

LAB ASSIGNMENT 3

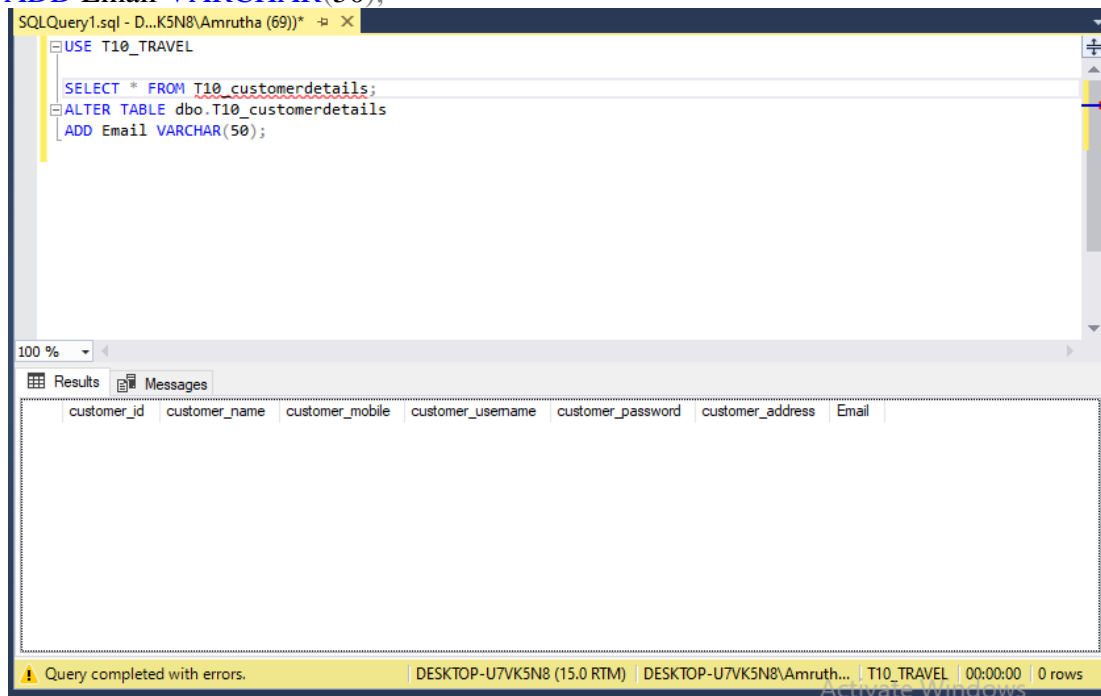
K.V.L.AMRUTHA

19BCS048

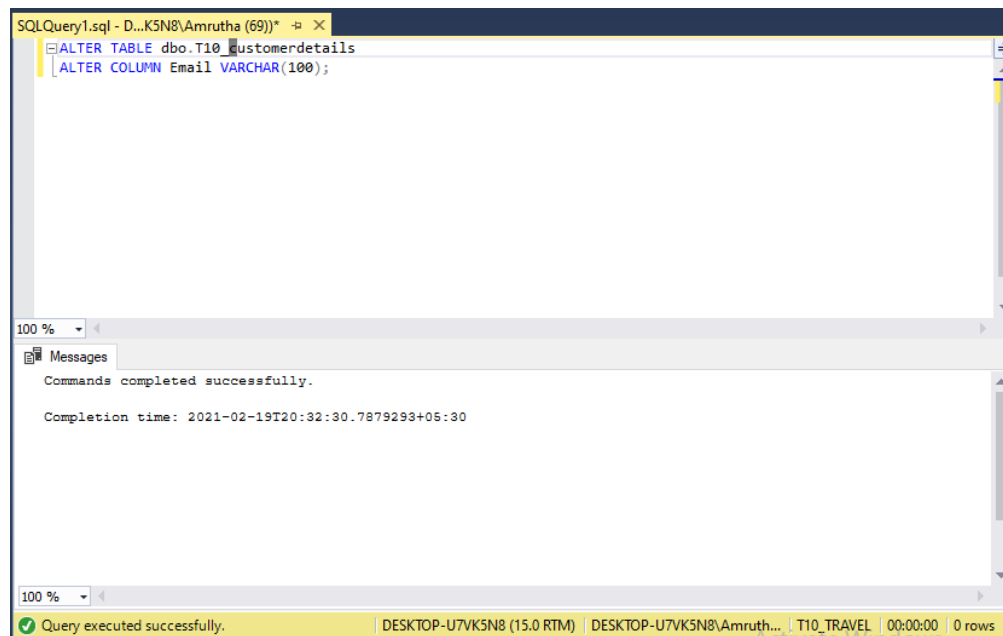
1. Add, Modify and Delete Column using Alter Command

USE T10_TRAVEL

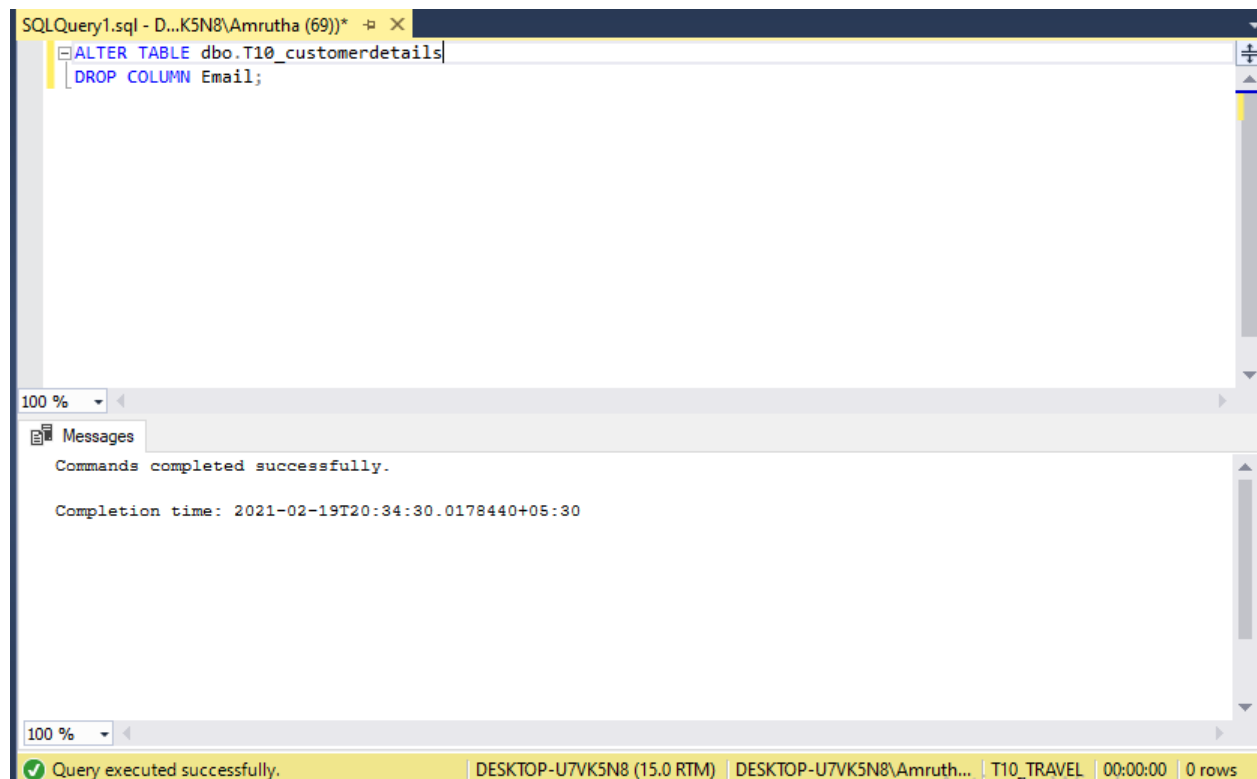
```
SELECT * FROM T10_customerdetails;  
ALTER TABLE dbo.T10_customerdetails  
ADD Email VARCHAR(50);
```



```
ALTER TABLE dbo.T10_customerdetails  
ALTER COLUMN Email VARCHAR(100);
```



