

DBMS_LAB_ASSIGNMENT_2

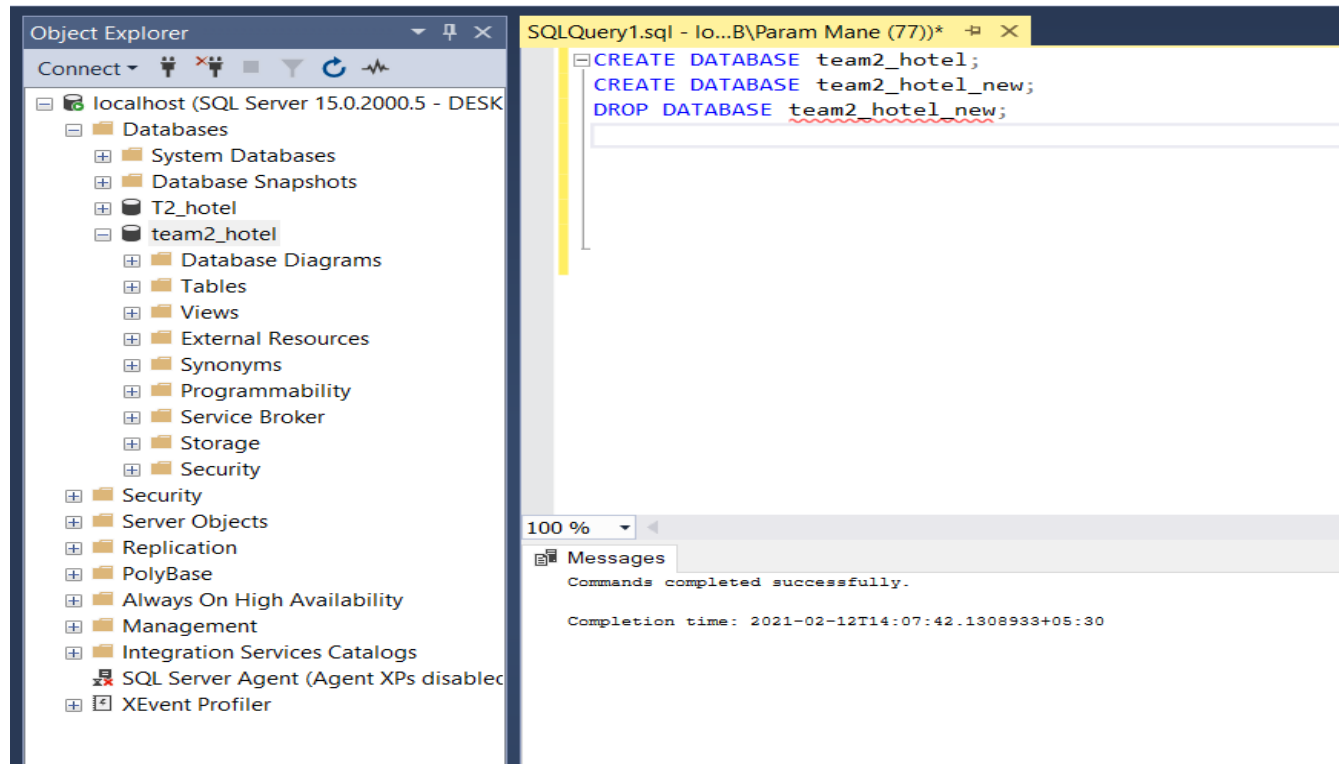
