

DBMS LAB ASSIGNMENT 2

NAME: SHINDE ROHIT SAGAR

REG NO: 19BCS099

Q1) Show how to Create and Drop Database ?

The screenshot displays the Microsoft SQL Server Management Studio (SSMS) interface. The title bar indicates the file 'SQLQuery1.sql' is open on the server 'localhost.team2_hotel'. The menu bar includes File, Edit, View, Query, Project, Tools, Window, and Help. The toolbar contains icons for file operations, query execution, and other database management tasks. The 'Object Explorer' on the left shows the server hierarchy for 'localhost (SQL Server 15.0.2080.9 - LAPTOP-724QSKMF\Rohit Sagar Shinde (57))', with 'Databases' expanded to show 'team2_hotel'. The main query editor window shows the following SQL script:

```
CREATE DATABASE team_2_hotel;  
CREATE DATABASE team_2_hotel_new;  
DROP DATABASE team_2_hotel_new;
```

The 'Messages' pane at the bottom shows the execution results:

```
Commands completed successfully.  
  
Completion time: 2021-02-19T12:16:37.5530179+05:30
```

The status bar at the bottom indicates 'Query executed successfully.' and provides details about the execution: 'localhost (15.0 RTM) | LAPTOP-724QSKMF\Rohit ... | team2_hotel | 00:00:03 | 0 rows'.

Q2) Show all the Databases are in the system ?

SQLQuery1.sql - localhost.team2_hotel (LAPTOP-724QSKMF\Rohit Sagar Shinde (57))* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

team2_hotel Execute

Object Explorer

Connect

localhost (SQL Server 15.0.2080.9 - LAPTOP)

Databases

- System Databases
- Database Snapshots
- 2_hotel
- 3_hotel
- Hotel
- team2_hotel
- team2_hotel
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

SQLQuery1.sql - loc...Sagar Shinde (57))*

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

100 %

Results Messages

	database_name	database_id	create_date
1	master	1	2003-04-08 09:13:36.390
2	tempdb	2	2021-02-12 17:27:11.947
3	model	3	2003-04-08 09:13:36.390
4	msdb	4	2019-09-24 14:21:42.270
5	2_hotel	5	2021-02-04 19:22:56.980
6	3_hotel	6	2021-02-04 20:24:27.160
7	Hotel	7	2021-02-05 13:53:38.280
8	team2_hotel	8	2021-02-13 12:13:43.270
9	team_2_hotel	9	2021-02-13 12:16:34.057
10	team_2_hotel_new	10	2021-02-13 12:26:28.737

Query executed successfully.

localhost (15.0 RTM) LAPTOP-724QSKMF\Rohit ... team2_hotel 00:00:00 10 rows

Ready Ln 3 Col 19 Ch 19 INS

Q3) Create table for your Database ?

Input:

The screenshot displays the Microsoft SQL Server Management Studio (SSMS) interface. The title bar indicates the connection to 'SQLQuery1.sql - localhost:team_2_hotel (LAPTOP-724QSKMF\Rohit Sagar Shinde (57))* - Microsoft SQL Server Management Studio'. The 'Object Explorer' on the left shows the database structure, including tables like 'dbo.team_2_billing', 'dbo.team_2_reservation', and 'dbo.team_2_rooms'. The 'SQLQuery1.sql' editor in the center contains the following T-SQL script:

```
USE team_2_hotel;

DROP TABLE team_2_rooms;
CREATE TABLE team_2_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 team_2_rooms;

DROP TABLE team_2_customer;
CREATE TABLE team_2_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 team_2_customer;

DROP TABLE team_2_billing;
CREATE TABLE team_2_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 team_2_billing;

DROP TABLE team_2_reservation;
CREATE TABLE team_2_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 team_2_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.' and shows the server name 'localhost (15.0 RTM)', the user 'LAPTOP-724QSKMF\Rohit ...', the database 'team_2_hotel', and the execution time '00:00:00'.

OUTPUT:

room_number	room_type	room_loaction	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				

Q4) Drop Table ?

SQLQuery1.sql - localhost.team_2_hotel (LAPTOP-724QSKMF\Rohit Sagar Shinde (57))* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

team_2_hotel Execute

Object Explorer

- Databases
 - System Databases
 - Database Snapshots
 - 2_hotel
 - 3_hotel
 - Hotel
 - team_2_hotel
 - Database Diagrams
 - Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.team_2_billing
 - dbo.team_2_customer
 - dbo.team_2_reservation
 - dbo.team_2_rooms
 - Views
 - External Resources
 - Synonyms
 - Programmability
 - Service Broker
 - Storage
 - Security
 - team_2_hotel_new
 - team2_hotel
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

SQLQuery1.sql - loc...Sagar Shinde (57))*

