

# DBMS Lab Assignment-3

**Name:- M.Sai Chaitra**

**Roll No. :-19BCS065.**

**Database:- Travel Agency**

## 1. Add, Modify and Delete Column using Alter Command

**Query:-**

```
USE T10_Travel;
```

```
SELECT *FROM T10_customerdetailsNEW;
```

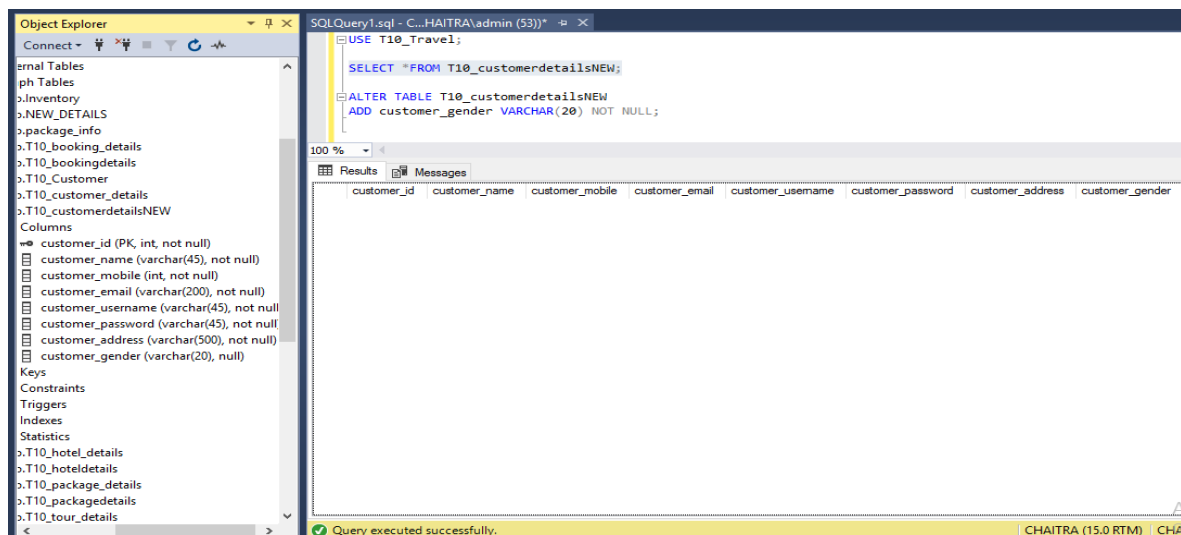
```
ALTER TABLE T10_customerdetailsNEW  
ADD customer_gender VARCHAR(20) NOT NULL;
```

```
ALTER TABLE T10_customerdetailsNEW  
ALTER COLUMN customer_gender VARCHAR(80) NOT NULL;
```

```
ALTER TABLE T10_customerdetailsNEW  
DROP COLUMN customer_gender;
```

**Output:-**

**Added customer\_gender column**



## Modified customer\_gender column

The screenshot shows the SQL Server Enterprise Manager interface. On the left, the Object Explorer displays the database structure for 'T10\_Travel'. The 'Columns' folder is expanded, showing the 'customer\_gender' column with a data type of 'varchar(80), not null'. The main pane displays the SQL query editor with the following commands:

```
ALTER TABLE T10_customerdetailsNEW
ADD customer_gender VARCHAR(20) NOT NULL;

ALTER TABLE T10_customerdetailsNEW
ALTER COLUMN customer_gender VARCHAR(80) NOT NULL;
```

The Messages pane at the bottom shows the execution results:

```
Commands completed successfully.

Completion time: 2021-02-19T14:41:14.8007147+05:30
```

A status bar at the bottom indicates 'Query executed successfully.'

## Deleted customer\_gender column

The screenshot shows the SQL Server Enterprise Manager interface. On the left, the Object Explorer displays the database structure for 'T10\_Travel'. The 'Columns' folder is expanded, showing the 'customer\_gender' column with a data type of 'varchar(80), not null'. The main pane displays the SQL query editor with the following commands:

```
USE T10_Travel;

SELECT * FROM T10_customerdetailsNEW;

ALTER TABLE T10_customerdetailsNEW
ADD customer_gender VARCHAR(20) NOT NULL;

ALTER TABLE T10_customerdetailsNEW
ALTER COLUMN customer_gender VARCHAR(80) NOT NULL;

ALTER TABLE T10_customerdetailsNEW
DROP COLUMN customer_gender;
```

The Results pane shows the output of the SELECT statement, displaying columns: customer\_id, customer\_name, customer\_mobile, customer\_email, customer\_username, customer\_password, and customer\_address. The Messages pane at the bottom shows the execution results:

```
Commands completed successfully.

Completion time: 2021-02-19T14:41:14.8007147+05:30
```

A status bar at the bottom indicates 'Query executed successfully.'

