

# KUPPA VENKATA KRISHNA PAANCHAJANYA

Registration No.: 19BCS063

## Database Management Systems Lab Assignment 3

### Question 1: Add, Modify and Delete column using Alter command.

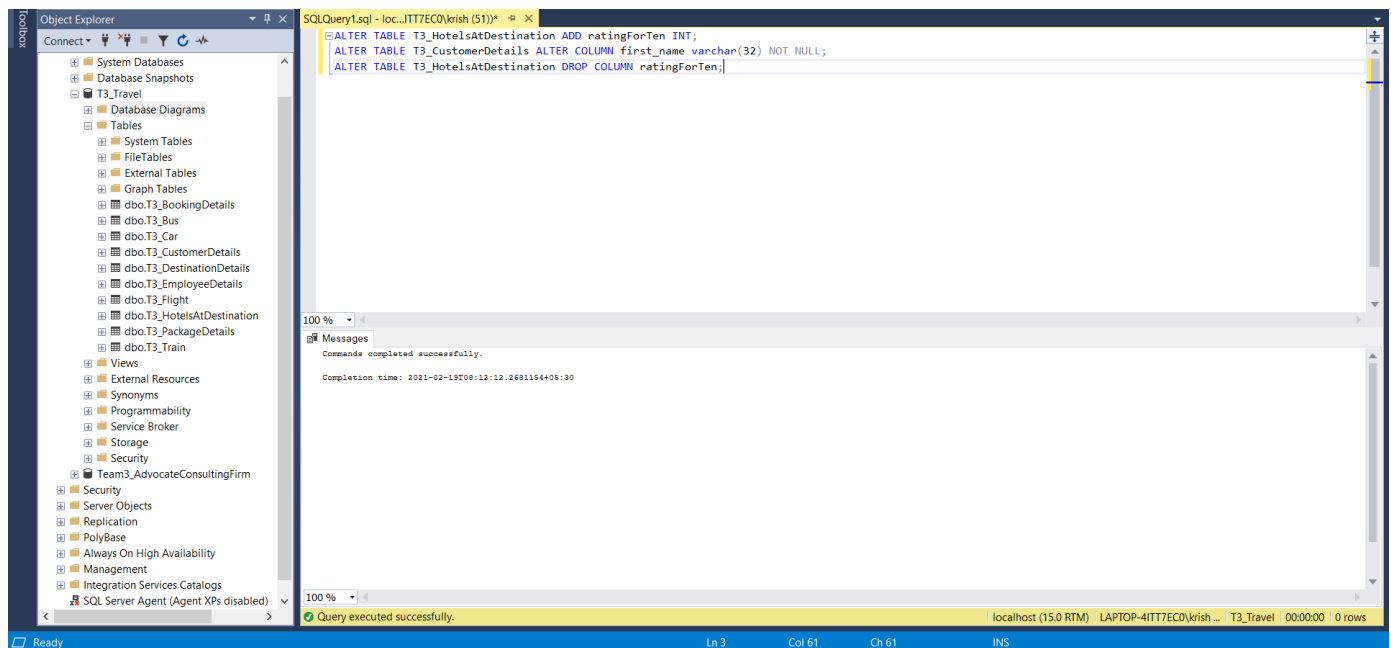
#### Query:

```
ALTER TABLE T3_HotelsAtDestination ADD ratingForTen INT;
```

```
ALTER TABLE T3_CustomerDetails ALTER COLUMN first_name varchar(32) NOT NULL;
```

```
ALTER TABLE T3_HotelsAtDestination DROP COLUMN ratingForTen;
```