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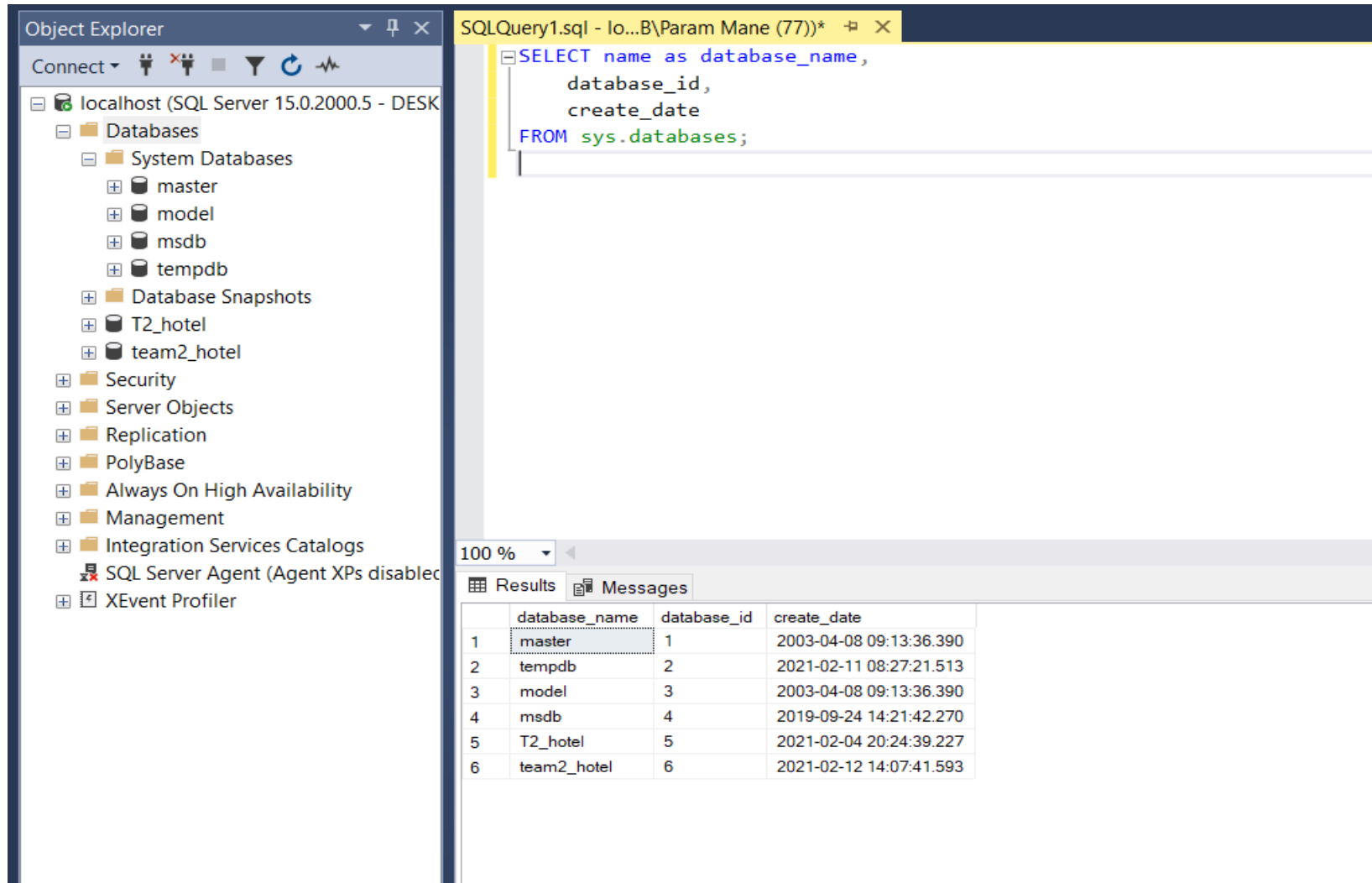
Team: 2