## 2. Insert 20 Employees Data into all the tables. Use all the 3 methods .

### Query:-

/\*1.insert into using select 2.insert into all values directly 3.insert into parameters\*/

USE T10\_Travel

INSERT INTO T10\_customerdetailsNEW

VALUES('001','CHAITRA','82096','chaitra@gmail.com','msaichaitra','little','kadapa');

USE T10\_TRAVEL

SELECT \*FROM T10\_customerdetailsNEW

INSERT INTO

T10\_customerdetailsNEW(customer\_id,customer\_name,customer\_mobile,customer\_email,customer\_username,customer\_password,customer\_address)

(SELECT

customer\_id,customer\_name,customer\_mobile,customer\_email,customer\_username,customer\_password,customer\_address FROM T10\_TRAVEL.dbo.T10\_customerdetailsNEW WHERE customer\_id= 001 );

INSERT INTO T10\_customerdetailsNEW

VALUES('002','CHAITRA','80825','chaitra','chaitrareddy','msaichaitra','kadapa');

INSERT INTO T10\_customerdetailsNEW

VALUES('003','MANASA','9127','manasa','hello','hopefullife','kovur');

INSERT INTO T10\_customerdetailsNEW

VALUES('004','RITHIKA','989787','rithika','myself','creativeme','maduria');

INSERT INTO T10\_customerdetailsNEW

VALUES('005','ROJA','85674','roja','newstart','newroja','ongole');

INSERT INTO T10\_customerdetailsNEW

VALUES('006','DEEPTI','8083','deepti','life','rightdeepti','belgum');

INSERT INTO T10\_customerdetailsNEW

VALUES('007','AMRUTHA','8082','amrutha','takerest','meamrutha','vizag');

INSERT INTO T10\_customerdetailsNEW

(customer\_id,customer\_name,customer\_mobile,customer\_email,customer\_username,customer\_password,customer\_address)

VALUES('018','SIRI','86674','rushy','newstar','newsiri','ongol');

INSERT INTO T10\_customerdetailsNEW

(customer\_id,customer\_name,customer\_mobile,customer\_email,customer\_username,customer\_password,customer\_address)

VALUES('019','SEEMA','87774','sushma','freshlife','newseema','palem');

INSERT INTO T10\_customerdetailsNEW

(customer\_id,customer\_name,customer\_mobile,customer\_email,customer\_username,customer\_password,customer\_address)

VALUES('020','VAISHNAVI','89874','aisha','freshstart','newvaish','banglore');

INSERT INTO T10\_customerdetailsNEW

(customer\_id,customer\_name,customer\_mobile,customer\_email,customer\_username,customer\_password,customer\_address)