#### Database Output:



### Question 2: Insert 20 Customer Booking records in the Travel Database.

#### Query:

```
INSERT INTO T3_EmployeeDetails (employee_id, name, designation, phone_number, salary) VALUES ('01001', 'P. RAJESH', 'Driver', '911234567890', 12500);
```

```
INSERT INTO T3_EmployeeDetails (employee_id, name, designation, phone_number, salary) VALUES ('01002', 'A. RAMESH', 'Driver', '911234567891', 12500);
```

```
INSERT INTO T3_EmployeeDetails (employee_id, name, designation, phone_number, salary) VALUES ('02003', 'B. SURESH', 'Driver', '911234567892', 12500);
```

```
INSERT INTO T3_EmployeeDetails (employee_id, name, designation, phone_number, salary) VALUES ('02004', 'N. NARESH', 'Driver', '911234567893', 12500);
```

```
INSERT INTO T3_EmployeeDetails (employee_id, name, designation, phone_number, salary) VALUES ('01005', 'R. PARESH', 'Cleaner', '911234567894', 8000);
INSERT INTO T3_EmployeeDetails (employee_id, name, designation, phone_number, salary) VALUES ('02006', 'T. MALLESH', 'Cleaner', '911234567895', 8000);
INSERT INTO T3_EmployeeDetails (employee_id, name, designation, phone_number, salary) VALUES ('01007', 'O. JAYESH', 'Luggage Manager', '911234567897', 5000);
INSERT INTO T3_EmployeeDetails (employee_id, name, designation, phone_number, salary) VALUES ('02008', 'P. PARAMESH', 'Luggage Manager', '911234567898', 5000);
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000001', 'Kiran', 'Kumar', 31, 'M', '919999999999');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000002', 'Charan', 'Rao', 28, 'M', '919999999998');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000003', 'Farhan', 'Abdul', 37, 'M', '919999999997');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000004', 'Kissan', 'Chary', 21, 'M', '919999999996');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000005', 'Laban', 'Seth', 18, 'M', '919999999995');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000006', 'Cheman', 'Kumar', 35, 'M', '919999999994');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000007', 'Eeshwar', 'Prasad', 53, 'M', '919999999993');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000008', 'Raghavendra', 'Swamy', 42, 'M', '919999999992');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000009', 'Shivaji', 'Chatrapati', 61, 'M', '919999999991');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000010', 'Chakram', 'Kumar', 14, 'M', '919999999990');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000011', 'Jai', 'Krishna', 28, 'M', '9199999999912');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000012', 'Prabha', 'lingaraju', 41, 'M', '9199999999913');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000013', 'Somesh', 'Thakur', 33, 'M', '9199999999914');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000014', 'Deepak', 'Chowdary', 19, 'M', '9199999999915');
```