```
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;
```

100 %

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

Query executed successfully.

localhost (15.0 RTM) LAPTOP-724QSKMF\Rohit ... team_2_hotel 00:00:00 10 rows

Ready Ln 58 Col 28 Ch 28 INS

Q5) Show how to check the schema of the tables ?

INPUT:

The screenshot displays the Microsoft SQL Server Management Studio (SSMS) interface. The title bar indicates the connection is to '4.sql - localhost:team_2_hotel (LAPTOP-724QSKMF\Rohit Sagar Shinde (57))* - Microsoft SQL Server Management Studio'. The menu bar includes File, Edit, View, Query, Project, Tools, Window, and Help. The toolbar contains various icons for file operations, query execution, and navigation. The 'Object Explorer' on the left shows the database structure for 'localhost (SQL Server 15.0.2080.9 - LAPTOP-724QSKMF\Rohit Sagar Shinde (57))'. The 'Databases' folder is expanded, showing 'team_2_hotel' and its sub-objects: 'Database Diagrams', 'Tables', 'Views', 'External Resources', 'Synonyms', 'Programmability', 'Service Broker', 'Storage', 'Security', 'team_2_hotel_new', and 'team2_hotel'. The 'Tables' folder is expanded, showing 'team_2_hotel'. The 'Query Editor' window shows a SQL script with the following content:

```
USE team_2_hotel;

DROP TABLE team_2_rooms;
CREATE TABLE team_2_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 team_2_rooms;

DROP TABLE team_2_customer;
CREATE TABLE team_2_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 team_2_customer;

DROP TABLE team_2_billing;
CREATE TABLE team_2_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 team_2_billing;

DROP TABLE team_2_reservation;
CREATE TABLE team_2_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 team_2_reservation;

SELECT *FROM INFORMATION_SCHEMA.TABLES;
```

The status bar at the bottom shows 'Query executed successfully.' and 'localhost (15.0 RTM) | LAPTOP-724QSKMF\Rohit ... | team_2_hotel | 00:00:00 | 14 rows'.

OUTPUT:

	TABLE_CATALOG	TABLE_SCHEMA	TABLE_NAME	TABLE_TYPE
1	team_2_hotel	dbo	team_2_rooms	BASE TABLE
2	team_2_hotel	dbo	team_2_customer	BASE TABLE
3	team_2_hotel	dbo	team_2_billing	BASE TABLE
4	team_2_hotel	dbo	team_2_reservat...	BASE TABLE

✔ Query executed successfully. | localhost (15.0 RTM) | LAPTOP-724QSKMF\Rohit ... | team_2_hotel | 00:00:00 | 14 rows

Q6) Show all the tables from the database ?

INPUT:

The screenshot displays the Microsoft SQL Server Management Studio (SSMS) interface. The title bar indicates the connection to '4.sql - localhost.team_2_hotel (LAPTOP-724QSKMF\Rohit Sagar Shinde (58))'. The menu bar includes File, Edit, View, Query, Project, Tools, Window, and Help. The toolbar contains icons for various database operations. The Object Explorer on the left shows the server structure, with 'team_2_hotel' selected. The main query window shows two methods for querying the database:

