820183+05:30
```