`ALTER TABLE` dbo.T10_customerdetails
`DROP COLUMN` Email;



2. Insert 20 Employees Data into all the tables.

```

INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(100,'Amrutha',904517852,'Amrutha100','90451','Mumbai','amrutha@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(101,'Deepti',8549617542,'Deepti101','85496','patna','deepti@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(102,'Ranjolkar',8675142960,'Ranjolkar102','86751','Delhi','ranjokar@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(103,'Chaitra',7548214545,'Chaitra103','75482','Vijayawada','chaitra@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(104,'Ieesha',9638527410,'Ieesha104','96385','Kurnool','ieesha@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(105,'Robin',9548525502,'Robin105','95485','Hyderabad','robin@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(106,'Roja',7542154150,'Roja106','75421','America','roja@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(107,'Keerthi',9635285502,'Keerti107','96352','London','keerti@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(108,'Deepu',9658254110,'Deepu108','96582','Turkey','deepu@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(109,'Vani',9952400123,'Vani109','99240','Goa','vani@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(110,'Sree',8446195232,'Sree110','84461','Kadapa','sree@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(111,'Shruti',9774520899,'Shruti111','97745','Dharwad','shruti@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(112,'Ruthik',9445800012,'Ruthik112','94458','Hubbali','ruthik@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(113,'Karthik',9102486147,'Karthik113','91024','Belgum','karthik@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(114,'Frank',9776211463,'Frank114','97762','Srinagar','frank@gmail.com')

```

```

INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(115,'Bob',7447458100,'Bob115','74474','China','bob@gmail.com')
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email)
VALUES(116,'Rocky',9330014485,'Rocky116','93300','Gujarat','rocky@gmail.com')
INSERT INTO dbo.T10_customerdetails
VALUES(117,'Daniel',7475825035,'Daniel117','74758','Mumbai','daniel@gmail.com')
INSERT INTO dbo.T10_customerdetails
VALUES(118,'Olivia',9658964122,'Oliva118','96589','Mumbai','olivia@gmail.com')
INSERT INTO dbo.T10_customerdetails
VALUES(119,'Mia',9001414121,'Mia119','90014','Mumbai','mia@gmail.com')

```

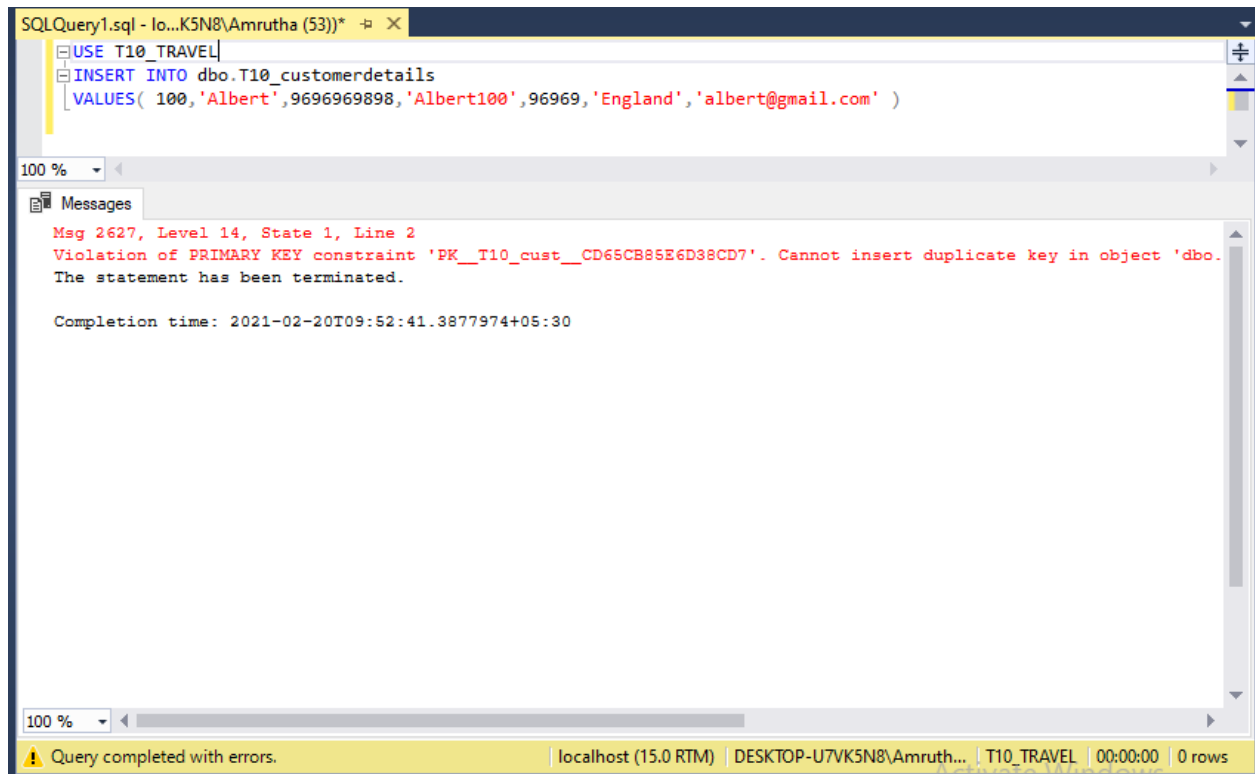
	customer_id	customer_name	customer_mobile	customer_username	customer_password	customer_address	Email
1	100	Amrutha	904517852	Amrutha100	90451	Mumbai	amrutha@gmail.com
2	101	Deepti	8549617542	Deepti101	85496	patna	deepti@gmail.com
3	102	Ranjolkar	8675142960	Ranjolkar102	86751	Delhi	ranjolkar@gmail.com
4	103	Chaitra	7548214545	Chaitra103	75482	Vijayawada	chaitra@gmail.com
5	104	leesha	9638527410	leesha104	96385	Kumool	ieesha@gmail.com
6	105	Robin	9548525502	Robin105	95485	Hyderabad	robin@gmail.com
7	106	Roja	7542154150	Roja106	75421	America	roja@gmail.com
8	107	Keerthi	9635285502	Keerti107	96352	London	keerti@gmail.com
9	108	Deepu	9658254110	Deepu108	96582	Turkey	deepu@gmail.com
10	109	Vani	9952400123	Vani109	99240	Goa	vani@gmail.com
11	110	Sree	8446195232	Sree110	84461	Kadapa	sree@gmail.com
12	111	Shruti	9774520899	Shruti111	97745	Dharwad	shruti@gmail.com
13	112	Ruthik	9445800012	Ruthik112	94458	Hubballi	ruthik@gmail.com
14	113	Karthik	9102486147	Karthik113	91024	Belgum	karthik@gmail.com
15	114	Frank	9776211463	Frank114	97762	Srinagar	frank@gmail.com
16	115	Bob	7447458100	Bob115	74474	China	bob@gmail.com
17	116	Rocky	9330014485	Rocky116	93300	Gujarat	rocky@gmail.com
18	117	Daniel	7475825035	Daniel117	74758	Mumbai	daniel@gmail.com
19	118	Olivia	9658964122	Oliva118	96589	Mumbai	olivia@gmail.com
20	119	Mia	9001414121	Mia119	90014	Mumbai	mia@gmail.com