Database: Hotel

1. Show how to create and drop database.



2. Show all the databases are in the system.



The screenshot displays the SQL Server Enterprise Manager interface. On the left, the Object Explorer shows the 'Databases' folder expanded under 'localhost (SQL Server 15.0.2000.5 - DESK)'. The databases listed are master, model, msdb, tempdb, T2_hotel, and team2_hotel. On the right, the SQL Query window shows a query to select database names, IDs, and creation dates from the sys.databases catalog. The results pane shows a table with 6 rows of data.

```
SELECT name as database_name,
       database_id,
       create_date
FROM sys.databases;
```

| | database_name | database_id | create_date |
|---|---------------|-------------|-------------------------|
| 1 | master | 1 | 2003-04-08 09:13:36.390 |
| 2 | tempdb | 2 | 2021-02-11 08:27:21.513 |
| 3 | model | 3 | 2003-04-08 09:13:36.390 |
| 4 | msdb | 4 | 2019-09-24 14:21:42.270 |
| 5 | T2_hotel | 5 | 2021-02-04 20:24:39.227 |
| 6 | team2_hotel | 6 | 2021-02-12 14:07:41.593 |

3. Create table for your database.

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the 'Object Explorer' pane shows the 'team2_hotel' database selected under 'Databases'. The 'Tables' folder is expanded, showing a list of tables: 'customer_id (int, not null)', 'billing_number (PK, int, not null)', 'room_charge (int, not null)', 'payment_date (date, not null)', 'credit_card (nvarchar(30), not null)', 'Keys', 'Constraints', 'Triggers', 'Indexes', 'Statistics', 'dbo.team2_customer', 'dbo.team2_reservation', and 'dbo.team2_rooms'. The 'Columns' folder is also expanded, showing the same list of columns. The 'dbo.team2_billing' table is highlighted. On the right, the 'SQLQuery1.sql' window shows the SQL script for creating the tables. The script includes the following statements:

```
USE team2_hotel;

DROP TABLE team2_rooms;
CREATE TABLE team2_rooms (
    room_number int IDENTITY(1,1) PRIMARY KEY,
    room_type varchar(10) NOT NULL,
    room_location varchar(20) DEFAULT NULL,
    number_of_beds int NOT NULL,
    customer_id int NOT NULL );
SELECT * FROM team2_rooms;

DROP TABLE team2_customer;
CREATE TABLE team2_customer (
    customer_id int IDENTITY(1,1) PRIMARY KEY,
    customer_name nchar(30) NOT NULL,
    ph_number int NOT NULL,
    city nchar(20) NOT NULL,
    zip_code int NOT NULL,
    reservation_no int NOT NULL,
    email_id nvarchar(30) DEFAULT NULL );
SELECT * FROM team2_customer;

DROP TABLE team2_billing;
CREATE TABLE team2_billing (
    customer_id int NOT NULL,
    billing_number int IDENTITY(1,1) PRIMARY KEY,
    room_charge int NOT NULL,
    payment_date date NOT NULL,
    credit_card nvarchar(30) NOT NULL );
SELECT * FROM team2_billing;

DROP TABLE team2_reservation;
CREATE TABLE team2_reservation (
    customer_id int NOT NULL,
    room_number int NOT NULL,
    no_of_guests int NOT NULL,
    reservation_date date NOT NULL,
    check_out_date date NOT NULL,
    reservation_no int IDENTITY(1,1) PRIMARY KEY,
    check_in_date date NOT NULL );
SELECT * FROM team2_reservation;

DROP TABLE service_help;
CREATE TABLE service_help (
    service_id int IDENTITY(1,1) PRIMARY KEY,
    name_of_service nchar(20) NOT NULL,
    service_cost int NOT NULL,
    reservation_no int NOT NULL );
SELECT * FROM service_help;
```