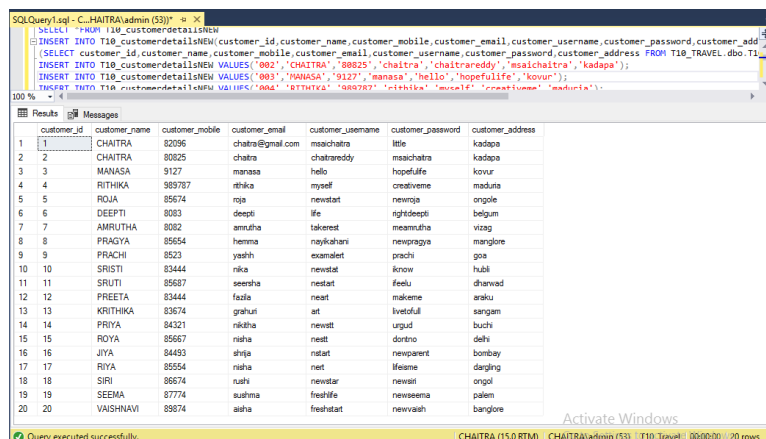
VALUES('008','PRAGYA','85654','hemma','nayikahani','newpragya','manglore');

```

INSERT INTO T10_customerdetailsNEW
(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('009','PRACHI','8523','yashh','examalert','prachi','goa');
INSERT INTO T10_customerdetailsNEW
(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('010','SRISTI','83444','nika','newstat','iknow','hubli');
INSERT INTO T10_customerdetailsNEW
(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('011','SRUTI','85687','seersha','nstart','ifeelu','dharwad');
INSERT INTO T10_customerdetailsNEW
(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('012','PREETA','83444','fazila','neart','makeme','araku');
INSERT INTO T10_customerdetailsNEW
(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('013','KRITHIKA','83674','grahuri','art','livetofull','sangam');
INSERT INTO T10_customerdetailsNEW
(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('014','PRIYA','84321','nikitha','newstt','urgud','buchi');
INSERT INTO T10_customerdetailsNEW
(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('015','ROYA','85667','nisha','nestt','dontno','delhi');
INSERT INTO T10_customerdetailsNEW
(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('016','JIYA','84493','shrija','nstart','newparent','bombay');
INSERT INTO T10_customerdetailsNEW
(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('017','RIYA','85554','nisha','nert','lifeisme','dargling');

```

Output:-



The screenshot shows a SQL Server query window with the following SQL code:

```

SELECT * FROM T10_customerdetailsNEW
INSERT INTO T10_customerdetailsNEW(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('009','PRACHI','8523','yashh','examalert','prachi','goa');
INSERT INTO T10_customerdetailsNEW(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('010','SRISTI','83444','nika','newstat','iknow','hubli');
INSERT INTO T10_customerdetailsNEW(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('011','SRUTI','85687','seersha','nstart','ifeelu','dharwad');
INSERT INTO T10_customerdetailsNEW(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('012','PREETA','83444','fazila','neart','makeme','araku');
INSERT INTO T10_customerdetailsNEW(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('013','KRITHIKA','83674','grahuri','art','livetofull','sangam');
INSERT INTO T10_customerdetailsNEW(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('014','PRIYA','84321','nikitha','newstt','urgud','buchi');
INSERT INTO T10_customerdetailsNEW(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('015','ROYA','85667','nisha','nestt','dontno','delhi');
INSERT INTO T10_customerdetailsNEW(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('016','JIYA','84493','shrija','nstart','newparent','bombay');
INSERT INTO T10_customerdetailsNEW(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
VALUES('017','RIYA','85554','nisha','nert','lifeisme','dargling');

```

The query executed successfully, and the results are displayed in a table with 20 rows and 6 columns:

| customer_id | customer_name | customer_mobile | customer_email    | customer_username | customer_password | customer_address |
|-------------|---------------|-----------------|-------------------|-------------------|-------------------|------------------|
| 1           | CHAITRA       | 82096           | chaitra@gmail.com | msachaitra        | little            | kadapa           |
| 2           | CHAITRA       | 80825           | chaitra           | chaitrareddy      | msachaitra        | kadapa           |
| 3           | MANASA        | 9127            | manasa            | hello             | hopefullife       | kovur            |
| 4           | RITHIKA       | 869787          | rthika            | myself            | creatveme         | maduna           |
| 5           | ROJA          | 85674           | roja              | nstart            | newmpa            | ongole           |
| 6           | DEEPTI        | 8083            | deepti            | life              | rightdeepti       | belgum           |
| 7           | AMRUTHA       | 8082            | amrutha           | takereast         | meamrutha         | vizag            |
| 8           | PRAGYA        | 85654           | hemma             | nayikahani        | newpragya         | manglore         |
| 9           | PRACHI        | 8523            | yashh             | examalert         | prachi            | goa              |
| 10          | SRISTI        | 83444           | nika              | newstat           | know              | hubli            |
| 11          | SRUTI         | 85687           | seersha           | nstart            | feelu             | dharwad          |
| 12          | PREETA        | 83444           | fazila            | neart             | makeme            | araku            |
| 13          | KRITHIKA      | 83674           | grahuri           | art               | livetofull        | sangam           |
| 14          | PRIYA         | 84321           | nikitha           | newstt            | urgud             | buchi            |
| 15          | ROYA          | 85667           | nisha             | nestt             | dontno            | delhi            |
| 16          | JIYA          | 84493           | shrija            | nstart            | newparent         | bombay           |
| 17          | RIYA          | 85554           | nisha             | nert              | lifeisme          | dargling         |
| 18          | SIRI          | 86674           | rutha             | newstar           | newasi            | ongol            |
| 19          | SEEMA         | 87774           | sathma            | freshlife         | newseema          | palem            |
| 20          | VAISHNAVI     | 89674           | aisha             | freshstart        | newvaish          | banglore         |

