

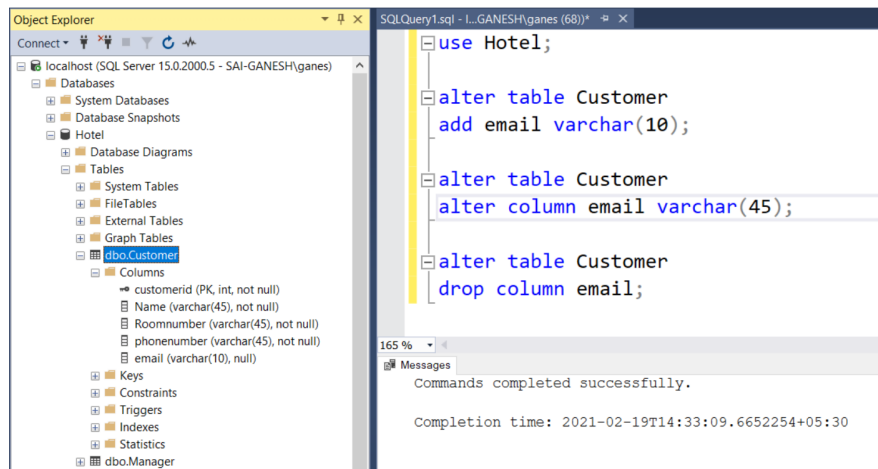
DBMS LAB ASSIGNMENT

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

ADD:

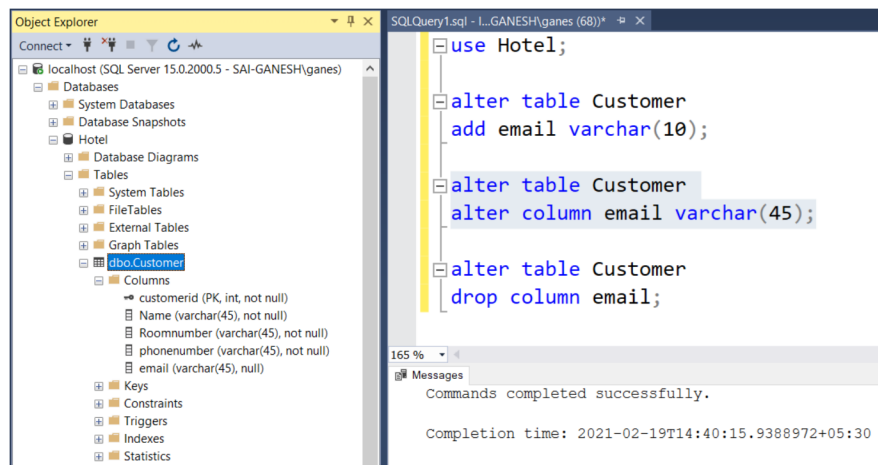


The screenshot shows the SQL Server Enterprise Manager interface. On the left, the 'Object Explorer' pane displays the 'Hotel' database structure, including tables, columns, and constraints. The 'Columns' list for the 'Customer' table is expanded, showing 'customerid (PK, int, not null)', 'Name (varchar(45), not null)', 'Roomnumber (varchar(45), not null)', 'phonenumber (varchar(45), not null)', and 'email (varchar(10), null)'. The 'Messages' pane at the bottom shows the execution of the following SQL commands:

```
use Hotel;  
alter table Customer  
add email varchar(10);  
alter table Customer  
alter column email varchar(45);  
alter table Customer  
drop column email;
```

The completion time is 2021-02-19T14:33:09.6652254+05:30.

MODIFY :

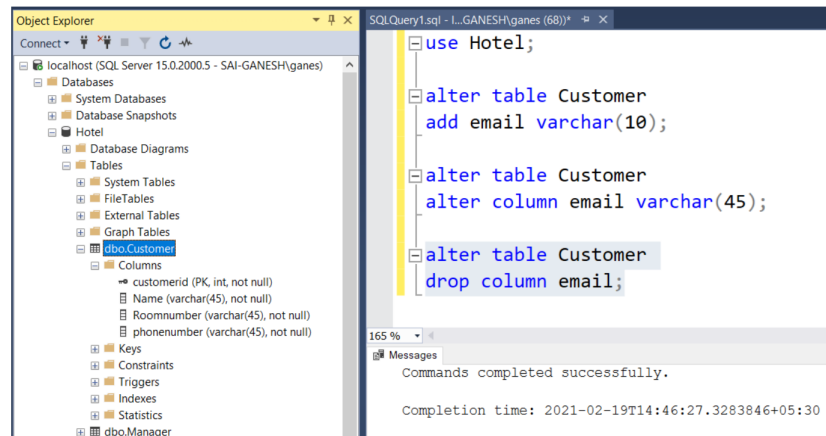


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alter table Customer  
add email varchar(10);  
alter table Customer  
alter column email varchar(45);  
alter table Customer  
drop column email;
```

The completion time is 2021-02-19T14:40:15.9388972+05:30.

DELETE :



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 :

```
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 :

```
use Hotel;

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

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 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 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: 2021-02-18T20:23:12.8435276+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, 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