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

```

USE T10_TRAVEL
INSERT INTO dbo.T10_customerdetails
VALUES( 100,'Albert',9696969898,'Albert100',96969,'England','albert@gmail.com' )

```



The screenshot shows a SQL Server Enterprise Manager window with a query executed. The query is:

```
USE T10_TRAVEL
INSERT INTO dbo.T10_customerdetails
VALUES( 100, 'Albert', 9696969898, 'Albert100', 96969, 'England', 'albert@gmail.com' )
```

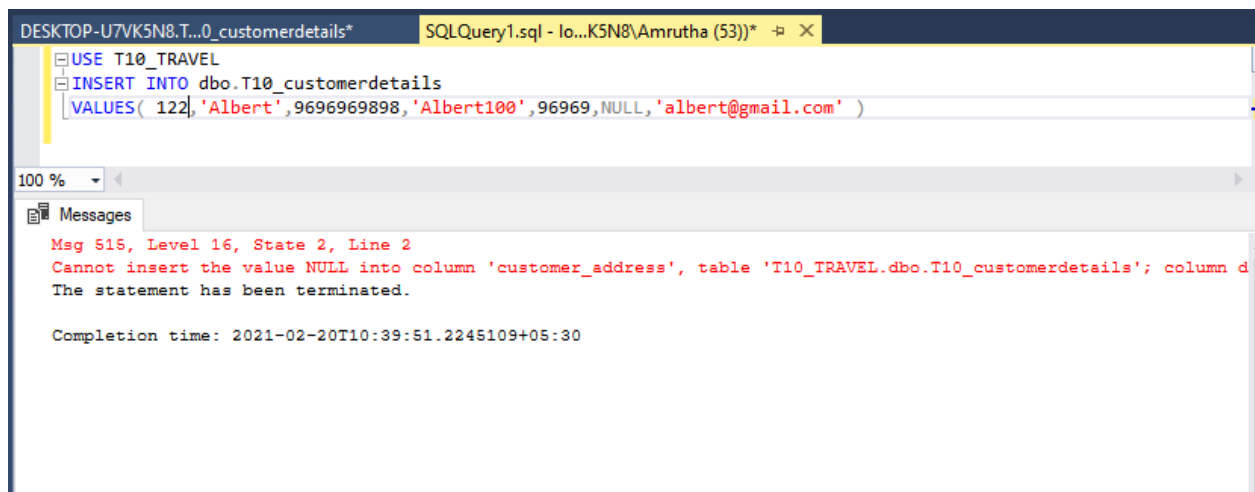
The Messages pane shows the following error:

```
Msg 2627, Level 14, State 1, Line 2
Violation of PRIMARY KEY constraint 'PK_T10_cust_CD65CB85E6D38CD7'. Cannot insert duplicate key in object 'dbo.
The statement has been terminated.

Completion time: 2021-02-20T09:52:41.3877974+05:30
```

The status bar at the bottom indicates: "Query completed with errors. localhost (15.0 RTM) | DESKTOP-U7VK5N8\Amrutha... | T10_TRAVEL | 00:00:00 | 0 rows".

```
USE T10_TRAVEL
INSERT INTO dbo.T10_customerdetails
VALUES( 122, 'Albert', 9696969898, 'Albert100', 96969, NULL, 'albert@gmail.com' )
```



The screenshot shows a SQL Server Enterprise Manager window with a query executed. The query is:

```
USE T10_TRAVEL
INSERT INTO dbo.T10_customerdetails
VALUES( 122, 'Albert', 9696969898, 'Albert100', 96969, NULL, 'albert@gmail.com' )
```