Query executed successfully. CHAITRA (15.0 RTM) CHAITRA\admin (53) T10\_Travel 00:00:20 : 20 rows

### 3. Show Violation of Primary Key, Unique Not Null and default key constraints through insertion.

Query:-

```
/*violation of primary key constraint*/
```

```
INSERT INTO
```

```
T10_customerdetailsNEW(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
```

```
VALUES(001,'CHAITRA','82096','chaitra@gmail.com','msaichaitra','little','kadapa');
```

```
/*violation of not null constraint*/
```

```
INSERT INTO
```

```
T10_customerdetailsNEW(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
```

```
VALUES(004,'CHAITRA',NULL,'chaitra','msaichaitra','little','kadapa');
```

```
/*Violation of default constraint*/
```

```
ALTER TABLE dbo.T10_customerdetailsNEW
```

```
ADD CONSTRAINT df_customer_name
```

```
DEFAULT '87997' FOR customer_name;
```

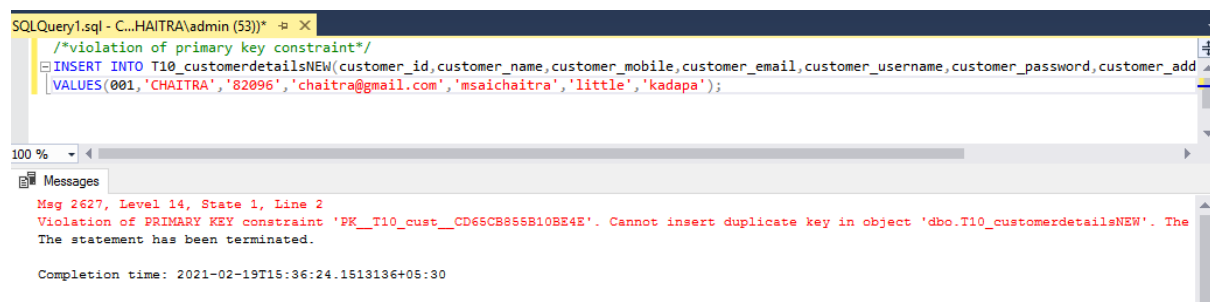
```
INSERT INTO T10_customerdetailsNEW
```

```
(customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_address)
```

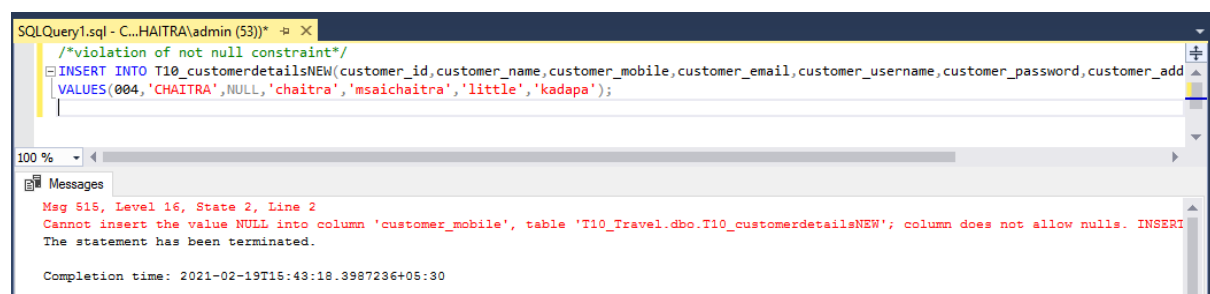
```
VALUES(103,'RAGHU',23333,'harsh','rishi','raghuriss','kolkata')
```