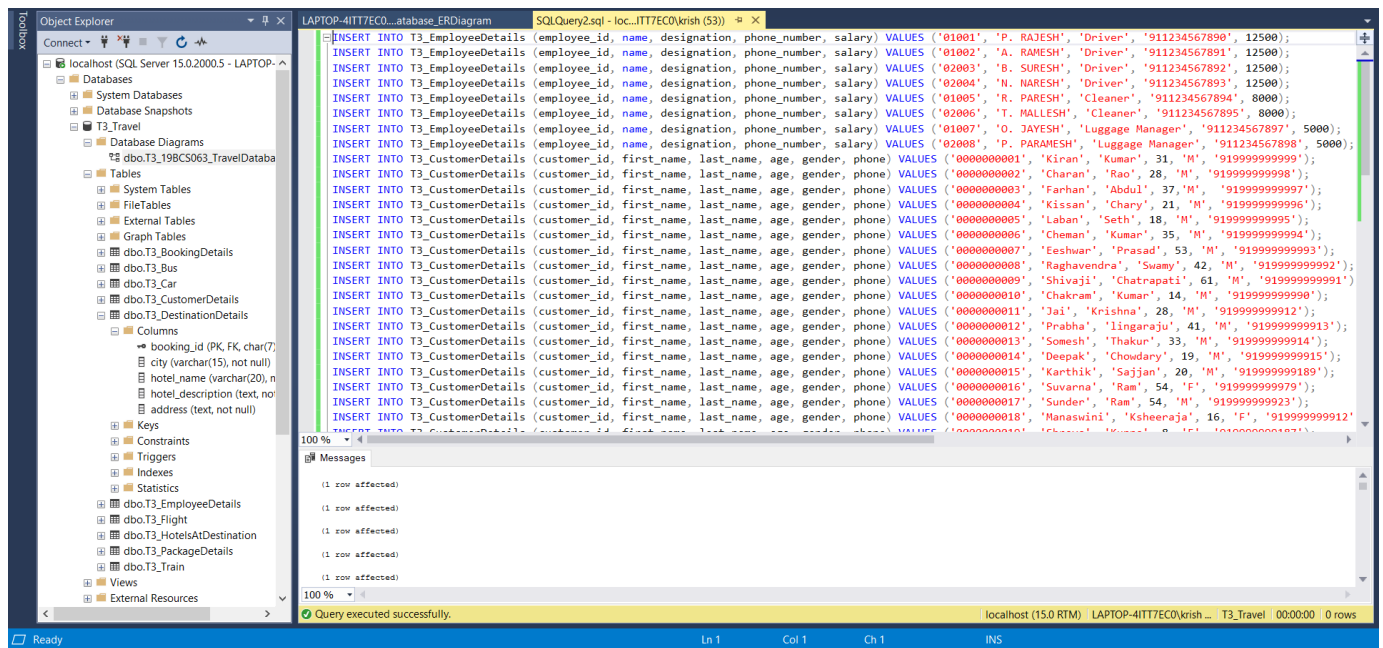
```
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000015', 'Karthik', 'Sajjan', 20, 'M', '919999999189');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000016', 'Suvarna', 'Ram', 54, 'F', '919999999979');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000017', 'Sunder', 'Ram', 54, 'M', '919999999923');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000018', 'Manaswini', 'Ksheeraja', 16, 'F', '919999999122');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000019', 'Shreya', 'Kuppa', 8, 'F', '919999999187');
INSERT INTO T3_CustomerDetails (customer_id, first_name, last_name, age, gender, phone) VALUES ('0000000020', 'Srinidhi', 'Kuppa', 5, 'F', '919999999964');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime) VALUES ('0000000001', '0100001', 25000, '2021-02-19T09:37:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime) VALUES ('0000000002', '0100002', 25000, '2021-02-19T09:42:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime) VALUES ('0000000003', '0100003', 25000, '2021-02-19T09:16:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime) VALUES ('0000000004', '0100004', 25000, '2021-02-19T09:07:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime) VALUES ('0000000005', '0100005', 25000, '2021-02-19T09:34:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime) VALUES ('0000000006', '0100006', 25000, '2021-02-19T09:12:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime) VALUES ('0000000007', '0100007', 25000, '2021-02-19T09:18:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime) VALUES ('0000000008', '0100008', 25000, '2021-02-19T09:58:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime) VALUES ('0000000009', '0100009', 25000, '2021-02-19T09:54:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime) VALUES ('0000000010', '0100010', 25000, '2021-02-19T11:12:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime) VALUES ('0000000011', '0200011', 50000, '2021-02-19T11:13:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime) VALUES ('0000000012', '0200012', 50000, '2021-02-19T10:18:00');
```

```

INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime)