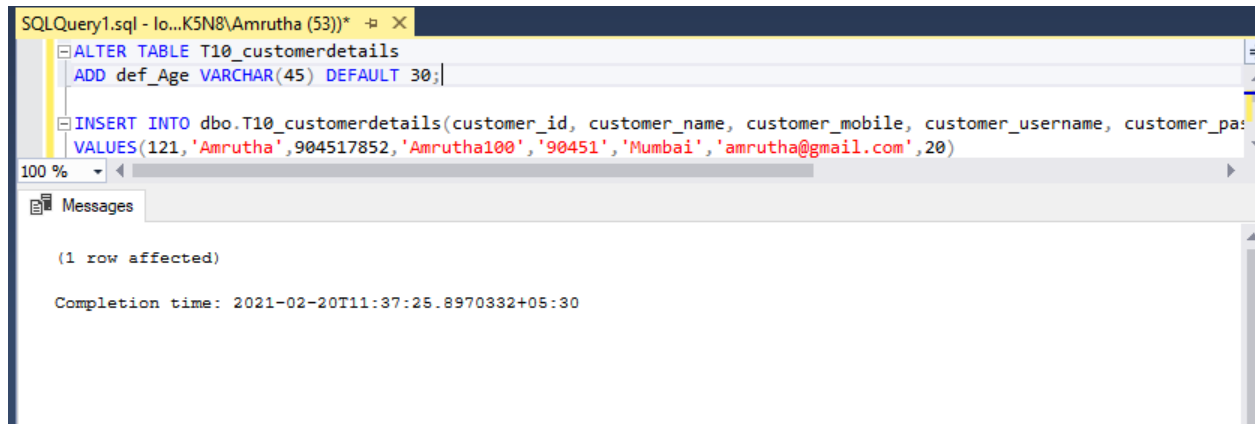
The Messages pane shows the following error:

```
Msg 515, Level 16, State 2, Line 2
Cannot insert the value NULL into column 'customer_address', table 'T10_TRAVEL.dbo.T10_customerdetails'; column d
The statement has been terminated.

Completion time: 2021-02-20T10:39:51.2245109+05:30
```

```
ALTER TABLE T10_customerdetails
ADD def_Age VARCHAR(45) DEFAULT 30;
```

```
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile,  
customer_username, customer_password, customer_address, Email, Age)  
VALUES(121,'Amrutha',904517852,'Amrutha100','90451','Mumbai','amrutha@gmail.com',20)
```



The screenshot shows a SQL Server Enterprise Manager window with the title 'SQLQuery1.sql - lo...K5N8\Amrutha (53))'. The query editor contains the following SQL code:

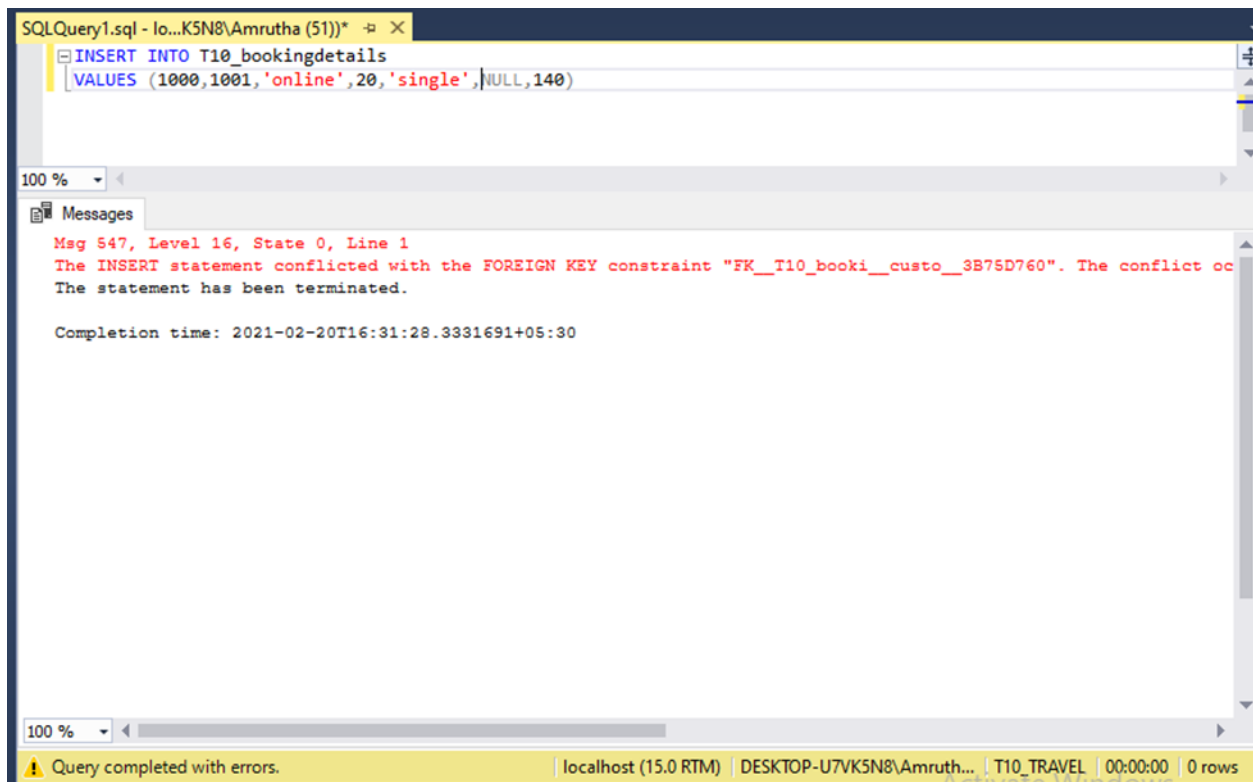
```
ALTER TABLE T10_customerdetails  
ADD def_Age VARCHAR(45) DEFAULT 30;  
  
INSERT INTO dbo.T10_customerdetails(customer_id, customer_name, customer_mobile, customer_username, customer_password, customer_address, Email, Age)  
VALUES(121,'Amrutha',904517852,'Amrutha100','90451','Mumbai','amrutha@gmail.com',20)
```

The Messages pane at the bottom shows the execution results:

```
(1 row affected)  
  
Completion time: 2021-02-20T11:37:25.8970332+05:30
```