Output:-

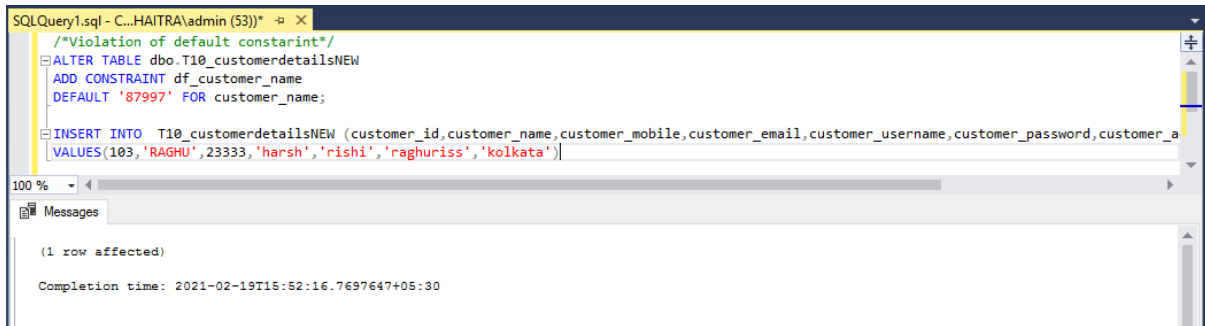
### Primary key violation



### Not null violation



## Default constraint



```
SQLQuery1.sql - C:\HAITRA\admin (53)*
/*Violation of default constarint*/
ALTER TABLE dbo.T10_customerdetailsNEW
ADD CONSTRAINT df_customer_name
DEFAULT '87997' FOR customer_name;

INSERT INTO T10_customerdetailsNEW (customer_id,customer_name,customer_mobile,customer_email,customer_username,customer_password,customer_a
VALUES(103,'RAGHU',23333,'harsh','rishi','raghuriss','kolkata')

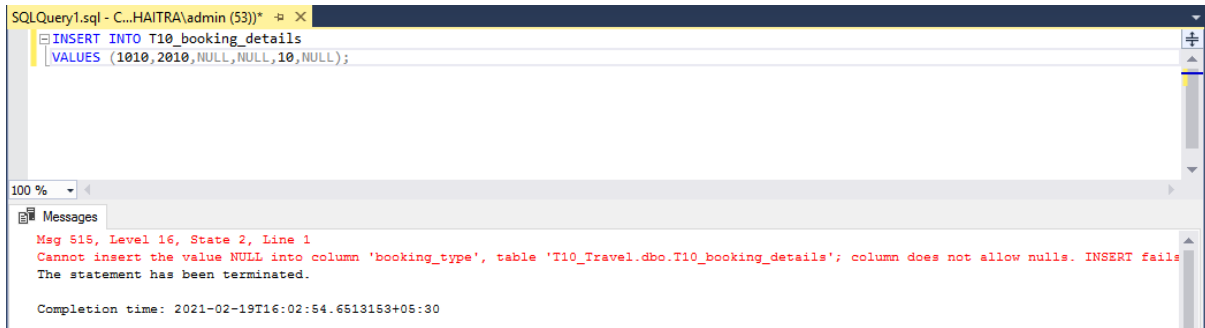
100 %
Messages
(1 row affected)
Completion time: 2021-02-19T15:52:16.7697647+05:30
```

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

Query:-

```
INSERT INTO T10_booking_details
VALUES (1010,2010,NULL,NULL,10,NULL);
```

Output:-



```
SQLQuery1.sql - C:\HAITRA\admin (53)*
INSERT INTO T10_booking_details
VALUES (1010,2010,NULL,NULL,10,NULL);

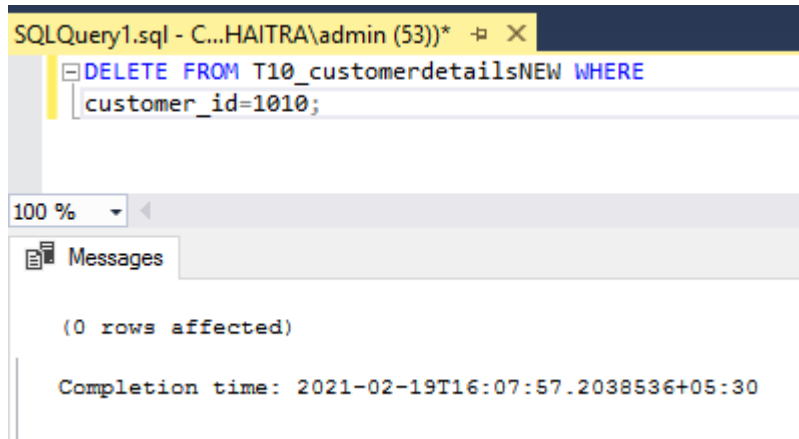
100 %
Messages
Msg 515, Level 16, State 2, Line 1
Cannot insert the value NULL into column 'booking_type', table 'T10_Travel.dbo.T10_booking_details'; column does not allow nulls. INSERT failed.
The statement has been terminated.
Completion time: 2021-02-19T16:02:54.6513153+05:30
```

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.