VALUES ('00000000013', '0200013', 50000, '2021-02-19T10:20:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime)
VALUES ('00000000014', '0200014', 50000, '2021-02-19T10:25:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime)
VALUES ('00000000015', '0200015', 50000, '2021-02-19T10:38:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime)
VALUES ('00000000016', '0200016', 50000, '2021-02-19T10:42:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime)
VALUES ('00000000017', '0200017', 50000, '2021-02-19T10:16:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime)
VALUES ('00000000018', '0200018', 50000, '2021-02-19T10:11:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime)
VALUES ('00000000019', '0200019', 50000, '2021-02-19T10:09:00');
INSERT INTO T3_BookingDetails (customer_id, booking_id, payment_amount, payment_dateTime)
VALUES ('00000000020', '0200020', 50000, '2021-02-19T10:14:00');
INSERT INTO T3_PackageDetails (package_name, package_description, cost, starting_point, booking_id)
SELECT 'Kulu Manali', 'Chill Out!', 25000.00, 'Hyderabad', booking_id FROM T3_BookingDetails
WHERE booking_id LIKE '01_____';
INSERT INTO T3_PackageDetails (package_name, package_description, cost, starting_point, booking_id)
SELECT 'Manasarovar', 'Have a nice glimpse of Nature!', 50000.00, 'Hyderabad', booking_id FROM
T3_BookingDetails WHERE booking_id LIKE '02_____';
INSERT INTO T3_DestinationDetails (city, hotel_name, hotel_description, address, booking_id) SELECT
'Kulu Manali', 'Raj Palace', 'Good', 'Kulu Manali', booking_id FROM T3_BookingDetails WHERE
booking_id LIKE '01_____';
INSERT INTO T3_DestinationDetails (city, hotel_name, hotel_description, address, booking_id) SELECT
'Burang', 'Gurugrantha Choultry', 'Good', 'Manasarovar', booking_id FROM T3_BookingDetails WHERE
booking_id LIKE '02_____';
INSERT INTO T3_Bus (bus_id, bus_type, dateAndTime_of_Arrival, dateAndTime_of_Departure,
booking_id) SELECT '8714', 'Sleeper', '2021-03-04T15:15:00', '2021-03-06T15:15:00', booking_id FROM
T3_BookingDetails WHERE booking_id LIKE '01_____';
INSERT INTO T3_Bus (bus_id, bus_type, dateAndTime_of_Arrival,
dateAndTime_of_Departure, booking_id) SELECT '6938', 'Sleeper', '2021-03-04T05:30:00', '2021-03-
08T15:15:00', booking_id FROM T3_BookingDetails WHERE booking_id LIKE '02_____';