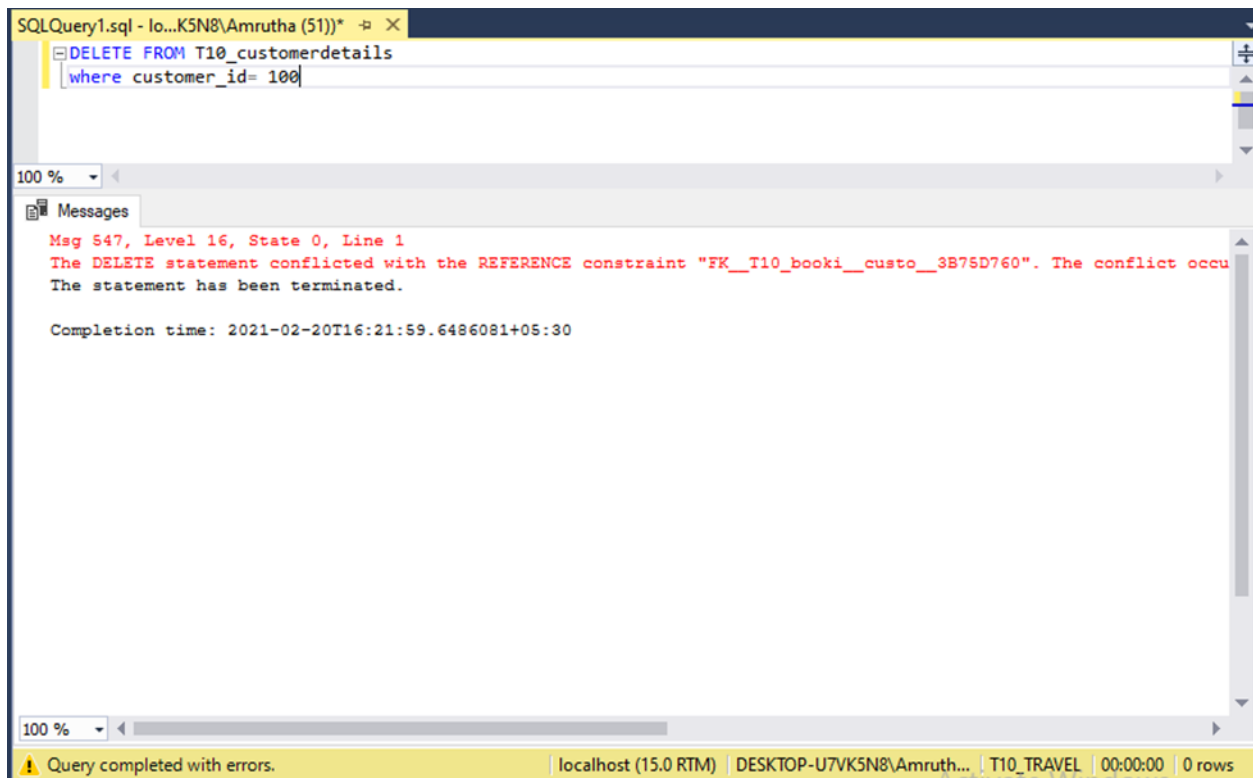
4. Insert tuples into the table and see how foreign key constraint works if you try to insert into dependent table first.

```
INSERT INTO T10_bookingdetails  
VALUES (1000,1001,'online',20,'single',NULL,140)
```



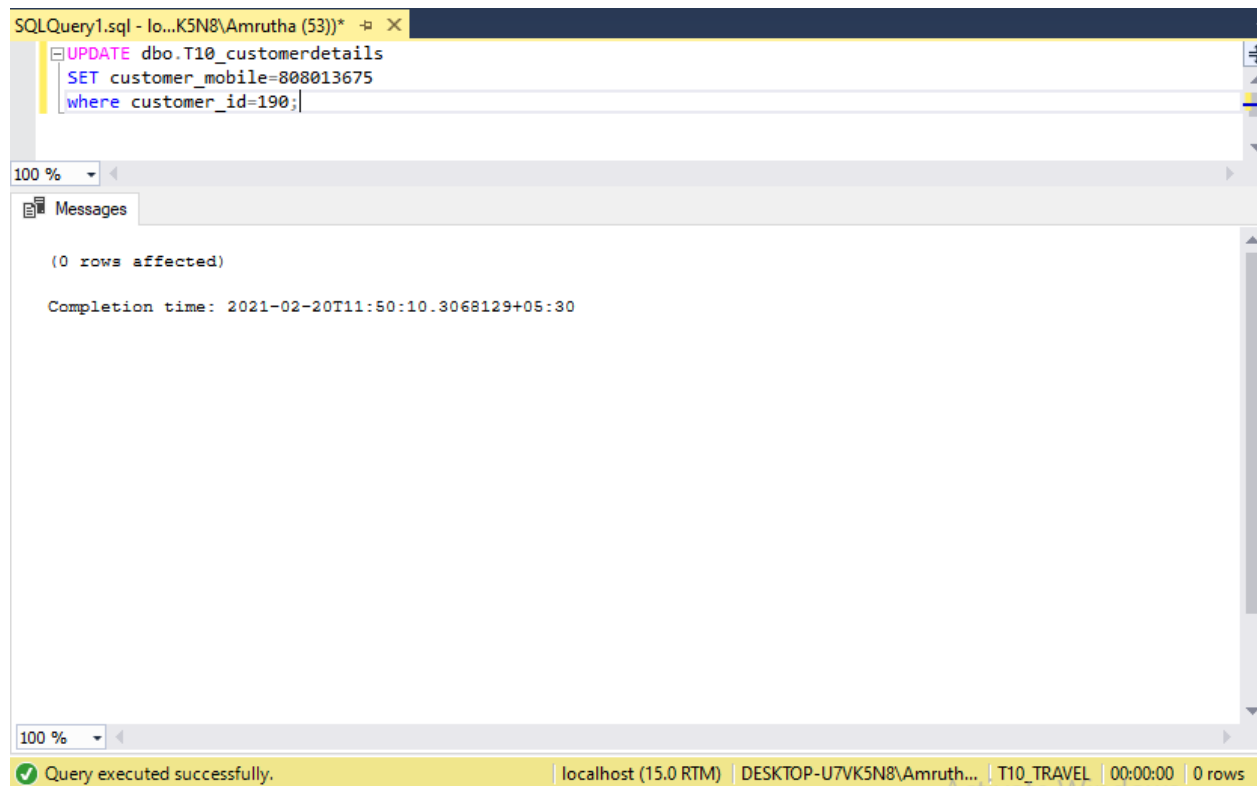
5. Show Violation of Foreign Key Constraint when you try to delete from a base table. If you get an error explain why deletion gives an error