Query:-

```
DELETE FROM T10_customerdetailsNEW WHERE
customer_id=1010;
```

Output:-



The screenshot shows a SQL query window titled 'SQLQuery1.sql - C...\HAITRA\admin (53))\*'. The query is 'DELETE FROM T10\_customerdetailsNEW WHERE customer\_id=1010;'. Below the query, the 'Messages' pane shows '(0 rows affected)' and 'Completion time: 2021-02-19T16:07:57.2038536+05:30'.

```
SQLQuery1.sql - C...\HAITRA\admin (53))*
DELETE FROM T10_customerdetailsNEW WHERE
customer_id=1010;

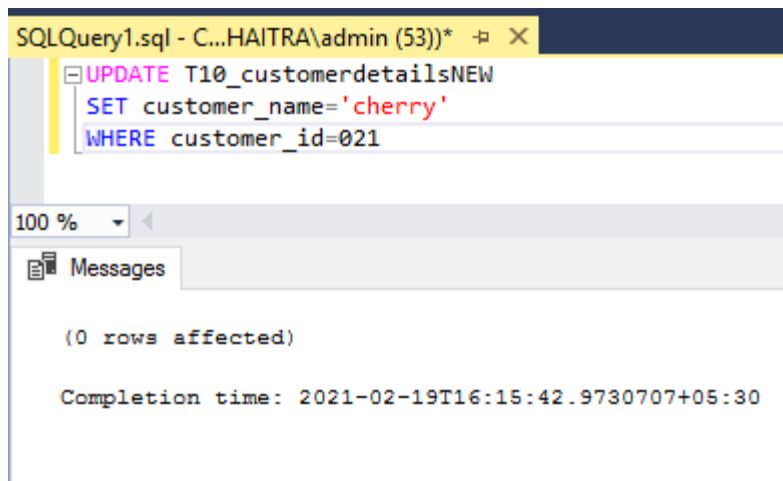
100 %
Messages
(0 rows affected)
Completion time: 2021-02-19T16:07:57.2038536+05:30
```

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

Query:-

```
UPDATE T10_customerdetailsNEW
SET customer_name='cherry'
WHERE customer_id=021
```

Output:-



The screenshot shows a SQL query window titled 'SQLQuery1.sql - C...\HAITRA\admin (53))\*'. The query is 'UPDATE T10\_customerdetailsNEW SET customer\_name='cherry' WHERE customer\_id=021'. Below the query, the 'Messages' pane shows '(0 rows affected)' and 'Completion time: 2021-02-19T16:15:42.9730707+05:30'.

```
SQLQuery1.sql - C...\HAITRA\admin (53))*
UPDATE T10_customerdetailsNEW
SET customer_name='cherry'
WHERE customer_id=021

100 %
Messages
(0 rows affected)
Completion time: 2021-02-19T16:15:42.9730707+05:30
```

7. Add a column which has default value.

Query:-

```
SELECT *FROM T10_customerdetailsNEW

ALTER TABLE T10_customerdetailsNEW
ADD customer_final VARCHAR(45) DEFAULT 'NULL'
```

```
INSERT INTO T10_customerdetailsNEW
VALUES('1','CHAITRA','82096','chaitra@gmail.com', 'msaichaitra','little','kadapa',NULL)
```

Output:-

The screenshot shows a SQL query window with the following text:

```
SELECT *FROM T10_customerdetailsNEW
ALTER TABLE T10_customerdetailsNEW
ADD customer_final VARCHAR(45) DEFAULT 'NULL'
INSERT INTO T10_customerdetailsNEW
VALUES('1','CHAITRA','82096','chaitra@gmail.com', 'msaichaitra','little','kadapa',NULL)
```