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

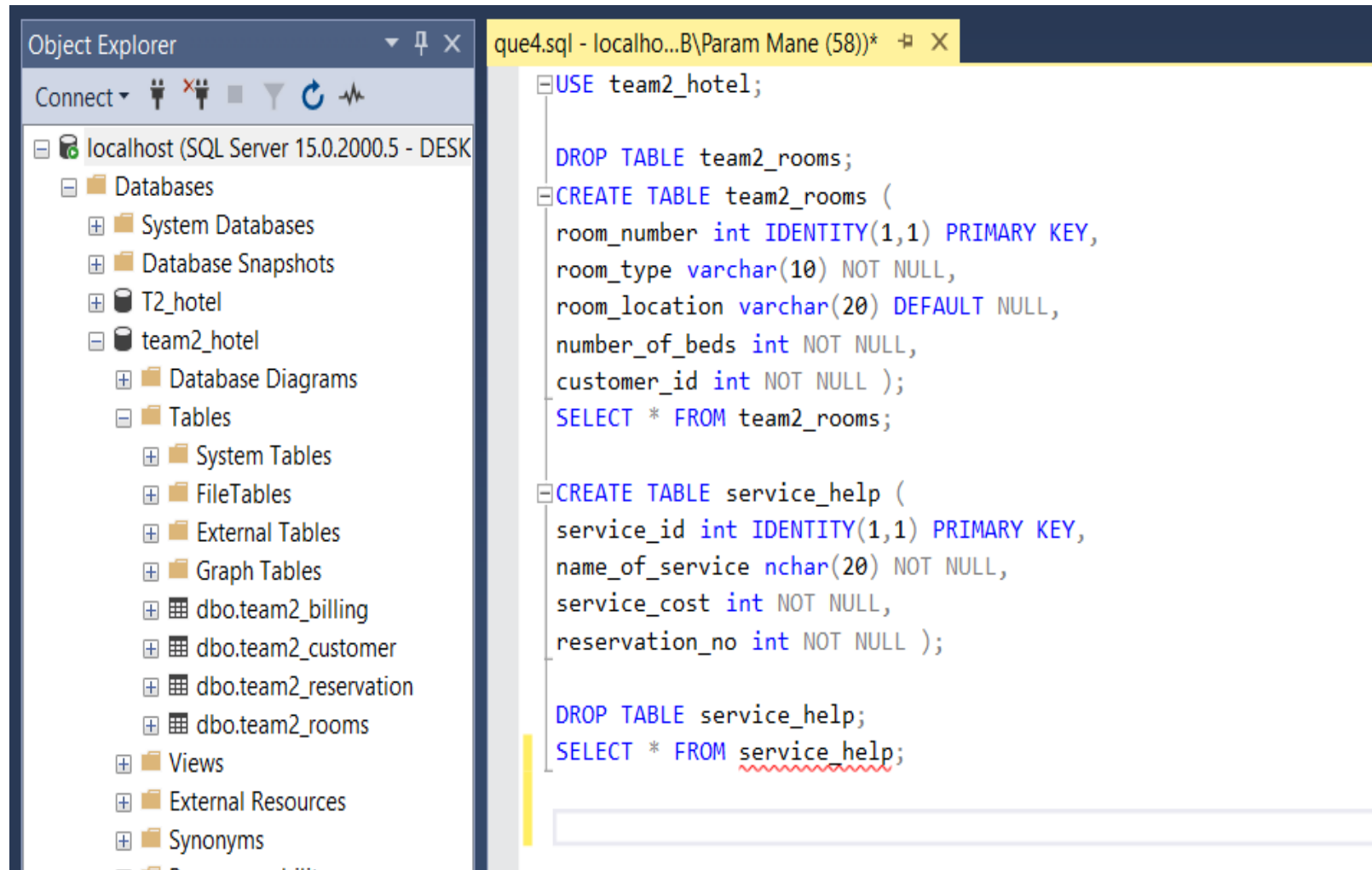
Results

Messages

| | | | | | | | |
|-------------|-----------------|---------------|------------------|----------------|----------------|---------------|--|
| room_number | room_type | room_location | number_of_beds | customer_id | | | |
| customer_id | customer_name | ph_number | city | zip_code | reservation_no | email_id | |
| customer_id | billing_number | room_charge | payment_date | credit_card | | | |
| customer_id | room_number | no_of_guests | reservation_date | check_out_date | reservation_no | check_in_date | |
| service_id | name_of_service | service_cost | reservation_no | | | | |

✓ Query executed successfully.

4. Drop table.



The screenshot displays the SQL Server Enterprise Manager interface on the left and a query window on the right. The Object Explorer on the left shows the database structure for 'localhost (SQL Server 15.0.2000.5 - DESK)'. Under the 'team2_hotel' database, the 'Tables' folder is expanded, listing several tables including 'dbo.team2_billing', 'dbo.team2_customer', 'dbo.team2_reservation', and 'dbo.team2_rooms'. The query window on the right, titled 'que4.sql - localho...B\Param Mane (58))*', contains the following SQL script:

```
USE team2_hotel;

DROP TABLE team2_rooms;

CREATE TABLE team2_rooms (
    room_number int IDENTITY(1,1) PRIMARY KEY,
    room_type varchar(10) NOT NULL,
    room_location varchar(20) DEFAULT NULL,
    number_of_beds int NOT NULL,
    customer_id int NOT NULL );
SELECT * FROM team2_rooms;

CREATE TABLE service_help (
    service_id int IDENTITY(1,1) PRIMARY KEY,
    name_of_service nchar(20) NOT NULL,
    service_cost int NOT NULL,
    reservation_no int NOT NULL );

DROP TABLE service_help;
SELECT * FROM service_help;
```

| Results | | Messages | | |
|-------------|-----------|---------------|----------------|-------------|
| room_number | room_type | room_location | number_of_beds | customer_id |
| | | | | |