DELETE FROM T10_customerdetails
where customer_id= 100



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

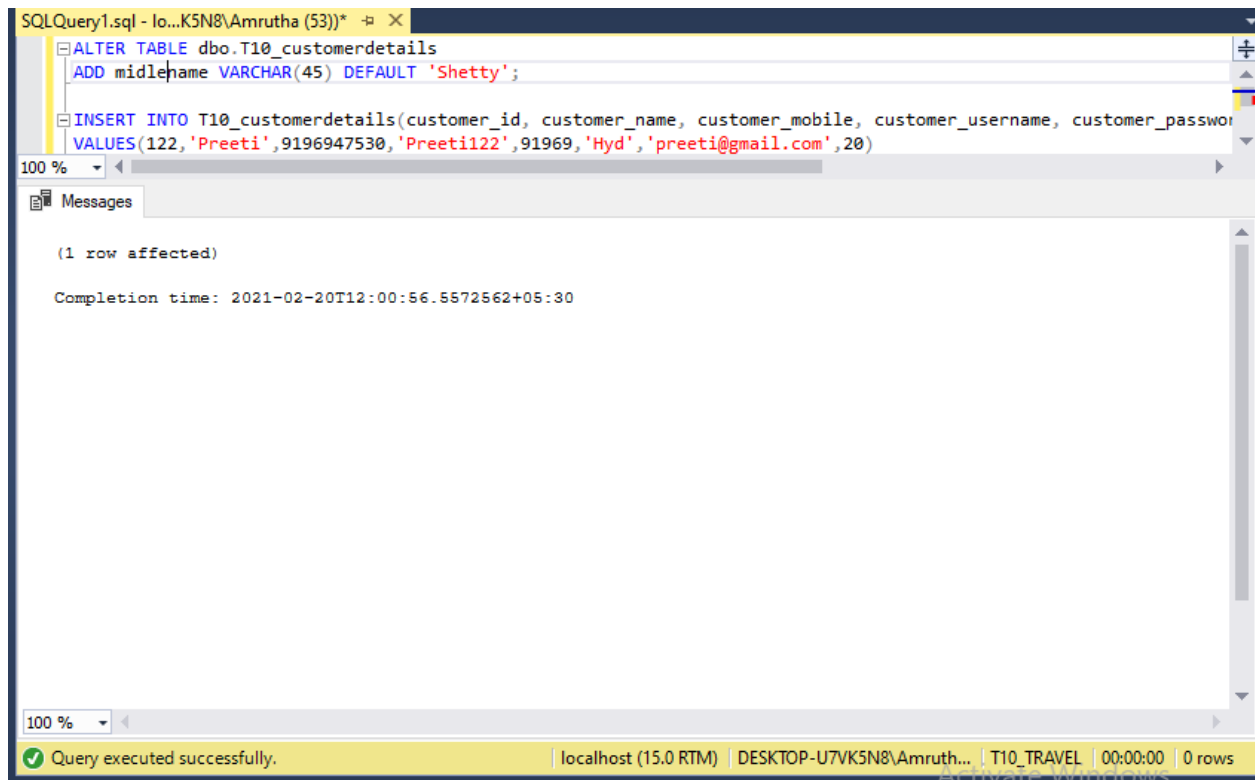
```
UPDATE dbo.T10_customerdetails  
SET customer_mobile=808013675  
where customer_id=190;
```

7. Add a column which has default value.

```
ALTER TABLE dbo.T10_customerdetails
ADD midlename VARCHAR(45) DEFAULT 'Shetty';
ALTER TABLE dbo.T10_customerdetails
ADD lastname VARCHAR(45) DEFAULT 'Shetty';
```

```
INSERT INTO T10_customerdetails(customer_id, customer_name, customer_mobile,
customer_username, customer_password, customer_address, Email, Age)
VALUES(122,'Preeti',9196947530,'Preeti122',91969,'Hyd','preeti@gmail.com',20)
```



The screenshot shows the SQL Server Enterprise Manager interface. The top pane displays the following SQL query:

```
ALTER TABLE dbo.T10_customerdetails
ADD midlename VARCHAR(45) DEFAULT 'Shetty';

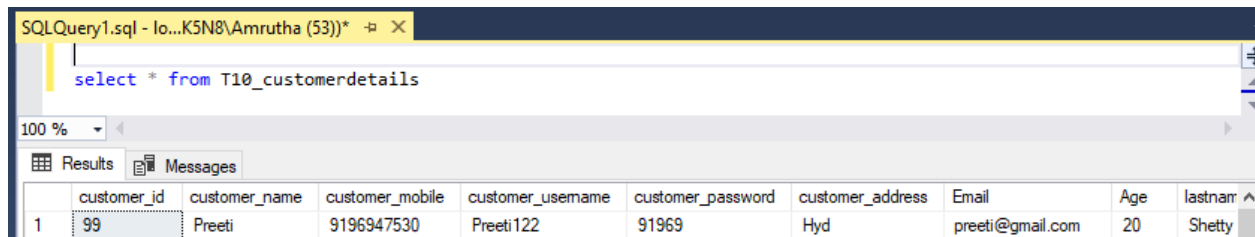
INSERT INTO T10_customerdetails(customer_id, customer_name, customer_mobile, customer_username, customer_password, customer_address, Email, Age, lastname)
VALUES(122, 'Preeti', 9196947530, 'Preeti122', 91969, 'Hyd', 'preeti@gmail.com', 20)
```

The bottom pane shows the execution results:

(1 row affected)

Completion time: 2021-02-20T12:00:56.5572562+05:30

A status bar at the bottom indicates: Query executed successfully. | localhost (15.0 RTM) | DESKTOP-U7VK5N8\Amrutha... | T10_TRAVEL | 00:00:00 | 0 rows



The screenshot shows the SQL Server Enterprise Manager interface. The top pane displays the following SQL query:

```
select * from T10_customerdetails
```

The bottom pane shows the execution results in a table format:

	customer_id	customer_name	customer_mobile	customer_username	customer_password	customer_address	Email	Age	lastnam
1	99	Preeti	9196947530	Preeti122	91969	Hyd	preeti@gmail.com	20	Shetty

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

`select * from T10_customerdetails`

SQLQuery1.sql - lo...K5N8\Amrutha (53))*

```
select * from T10_customerdetails
```

100 %

Results Messages

	customer_id	customer_name	customer_mobile	customer_username	customer_password	customer_address	Email	Age	lastnam
1	99	Preeti	9196947530	Preeti122	91969	Hyd	preeti@gmail.com	20	Shetty
2	100	Amrutha	904517852	Amrutha100	90451	Mumbai	amrutha@gmail.com	NULL	NULL
3	101	Deepthi	8549617542	Deepthi101	85496	patna	deepthi@gmail.com	NULL	NULL
4	102	Ranjolkar	8675142960	Ranjolkar102	86751	Delhi	ranjolkar@gmail.com	NULL	NULL
5	103	Chaitra	7548214545	Chaitra103	75482	Vijayawada	chaitra@gmail.com	NULL	NULL
6	104	leesha	9638527410	leesha104	96385	Kumool	ieesha@gmail.com	NULL	NULL
7	105	Robin	9548525502	Robin105	95485	Hyderabad	robin@gmail.com	NULL	NULL
8	106	Roja	7542154150	Roja106	75421	America	roja@gmail.com	NULL	NULL
9	107	Keerthi	9635285502	Keerti107	96352	London	keerti@gmail.com	NULL	NULL
10	108	Deepu	9658254110	Deepu108	96582	Turkey	deepu@gmail.com	NULL	NULL
11	109	Vani	9952400123	Vani109	99240	Goa	vani@gmail.com	NULL	NULL
12	110	Sree	8446195232	Sree110	84461	Kadapa	sree@gmail.com	NULL	NULL
13	111	Shruti	9774520899	Shruti111	97745	Dharwad	shruti@gmail.com	NULL	NULL
14	112	Ruthik	9445800012	Ruthik112	94458	Hubbali	ruthik@gmail.com	NULL	NULL
15	113	Karthik	9102486147	Karthik113	91024	Belgum	karthik@gmail.com	NULL	NULL
16	114	Frank	9776211463	Frank114	97762	Srinagar	frank@gmail.com	NULL	NULL
17	115	Bob	7447458100	Bob115	74474	China	bob@gmail.com	NULL	NULL
18	116	Rocky	9330014485	Rocky116	93300	Gujarat	rocky@gmail.com	NULL	NULL
19	117	Daniel	7475825035	Daniel117	74758	Mumbai	daniel@gmail.com	NULL	NULL
20	118	Olivia	9658964122	Oliva118	96589	Mumbai	olivia@gmail.com	NULL	NULL