Below the query window, the 'Results' tab is selected, displaying a table with 8 columns and 1 row of data:

|   | customer_id | customer_name | customer_mobile | customer_email    | customer_username | customer_password | customer_address | customer_final |
|---|-------------|---------------|-----------------|-------------------|-------------------|-------------------|------------------|----------------|
| 1 | 1           | CHAITRA       | 82096           | chaitra@gmail.com | msaichaitra       | little            | kadapa           | NULL           |

8. Five (5) Simple Select queries to retrieve data from your database.

Query:-

```
SELECT customer_name FROM T10_customerdetailsNEW
SELECT customer_name FROM T10_customerdetailsNEW WHERE customer_id = 001
SELECT *FROM T10_customerdetailsNEW
Select * from T10_customerdetailsNEW
where customer_id in (Select customer_id from T10_customerdetailsNEW where
customer_id = 002);

SELECT TOP 5*FROM T10_customerdetailsNEW
```

Output:-

The screenshot shows a SQL query window with the following text:

```
SELECT customer_name FROM T10_customerdetailsNEW
```

Below the query window, the 'Results' tab is selected, displaying a list of customer names:

|    | customer_name |
|----|---------------|
| 1  | CHAITRA       |
| 2  | CHAITRA       |
| 3  | MANASA        |
| 4  | RITHIKA       |
| 5  | ROJA          |
| 6  | DEEPTI        |
| 7  | AMRUTHA       |
| 8  | PRAGYA        |
| 9  | PRACHI        |
| 10 | SRISTI        |
| 11 | SRUTI         |
| 12 | PREETA        |
| 13 | KRITHIKA      |
| 14 | PRIYA         |
| 15 | ROYA          |
| 16 | JIYA          |
| 17 | RIYA          |
| 18 | SIRI          |
| 19 | SEEMA         |
| 20 | VAISHNAVI     |
| 21 | RAGHU         |

At the bottom of the window, a status bar indicates: "Query executed successfully."



SQLQuery1.sql - C...\HAITRA\admin (53))\*

```
SELECT customer_name FROM T10_customerdetailsNEW
WHERE customer_id = 001
```

100 %

Results Messages

|   | customer_name |
|---|---------------|
| 1 | CHAITRA       |

SQLQuery1.sql - C...\HAITRA\admin (53))\*

```
SELECT *FROM T10_customerdetailsNEW
```

100 %

Results Messages

|    | customer_id | customer_name | customer_mobile | customer_email    | customer_username | customer_password | customer_address | customer_final |
|----|-------------|---------------|-----------------|-------------------|-------------------|-------------------|------------------|----------------|
| 1  | 1           | CHAITRA       | 82096           | chaitra@gmail.com | msaichaitra       | little            | kadapa           | NULL           |
| 2  | 2           | CHAITRA       | 80825           | chaitra           | chaitraredy       | msaichaitra       | kadapa           | NULL           |
| 3  | 3           | MANASA        | 9127            | manasa            | hello             | hopefulife        | kovur            | NULL           |
| 4  | 4           | RITHIKA       | 989787          | rithika           | myself            | creativeme        | maduria          | NULL           |
| 5  | 5           | ROJA          | 85674           | roja              | newstart          | newroja           | ongole           | NULL           |
| 6  | 6           | DEEPTI        | 8083            | deepti            | life              | rightdeepti       | belgum           | NULL           |
| 7  | 7           | AMRUTHA       | 8082            | amrutha           | takerest          | meamrutha         | vizag            | NULL           |
| 8  | 8           | PRAGYA        | 85654           | hemma             | nayikahani        | newpragya         | manglore         | NULL           |
| 9  | 9           | PRACHI        | 8523            | yashh             | examalet          | prachi            | goa              | NULL           |
| 10 | 10          | SRISTI        | 83444           | nika              | newstat           | iknow             | hubli            | NULL           |
| 11 | 11          | SRUTI         | 85687           | seersha           | nestart           | ifeelu            | dhanwad          | NULL           |
| 12 | 12          | PREETA        | 83444           | fazila            | neart             | makeme            | araku            | NULL           |
| 13 | 13          | KRITHIKA      | 83674           | grahuri           | art               | livetofull        | sangam           | NULL           |
| 14 | 14          | PRIYA         | 84321           | nikitha           | newstt            | urgud             | buchi            | NULL           |
| 15 | 15          | ROYA          | 85667           | nisha             | nestt             | dontno            | delhi            | NULL           |
| 16 | 16          | JIYA          | 84493           | shrija            | nstart            | newparent         | bombay           | NULL           |
| 17 | 17          | RIYA          | 85554           | nisha             | ner               | lifeisme          | dargling         | NULL           |
| 18 | 18          | SIRI          | 86674           | rushi             | newstar           | newsiri           | ongol            | NULL           |
| 19 | 19          | SEEMA         | 87774           | sushma            | freshlife         | newseema          | palem            | NULL           |
| 20 | 20          | VAISHNAVI     | 89874           | aisha             | freshstart        | newvaish          | banglore         | NULL           |
| 21 | 103         | RAGHU         | 23333           | harsh             | rishi             | raghuriss         | kolkata          | NULL           |