```

**Database Output:**



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

#### Query:

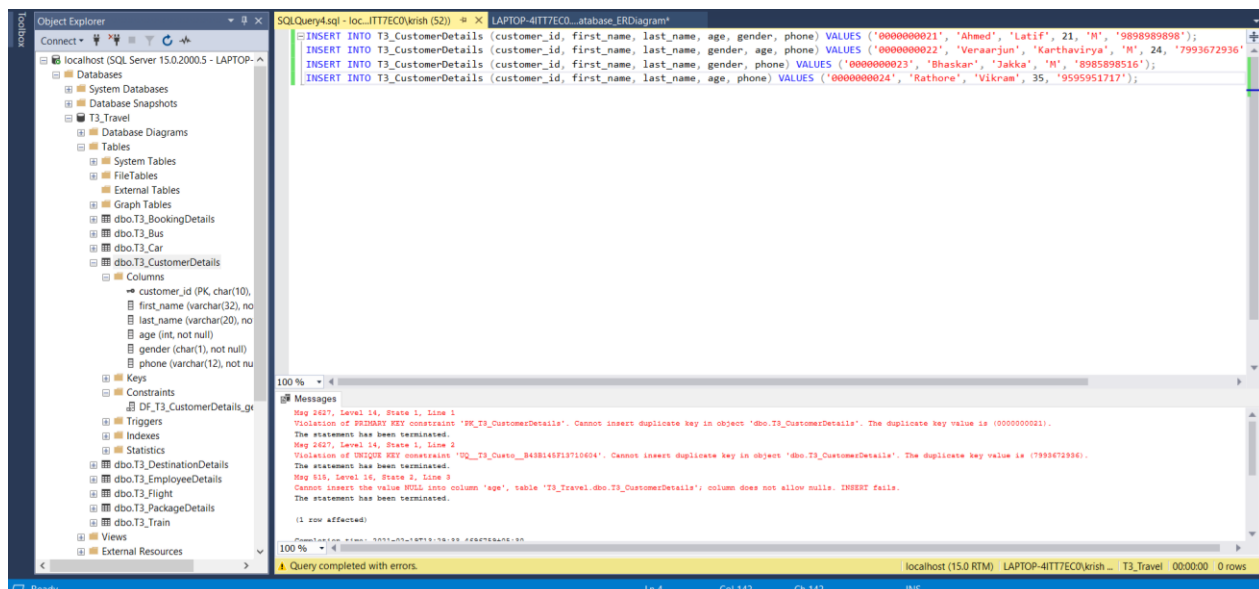
INSERT INTO T3\_CustomerDetails (customer\_id, first\_name, last\_name, age, gender, phone) VALUES ('00000000021', 'Ahmed', 'Latif', 21, 'M', '9898989898');