Query executed successfully. | localhost (15.0 RTM) | DESKTOP-U7VK5N8\Amruth... | T10_TRAVEL | 00:00:00 | 23 rows

SELECT customer_name **FROM** T10_customerdetails
WHERE Age=20;

SQLQuery1.sql - lo...K5N8\Amrutha (53))*

```
SELECT customer_name FROM T10_customerdetails  
WHERE Age=20;
```

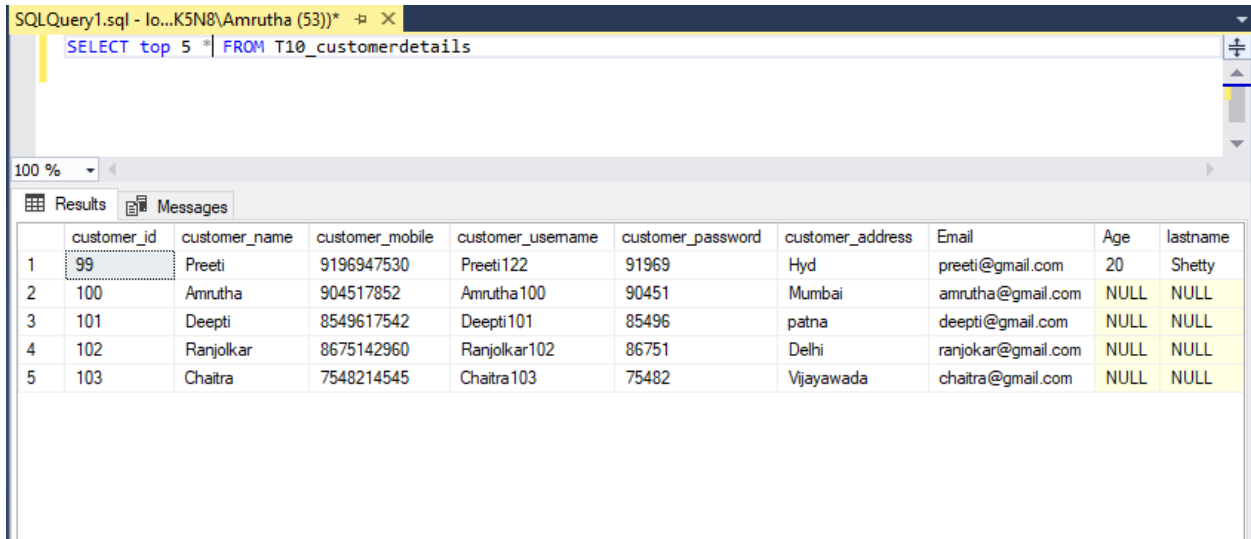
100 %

Results Messages

	customer_name
1	Preeti
2	Amrutha
3	Preeti

Query executed successfully. | localhost (15.0 RTM) | DESKTOP-U7VK5N8\Amruth... | T10_TRAVEL | 00:00:00 | 3 rows

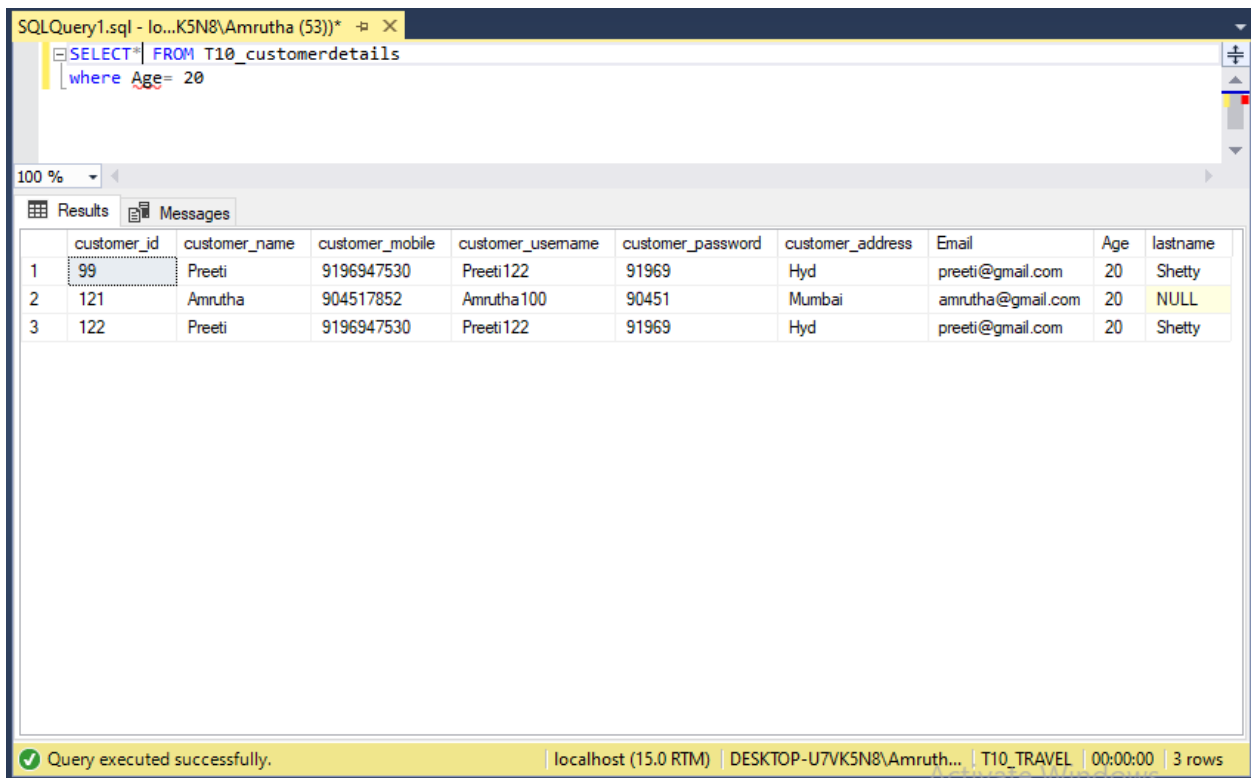
`SELECT top 5 * FROM T10_customerdetails`