Activate Windows

Query executed successfully. CHAITRA (15.0 RTM) CHAITRA\admin (53) T10\_Travel 00:00:00 21 rows

SQLQuery1.sql - C...\HAITRA\admin (53))\*

```
Select * from T10_customerdetailsNEW
where customer_id in (Select customer_id from T10_customerdetailsNEW where customer_id = 002);
```

100 %

Results Messages

|   | customer_id | customer_name | customer_mobile | customer_email | customer_username | customer_password | customer_address | customer_final |
|---|-------------|---------------|-----------------|----------------|-------------------|-------------------|------------------|----------------|
| 1 | 2           | CHAITRA       | 80825           | chaitra        | chaitraredy       | msaichaitra       | kadapa           | NULL           |

SQLQuery1.sql - C...\HAITRA\admin (53))\*

```
SELECT TOP 5*FROM T10_customerdetailsNEW
```

100 %

Results Messages

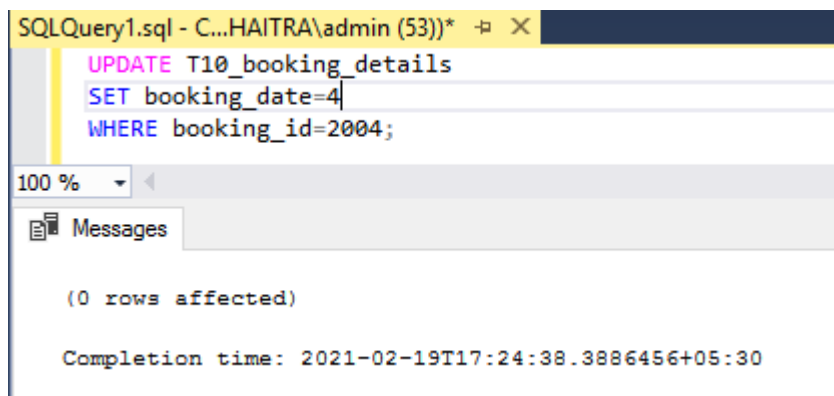
|   | customer_id | customer_name | customer_mobile | customer_email    | customer_username | customer_password | customer_address | customer_final |
|---|-------------|---------------|-----------------|-------------------|-------------------|-------------------|------------------|----------------|
| 1 | 1           | CHAITRA       | 82096           | chaitra@gmail.com | msaichaitra       | little            | kadapa           | NULL           |
| 2 | 2           | CHAITRA       | 80825           | chaitra           | chaitraredy       | msaichaitra       | kadapa           | NULL           |
| 3 | 3           | MANASA        | 9127            | manasa            | hello             | hopefulife        | kovur            | NULL           |
| 4 | 4           | RITHIKA       | 989787          | rithika           | myself            | creativeme        | maduria          | NULL           |
| 5 | 5           | ROJA          | 85674           | roja              | newstart          | newroja           | ongole           | NULL           |

9. Show how Foreign key constraint effects Updating a dependent table when value is not existing and in Base table where the value is referred and you want to update it.

Query:-

```
UPDATE T10_booking_details  
SET booking_date=4  
WHERE booking_id=2004;
```

Output:-



The screenshot shows a SQL query window titled "SQLQuery1.sql - C...HAITRA\admin (53))\*". The query text is:   
`UPDATE T10_booking_details  
SET booking_date=4  
WHERE booking_id=2004;`  
Below the query editor, the "Messages" pane shows the execution result:   
(0 rows affected)  
Completion time: 2021-02-19T17:24:38.3886456+05:30