5. Show how to check the schema of the tables.

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the Object Explorer shows the hierarchy: localhost (SQL Server 15.0.2000.5 - DESK) > Databases > team2_hotel > Tables. The tables listed are dbo.team2_billing, dbo.team2_customer, dbo.team2_reservation, and dbo.team2_rooms. On the right, the SQL Query window shows the following T-SQL script:

```
USE team2_hotel;

DROP TABLE team2_rooms;
CREATE TABLE team2_rooms (
    room_number int IDENTITY(1,1) PRIMARY KEY,
    room_type varchar(10) NOT NULL,
    room_location varchar(20) DEFAULT NULL,
    number_of_beds int NOT NULL,
    customer_id int NOT NULL );
SELECT * FROM team2_rooms;

DROP TABLE team2_customer;
CREATE TABLE team2_customer (
    customer_id int IDENTITY(1,1) PRIMARY KEY,
    customer_name nchar(30) NOT NULL,
    ph_number int NOT NULL,
    city nchar(20) NOT NULL,
    zip_code int NOT NULL,
    reservation_no int NOT NULL,
    email_id nvarchar(30) DEFAULT NULL );
SELECT * FROM team2_customer;

DROP TABLE team2_billing;
CREATE TABLE team2_billing (
    customer_id int NOT NULL,
    billing_number int IDENTITY(1,1) PRIMARY KEY,
    room_charge int NOT NULL,
    payment_date date NOT NULL,
    credit_card nvarchar(30) NOT NULL );
SELECT * FROM team2_billing;

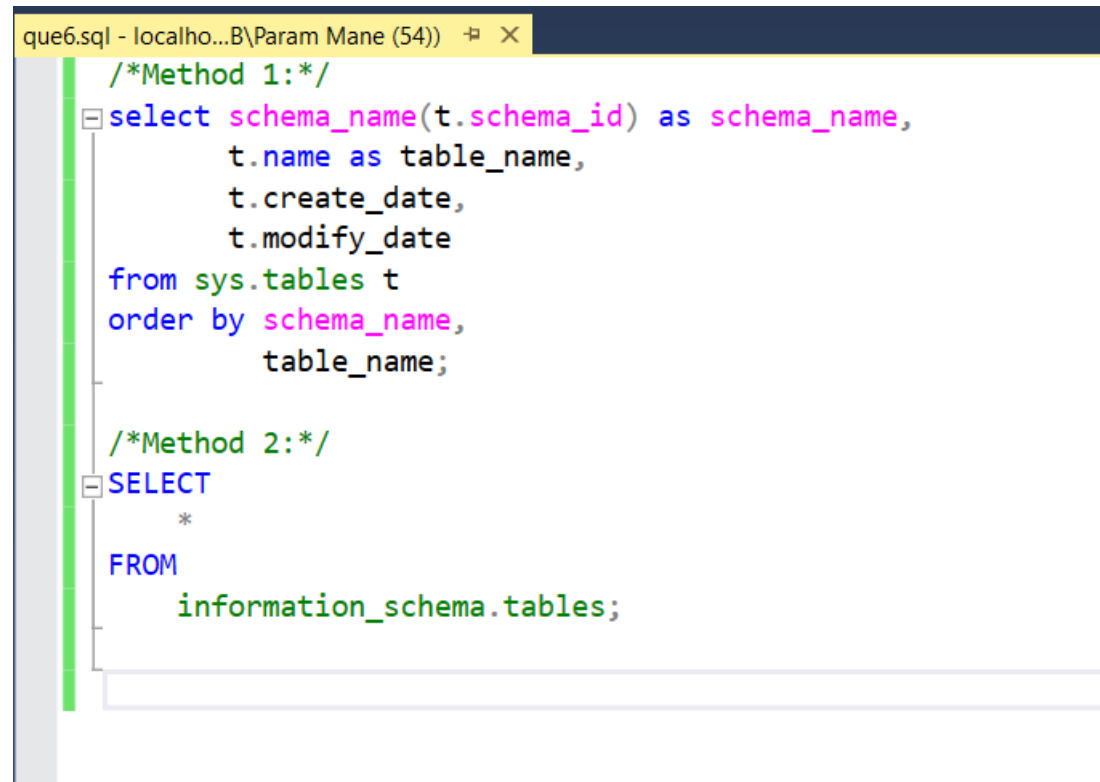
DROP TABLE team2_reservation;
CREATE TABLE team2_reservation (
    customer_id int NOT NULL,
    room_number int NOT NULL,
    no_of_guests int NOT NULL,
    reservation_date date NOT NULL,
    check_out_date date NOT NULL,
    reservation_no int IDENTITY(1,1) PRIMARY KEY,
    check_in_date date NOT NULL );
SELECT * FROM team2_reservation;

SELECT * FROM INFORMATION_SCHEMA.TABLES;
```

At the bottom, the status bar indicates "Query executed successfully."

