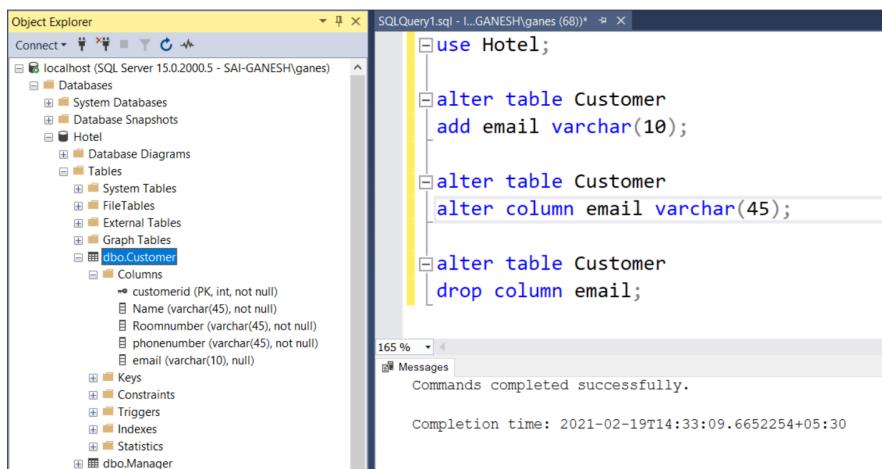


DBMS LAB ASSIGNMENT

NAME: KOTHAPALLI DINESH
REG.: 19BCS060

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

ADD:



```
use Hotel;

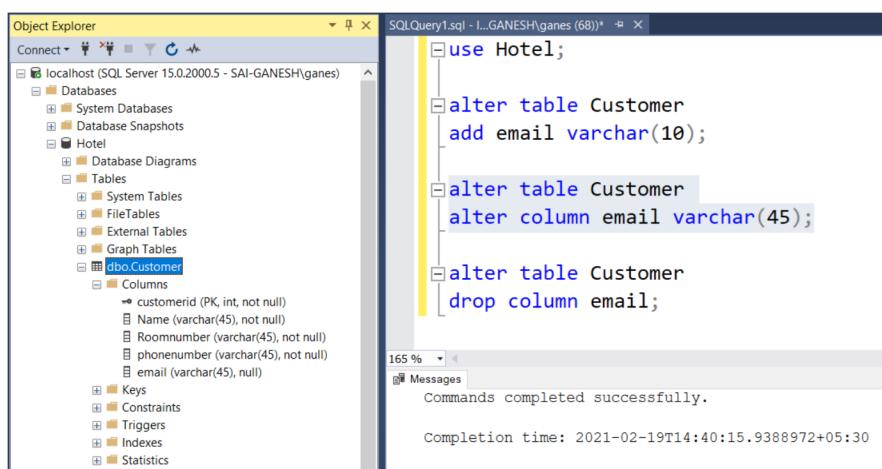
alter table Customer
add email varchar(10);

alter table Customer
alter column email varchar(45);

alter table Customer
drop column email;
```

Commands completed successfully.
Completion time: 2021-02-19T14:33:09.6652254+05:30

MODIFY :



```
use Hotel;

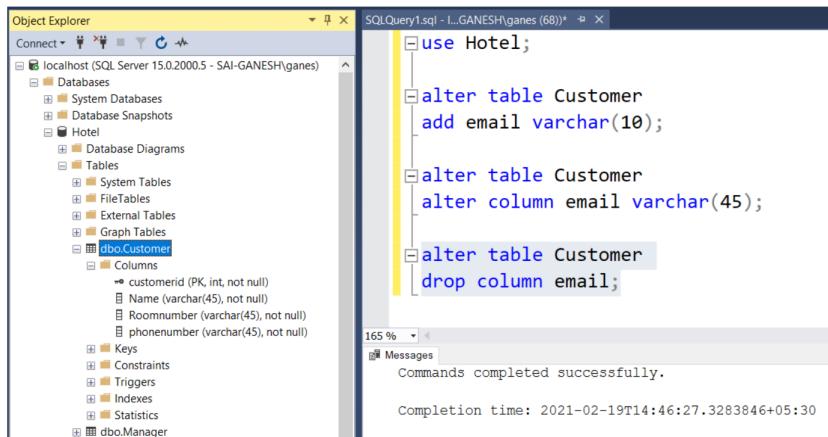
alter table Customer
add email varchar(10);

alter table Customer
alter column email varchar(45);

alter table Customer
drop column email;
```

Commands completed successfully.
Completion time: 2021-02-19T14:40:15.9388972+05:30

DELETE :



The screenshot shows the SSMS interface. On the left, the Object Explorer tree shows the database structure under 'localhost (SQL Server 15.0.2000.5 - SAI-GANESH\ganes)'. Under the 'Tables' node, 'dbo.Customer' is selected. On the right, the 'SQLQuery1.sql' window contains the following T-SQL code:

```
use Hotel;

alter table Customer
add email varchar(10);

alter table Customer
alter column email varchar(45);

alter table Customer
drop column email;
```

The 'Messages' pane at the bottom right shows the message "Commands completed successfully." and the completion time: 2021-02-19T14:46:27.3283846+05:30.

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

METHOD 1 :

```
use Hotel;

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

The screenshot shows a SQL query window with a yellow vertical bar on the left. In the top input field, the query `select * from Customer` is typed. Below it, the results pane displays a table titled "Results" with 20 rows of data. The columns are labeled: customerid, Name, Roomnumber, and phononenumber. The data is as follows:

	customerid	Name	Roomnumber	phonenumbers
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 :

```
use Hotel;
insert into Customer(customerid, Name, Roomnumber, phonenumbers)
values (1, 'steve', '51', '9876543210');
```

```
6 ▾
Messages
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 violation */
insert into Customer(customerid, Name, Roomnumber, phonenumbers)
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 'Manager'.
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 Manager
where customerid = 4;
```

```
100 % ▾
Messages
Msg 547, Level 16, State 0, Line 117
The DELETE statement conflicted with the REFERENCE constraint "FK_T3_BookingDetails_T3_CustomerDetails". The conflict occurred in database "T3_Travel", table "dbo.T3_BookingDetails".
The statement has been terminated.

Completion time: 2021-02-18T20:23:12.8435176+05:30
```

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.

```
use Hotel;
alter table Customer
add email varchar(45) default 'test@gmail.com';
insert into Customer(customerid, Name, Roomnumber, phonenumbers)
values (21, 'bobby', '021', '7896541230');
select * from Customer where customerid = 21;
```

```
% ▾
Results Messages
customerid Name Roomnumber phonenumbers email
21 bobby 021 7896541230 test@gmail.com
```

