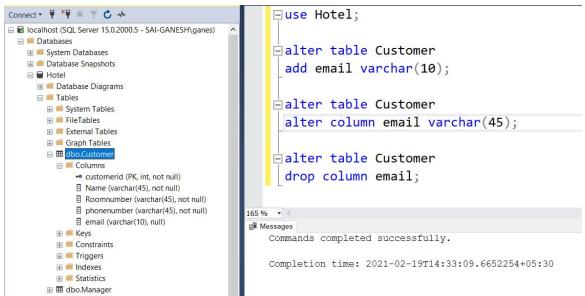# DBMS LAB ASSIGNEMT

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

Add:

Modify:

Delete:

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

```sql
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');
```

```sql
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:

```
select * from Customer;
```

136 %

Results | Messages

	customerid	Name	Roomnumber	phonenumber
1	1	peter	001	8754321987
2	2	chen	002	9514863258
3	3	rosy	003	7531598526
4	4	gill	004	8524569631
5	5	rio	005	7896321456
6	6	professor	006	8426957130
7	7	langford	007	7254796318
8	8	justin	008	9571536293
9	9	bobby	009	7564218930
10	10	bob	010	9658741230
11	11	cristen	011	7895621301
12	12	kamal	012	4862159735
13	13	dinesh	013	6547893215
14	14	abcd	014	2589641375
15	15	mona	015	1258974631
16	16	raj	016	1589746238
17	17	kumar	017	8459761238
18	18	edfh	018	4879635428
19	19	mahesh	019	8796532485
20	20	dhoni	020	4897563215

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

Primary key violation:

```
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

Null key violation:

```
/* null key voilation */
insert into Customer(customerid, Name, Roomnumber, phonenumber)
values (22, null, '150', '8796541230');

select * from Customer;
```

Messages
```
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
```
Msg 547, Level 16, State 0, Line 3
The INSERT statement conflicted with the FOREIGN KEY 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.

```
use Hotel;

delete from Stock where stockid = 2;
select * from Stock;
```

Results | Messages
```
Msg 547, Level 16, State 0, Line 3
The DELETE statement conflicted with the REFERENCE constraint "FK__Room__stockid__38996AB5". The conflict occurred in database "Hotel",
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.

```
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.

```
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;
```

% ▾ ◄

Results | Messages

customerid	Name	Roomnumber	phonenumber	email
21	bobby	021	7896541230	test@gmail.com

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

```
use Hotel;

select * from Stock;
select * from Room where stockid = 1;
select roomid, customerid from Receptionist where Name = 'priya';
select Name, customerid from Manager;
select * from Customer
where customerid in (select customerid from Manager where Name = 'daniel');
```
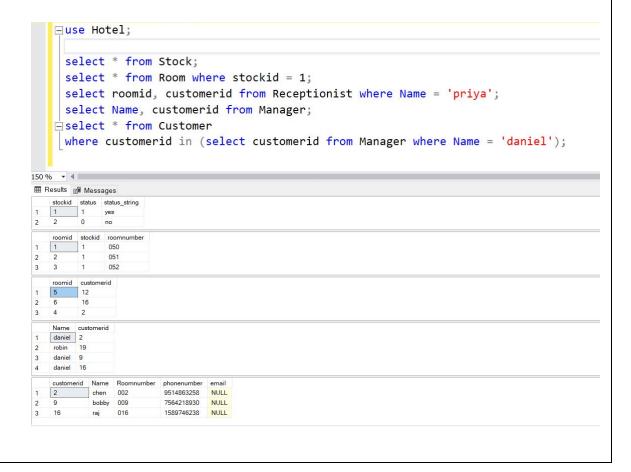
150 % ▾ ◄

Results | Messages

	stockid	status	status_string
1	1	1	yes
2	2	0	no

	roomid	stockid	roomnumber
1	1	1	050
2	2	1	051
3	3	1	052

	roomid	customerid
1	5	12
2	6	16
3	4	2

	Name	customerid
1	daniel	2
2	robin	19
3	daniel	9
4	daniel	16

	customerid	Name	Roomnumber	phonenumber	email
1	2	chen	002	9514863258	NULL
2	9	bobby	009	7564218930	NULL
3	16	raj	016	1589746238	NULL

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.

```sql
use Hotel;

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

150 %

Messages

(0 rows affected)

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