6. Show all the tables from the database.

Method 1:



```
que6.sql - localho...B\Param Mane (54)  + X
/*Method 1:*/
select schema_name(t.schema_id) as schema_name,
       t.name as table_name,
       t.create_date,
       t.modify_date
from sys.tables t
order by schema_name,
       table_name;

/*Method 2:*/
SELECT
    *
FROM
    information_schema.tables;
```

Results

Messages

| | schema_name | table_name | create_date | modify_date |
|---|-------------|-------------------|-------------------------|-------------------------|
| 1 | dbo | team2_billing | 2021-02-12 18:40:55.793 | 2021-02-12 18:40:55.793 |
| 2 | dbo | team2_customer | 2021-02-12 18:40:55.790 | 2021-02-12 18:40:55.790 |
| 3 | dbo | team2_reservation | 2021-02-12 18:40:55.797 | 2021-02-12 18:40:55.797 |
| 4 | dbo | team2_rooms | 2021-02-12 18:55:11.340 | 2021-02-12 18:55:11.340 |

| | TABLE_CATALOG | TABLE_SCHEMA | TABLE_NAME | TABLE_TYPE |
|---|---------------|--------------|-------------------|------------|
| 1 | team2_hotel | dbo | team2_customer | BASE TABLE |
| 2 | team2_hotel | dbo | team2_billing | BASE TABLE |
| 3 | team2_hotel | dbo | team2_reservation | BASE TABLE |
| 4 | team2_hotel | dbo | team2_rooms | BASE TABLE |

Method 2:

que6_m2.sql - loca...B\Param Mane (51))*

USE team2_hotel;

/*Method 1:*/

select t.name as table_name

from sys.tables t

order by table_name;

/*Method 2:*/

SELECT

*

FROM

information_schema.tables;

100 %

Results

Messages

| | table_name |
|---|-------------------|
| 1 | team2_billing |
| 2 | team2_customer |
| 3 | team2_reservation |
| 4 | team2_rooms |

| | TABLE_CATALOG | TABLE_SCHEMA | TABLE_NAME | TABLE_TYPE |
|---|---------------|--------------|-------------------|------------|
| 1 | team2_hotel | dbo | team2_customer | BASE TABLE |
| 2 | team2_hotel | dbo | team2_billing | BASE TABLE |
| 3 | team2_hotel | dbo | team2_reservation | BASE TABLE |
| 4 | team2_hotel | dbo | team2_rooms | BASE TABLE |

✔







Query executed successfully.

7. Create table using select statement.

```
q7.sql - localhost...VB\Param Mane (63))* X
USE team2_hotel;
DROP TABLE team2_CustomerInfo;
SELECT customer_name, ph_number, city, zip_code, email_id INTO team2_CustomerInfo
FROM team2_customer;

SELECT *FROM team2_CustomerInfo;
```

Object Explorer

Connect      

localhost (SQL Server 15.0.2000.5 - DESK)

- Databases
 - System Databases
 - Database Snapshots
 - T2_hotel
 - team2_hotel
 - Database Diagrams
 - Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.team2_billing
 - dbo.team2_customer
 - dbo.team2_CustomerInfo
 - dbo.team2_reservation
 - dbo.team2_rooms
 - Views

q7.sql - localhost...VB\Param Mane (63))*

```
USE team2_hotel;  
  
DROP TABLE team2.CustomerInfo;
```

100 %

Results Messages

| customer_name | ph_number | city | zip_code | email_id |
|---------------|-----------|------|----------|----------|
|---------------|-----------|------|----------|----------|

8. Create a table which has derived attribute.

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the Object Explorer shows the database structure for 'team2_hotel'. The 'Tables' folder is expanded, and the table 'dbo.team2_menu' is selected. The table's columns are listed: 'customer_id' (int, not null), 'order_idno' (PK, int, not null), 'order_date' (date, not null), 'order_amount' (nvarchar(10), not null), and 'gst_amount' (Computed, nvarchar(10)).

On the right, the SQL query editor shows the following script:

```
USE team2_hotel;  
  
DROP TABLE team2_menu;  
  
CREATE TABLE team2_menu (  
    customer_id int NOT NULL,  
    order_idno int IDENTITY (1,1) PRIMARY KEY,  
    order_date date NOT NULL,  
    order_amount nchar(10) NOT NULL,  
    gst_amount AS nchar (order_amount*0.3) );  
  
SELECT *FROM team2_menu;
```

At the bottom, the status bar indicates 'Query executed successfully.'

| Results | | Messages | | |
|-------------|------------|------------|--------------|------------|
| customer_id | order_idno | order_date | order_amount | gst_amount |