INSERT INTO T3\_CustomerDetails (customer\_id, first\_name, last\_name, gender, age, phone) VALUES ('00000000022', 'Veraarjun', 'Karthavirya', 'M', 24, '7993672936');

INSERT INTO T3\_CustomerDetails (customer\_id, first\_name, last\_name, gender, phone) VALUES ('00000000023', 'Bhaskar', 'Jakka', 'M', '8985898516');

INSERT INTO T3\_CustomerDetails (customer\_id, first\_name, last\_name, age, phone) VALUES ('00000000024', 'Rathore', 'Vikram', 35, '9595951717');

#### Database Output:

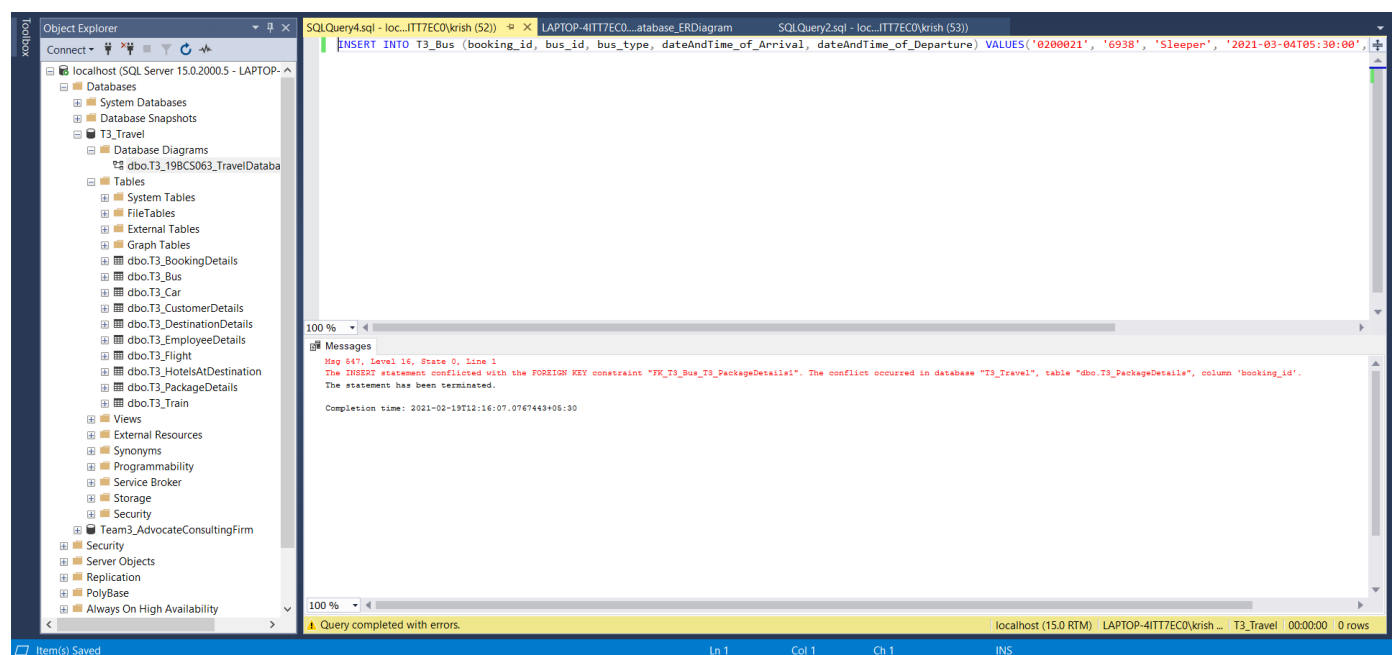


**Question 4: Insert tuples into the table and see how foreign key constraint works if you try to insert into dependent table first.**

**Query:**

```
INSERT INTO T3_Bus (booking_id, bus_id, bus_type, dateAndTime_of_Arrival,  
dateAndTime_of_Departure) VALUES('0200021', '6938', 'Sleeper', '2021-03-04T05:30:00', '2021-03-  
08T15:15:00');
```

**Database Output:**

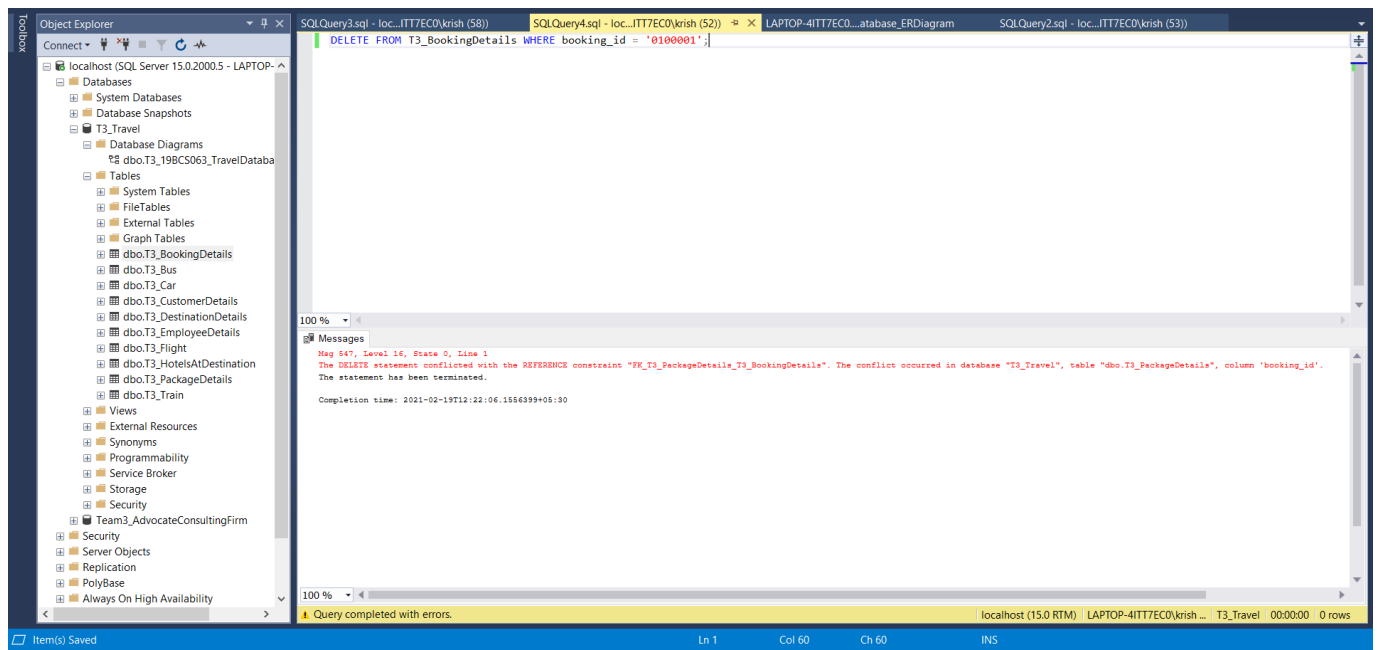


**Question 5: Show Violation of Foreign Key Constraint when you try to delete from a base table. If you get an error explain why deletion gives an error**