The screenshot shows a SQL query window with the text "SELECT top 5 * FROM T10_customerdetails". Below the query, the "Results" tab is active, displaying a table with 10 columns: customer_id, customer_name, customer_mobile, customer_username, customer_password, customer_address, Email, Age, and lastname. The table contains 5 rows of data.

	customer_id	customer_name	customer_mobile	customer_username	customer_password	customer_address	Email	Age	lastname
1	99	Preeti	9196947530	Preeti122	91969	Hyd	preeti@gmail.com	20	Shetty
2	100	Amrutha	904517852	Amrutha100	90451	Mumbai	amrutha@gmail.com	NULL	NULL
3	101	Deepti	8549617542	Deepti101	85496	patna	deepti@gmail.com	NULL	NULL
4	102	Ranjolkar	8675142960	Ranjolkar102	86751	Delhi	ranjolkar@gmail.com	NULL	NULL
5	103	Chaitra	7548214545	Chaitra 103	75482	Vijayawada	chaitra@gmail.com	NULL	NULL

`SELECT* FROM T10_customerdetails
where Age= 20`

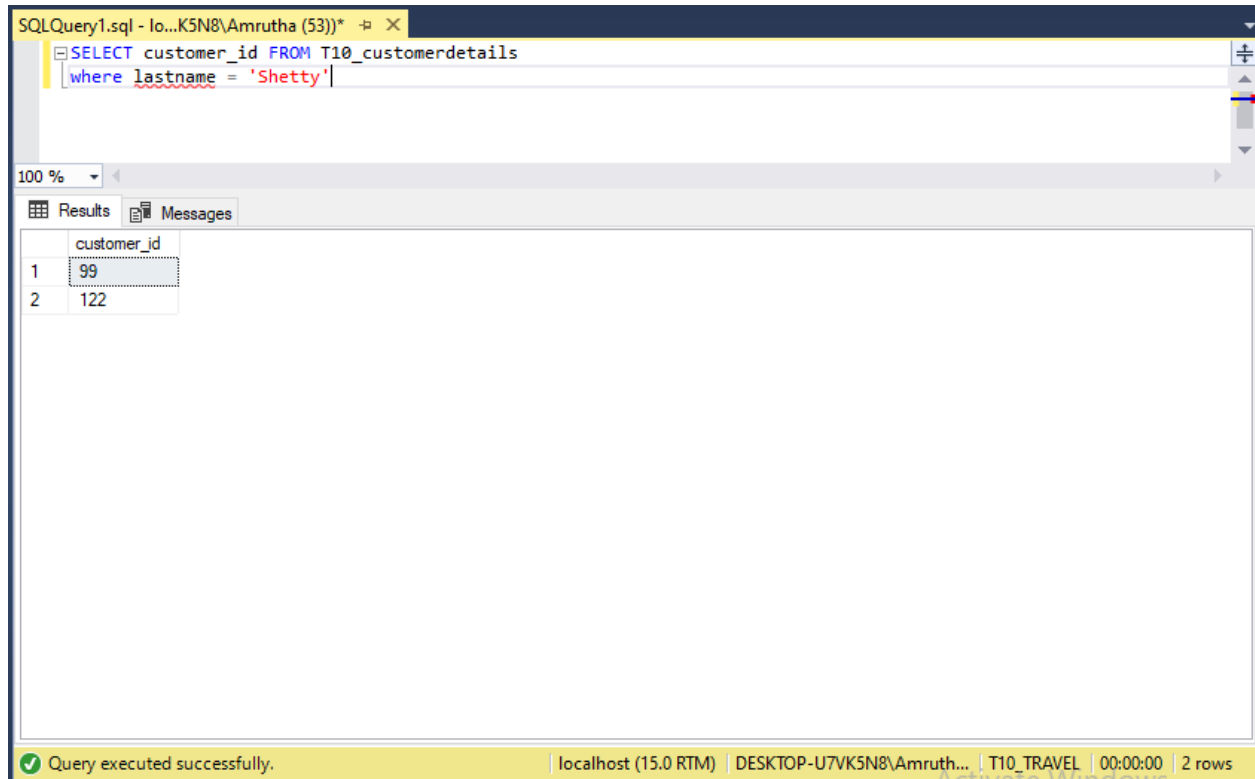


The screenshot shows a SQL query window with the text "SELECT* FROM T10_customerdetails where Age= 20". Below the query, the "Results" tab is active, displaying a table with 10 columns: customer_id, customer_name, customer_mobile, customer_username, customer_password, customer_address, Email, Age, and lastname. The table contains 3 rows of data. A status bar at the bottom indicates "Query executed successfully." and "3 rows".

	customer_id	customer_name	customer_mobile	customer_username	customer_password	customer_address	Email	Age	lastname
1	99	Preeti	9196947530	Preeti122	91969	Hyd	preeti@gmail.com	20	Shetty
2	121	Amrutha	904517852	Amrutha100	90451	Mumbai	amrutha@gmail.com	20	NULL
3	122	Preeti	9196947530	Preeti122	91969	Hyd	preeti@gmail.com	20	Shetty

Query executed successfully. | localhost (15.0 RTM) | DESKTOP-U7VK5N8\Amruth... | T10_TRAVEL | 00:00:00 | 3 rows

```
SELECT customer_id FROM T10_customerdetails
where lastname = 'Shetty'
```



The screenshot shows a SQL Server Enterprise Manager window with a query executed. The query is: `SELECT customer_id FROM T10_customerdetails where lastname = 'Shetty'`. The results are displayed in a table with two rows.

	customer_id
1	99
2	122

The status bar at the bottom indicates: "Query executed successfully. | localhost (15.0 RTM) | DESKTOP-U7VK5N8\Amruth... | T10_TRAVEL | 00:00:00 | 2 rows".

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.

```
SET UPDATE dbo.T10_bookingdetails
customer_id= 130
WHERE booking_id=10000;
```

SQLQuery1.sql - lo...K5N8\Amrutha (51))*

```
UPDATE dbo.T10_bookingdetails
SET customer_id= 130
WHERE booking_id=10000;
```

100 %

Messages

(0 rows affected)

Completion time: 2021-02-20T16:27:18.5210361+05:30

100 %

✓ Query executed successfully. | localhost (15.0 RTM) | DESKTOP-U7VK5N8\Amruth... | T10_TRAVEL | 00:00:00 | 0 rows