DBMS LAB ASSIGNEMT

NAME: BIPUL GAUTAM

REG.: 19BCS023

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

ADD:

```
Connect ▼ *♥ ■ ▼ ♂ →
                                                  ∃use Hotel;
■ localhost (SQL Server 15.0.2000.5 - SAI-GANESH\ganes)
 □ ■ Databases
                                                  alter table Customer
   ⊞ ■ System Databases
   Database Snapshots
                                                   add email varchar(10);
  alter table Customer
      ⊕ ■ FileTables
                                                   alter column email varchar(45);
       alter table Customer
            - customerid (PK, int, not null)
                                                   drop column email;

■ Name (varchar(45), not null)

    ☐ Roomnumber (varchar(45), not null)
    ☐ phonenumber (varchar(45), not null)

                                             165 % * 4
            email (varchar(10), null)
                                             Messages
        ⊞ ■ Keys
                                                 Commands completed successfully.
        ⊞ ■ Constraints
                                                 Completion time: 2021-02-19T14:33:09.6652254+05:30
        ⊞ ■ Statistics
      ⊞ dbo.Manager
```

MODIFY:

```
Connect ▼ ¥ ■ ▼ 🖒 🚸
                                              □use Hotel;

        ■ localhost (SQL Server 15.0.2000.5 - SAI-GANESH\ganes)

        ■ Databases

                                              ⊟alter table Customer
  add email varchar(10);
   alter table Customer
      alter column email varchar(45);
      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)
        Commands completed successfully.
        🕀 🔳 Triggers
                                              Completion time: 2021-02-19T14:40:15.9388972+05:30
```

DELETE:

```
Connect • ♥ ×♥ ■ ▼ ♂ →
                                                 □use Hotel;
■ localhost (SQL Server 15.0.2000.5 - SAI-GANESH\ganes)

    □ ■ Databases

  ∃alter table Customer
                                                   add email varchar(10);
   ⊟ ■ Hotel
      Database Diagrams
     ☐ ■ Tables
                                                malter table Customer
      alter column email varchar(45);
       ⊟alter table Customer

    □ ■ Columns

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

■ Roomnumber (varchar(45), not null)

    ■ phonenumber (varchar(45), not null)

                                            165 % + 4
        ⊞ ≡ Keys
        ⊞ ■ Constraints
                                               Commands completed successfully.

    ■ Triggers

        ⊞ ■ Indexes
                                                Completion time: 2021-02-19T14:46:27.3283846+05:30
         T Statistics
```

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

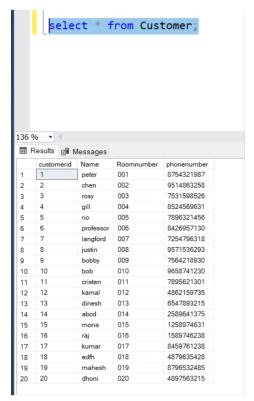
METHOD 1:

```
□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');
```

METHOD 2:

```
insert into Customer
 values (11, 'cristen', '011', '7895621301');
insert into Customer
 values (12, 'kamal', '012', '4862159735');
insert into Customer
 values (13, 'dinesh', '013', '6547893215');
insert into Customer
 values (14, 'abcd', '014', '2589641375');
insert into Customer
 values (15, 'mona', '015', '1258974631');
insert into Customer
 values (16, 'raj', '016', '1589746238');
insert into Customer
 values (17, 'kumar', '017', '8459761238');
insert into Customer
 values (18, 'edfh', '018', '4879635428');
insert into Customer
 values (19, 'mahesh', '019', '8796532485');
insert into Customer
values (20, 'dhoni', '020', '4897563215');
```

OUTPUT:



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

PRIMARY KEY: ∃use Hotel; insert into Customer(customerid, Name, Roomnumber, phonenumber) values (1, 'steve', '51', '9876543210'); lessages Msg 2627, Level 14, State 1, Line 3 Violation of PRIMARY KEY constraint 'PK_Customer_B61ED7F594288BA1'. Cannot insert duplicate key in object 'dbo.Customer'. The duplicate key value The statement has been terminated. Completion time: 2021-02-19T15:44:49.1809528+05:30 NOT NULL: /* null key voilation */ insert into Customer(customerid, Name, Roomnumber, phonenumber) values (22, null, '150', '8796541230'); select * from Customer; % • Msg 515, Level 16, State 2, Line 7 Cannot insert the value NULL into column 'Name', table 'Hotel.dbo.Customer'; column does not allow nulls. INSERT fails. The statement has been terminated. Completion time: 2021-02-19T15:53:43.3520069+05:30

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

```
☐ use Hotel;
☐ insert into Receptionist
values (1, 'kidinesh', '9654178235', 1, null);

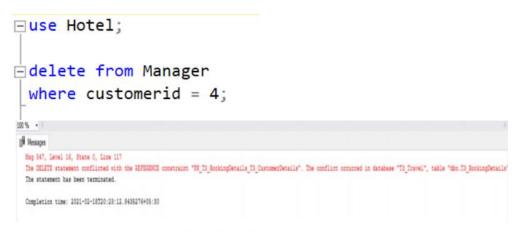
[ select * from Manager;

Messages

Mag 547, Level 16, State 0, Line 3
The INSERT statement conflicted with the FOREIGN REY constraint "FK_Reception_roomi_403A8C7D". The conflict occurred in database "Hotel", table 'The statement has been terminated.

Completion time: 2021-02-19T16:38:35.4984113+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.



The deletion is giving an error as it violates referential integrity constraint. First, we need to delete the corresponding tuple from the dependent table and then the base table.

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

```
use Hotel;

update Customer

set Name = 'kidnesh'

where customerid = 30

Messages

(0 rows affected)

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

7.) Add a column which has default value.