**Query:**

```
DELETE FROM T3_BookingDetails WHERE booking_id = '0100001';
```

**Database Output:**

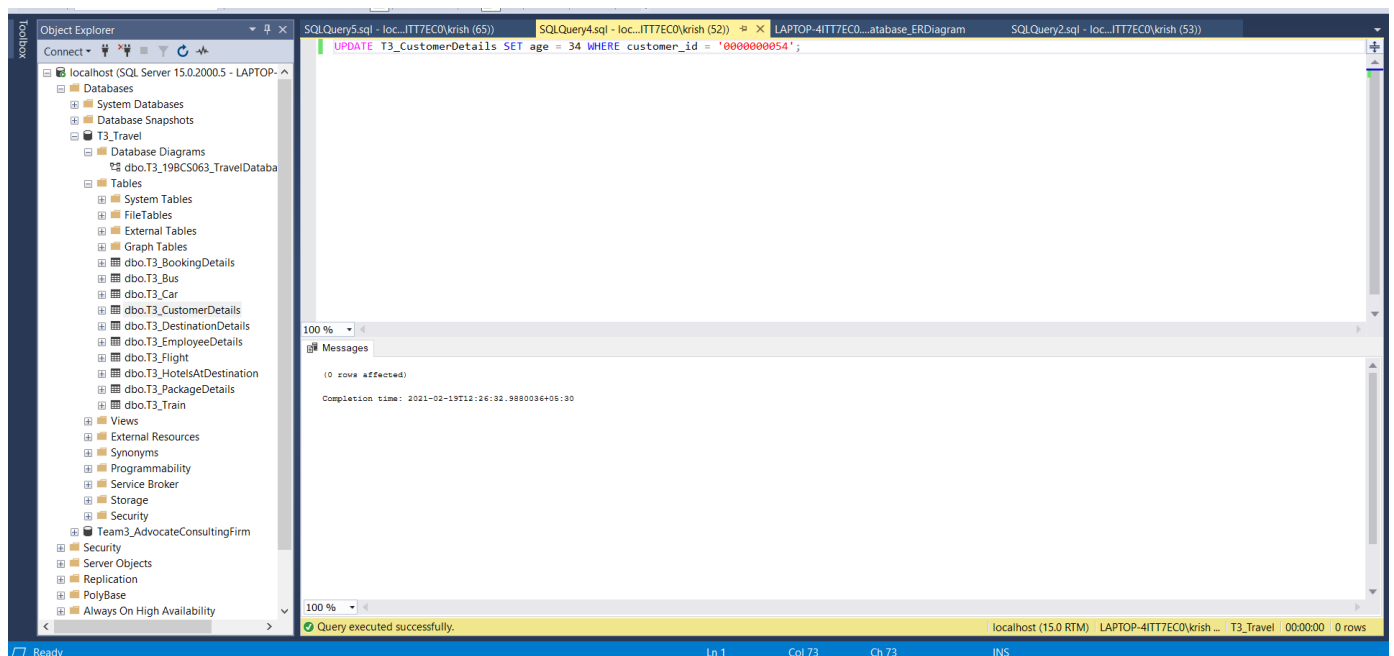


The Query did not execute because whenever we aim to delete a record from the base table, we need to ensure that all the related dependent table records are deleted prior. Otherwise, there will be redundant data all over the database.

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

UPDATE T3\_CustomerDetails SET age = 34 WHERE customer\_id = '0000000054';

### Database Output:



Here, we tried to update a non-existing entity of an entity set. This doesn't give an error but does no effect on the existing entities.

### Question 7: Add a column which has default value.

ALTER TABLE T3\_CustomerDetails ADD CONSTRAINT df\_gender DEFAULT 'M' FOR gender;

## Database Output:

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the Object Explorer with the database structure of T3\_Travel. The right pane shows the SQL Query window with the following statement:

```
ALTER TABLE T3_CustomerDetails ADD CONSTRAINT df_gender DEFAULT 'M' FOR gender;
```

The Messages pane at the bottom indicates that the command completed successfully. The status bar shows the query was executed successfully on the T3\_Travel database.

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

SELECT \* FROM T3\_CustomerDetails;

SELECT \* FROM T3\_BookingDetails WHERE booking\_id LIKE '02\_\_\_\_\_';

SELECT bus\_type FROM T3\_Bus WHERE booking\_id LIKE '01\_\_\_\_\_';

SELECT name, phone\_number FROM T3\_EmployeeDetails WHERE employee\_id = '01001';

SELECT \* FROM T3\_DestinationDetails WHERE city = 'Kulu Manali';

## Database Output:

The screenshot shows the SQL Server Enterprise Manager interface with five queries executed. The Results pane displays the output of each query.

**Query 1: SELECT \* FROM T3\_CustomerDetails;**

customer_id	first_name	last_name	age	gender	phone
0000000001	Kiran	Kumar	31	M	919999999999
0000000002	Charan	Rao	28	M	919999999998
0000000003	Faihan	Abdul	37	M	919999999997
0000000004	Kissen	Chary	21	M	919999999996
0000000005	Laban	Seth	18	M	919999999995

**Query 2: SELECT \* FROM T3\_BookingDetails WHERE booking\_id LIKE '02\_\_\_\_\_';**

customer_id	booking_id	payment_amount	payment_dateTime	refunded	refund_amount	refund_dateTime
0000000011	0200011	50000.00	2021-02-19 11:13:00.000	NULL	NULL	NULL
0000000012	0200012	50000.00	2021-02-19 10:18:00.000	NULL	NULL	NULL
0000000013	0200013	50000.00	2021-02-19 10:20:00.000	NULL	NULL	NULL
0000000014	0200014	50000.00	2021-02-19 10:25:00.000	NULL	NULL	NULL
0000000015	0200015	50000.00	2021-02-19 10:38:00.000	NULL	NULL	NULL

**Query 3: SELECT bus\_type FROM T3\_Bus WHERE booking\_id LIKE '01\_\_\_\_\_';**

bus_type
Sleeper
Sleeper
Sleeper
Sleeper
Sleeper

**Query 4: SELECT name, phone\_number FROM T3\_EmployeeDetails WHERE employee\_id = '01001';**

name	phone_number
P. RAJESH	911234567890

**Query 5: SELECT \* FROM T3\_DestinationDetails WHERE city = 'Kulu Manali';**

booking_id	city	hotel_name	hotel_description	address
0100001	Kulu Manali	Raj Palace	Good	Kulu Manali
0100002	Kulu Manali	Raj Palace	Good	Kulu Manali
0100003	Kulu Manali	Raj Palace	Good	Kulu Manali
0100004	Kulu Manali	Raj Palace	Good	Kulu Manali
0100005	Kulu Manali	Raj Palace	Good	Kulu Manali
0100006	Kulu Manali	Raj Palace	Good	Kulu Manali
0100007	Kulu Manali	Raj Palace	Good	Kulu Manali
0100008	Kulu Manali	Raj Palace	Good	Kulu Manali
0100009	Kulu Manali	Raj Palace	Good	Kulu Manali
0100010	Kulu Manali	Raj Palace	Good	Kulu Manali



**Question 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 T3_Bus SET bus_type = '2 Seater' WHERE bus_id = '6938';
```

**Database Output:**