```
/*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;
```

The status bar at the bottom indicates 'Query executed successfully.' and shows the execution time as '00:00:00' with '22 rows' returned. The bottom status bar also shows 'Ready', 'Ln 60', 'Col 1', 'Ch 1', and 'INS'.

OUTPUT:

	schema_name	table_name	create_date	modify_date
1	dbo	team_2_billing	2021-02-13 14:17:02.987	2021-02-13 14:17:02.987
2	dbo	team_2_customer	2021-02-13 14:17:02.980	2021-02-13 14:17:02.980
3	dbo	team_2_reservat...	2021-02-13 14:17:02.993	2021-02-13 14:17:02.993
4	dbo	team_2_rooms	2021-02-13 14:17:02.970	2021-02-13 14:17:02.970

	TABLE_CATALOG	TABLE_SCHEMA	TABLE_NAME	TABLE_TYPE
1	team_2_hotel	dbo	team_2_rooms	BASE TABLE
2	team_2_hotel	dbo	team_2_customer	BASE TABLE
3	team_2_hotel	dbo	team_2_billing	BASE TABLE
4	team_2_hotel	dbo	team_2_reservat...	BASE TABLE

 Query executed successfully.

Ln 60Col 1Ch 1

Q7) Create table using Select statement ?

The screenshot displays the Microsoft SQL Server Management Studio interface. The title bar indicates the current query is 'SQLQuery1.sql - localhost.team_2_hotel (LAPTOP-724QSKMF\Rohit Sagar Shinde (71))* - Microsoft SQL Server Management Studio'. The menu bar includes File, Edit, View, Query, Project, Tools, Window, and Help. The toolbar contains various icons for file operations, query execution, and formatting. The 'Object Explorer' on the left shows the database structure for 'localhost (SQL Server 15.0.2080.9 - LAPTOP-724QS ^)'. Under 'Databases', 'team_2_hotel' is expanded, showing 'Tables' such as 'dbo.team_2_billing', 'dbo.team_2_customer', 'dbo.team_2_CustomerInfo', 'dbo.team_2_reservation', and 'dbo.team_2_rooms'. The 'Query Editor' on the right shows the following SQL script:

```
USE team_2_hotel;  
  
DROP TABLE team_2_CustomerInfo;  
  
SELECT customer_name,ph_number,city,zip_code,email_id INTO team_2_CustomerInfo  
FROM team_2_Customer;  
  
SELECT *FROM team_2_CustomerInfo;
```

The 'Results' pane below the query editor shows the output of the last query, displaying a table with the following columns: customer_name, ph_number, city, zip_code, and email_id. The status bar at the bottom indicates 'Query executed successfully.' and provides details about the execution environment: localhost (15.0 RTM), LAPTOP-724QSKMF\Rohit ..., team_2_hotel, 00:00:00, 0 rows.

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

Q8) Create a table which has derived attribute.

The screenshot displays the Microsoft SQL Server Management Studio interface. The title bar indicates the active query is 'SQLQuery2.sql - localhost.team_2_hotel (LAPTOP-724QSKMF\Rohit Sagar Shinde (52))* - Microsoft SQL Server Management Studio'. The menu bar includes File, Edit, View, Query, Project, Tools, Window, and Help. The toolbar contains various icons for file operations, query execution, and formatting. The 'Object Explorer' on the left shows the database structure for 'localhost (SQL Server 15.0.2080.9 - LAPTOP-724QS ^)', including 'Databases', 'System Databases', 'Database Snapshots', '2_hotel', '3_hotel', 'Hotel', and 'team_2_hotel'. Under 'team_2_hotel', there are 'Database Diagrams', 'Tables', 'System Tables', 'FileTables', 'External Tables', 'Graph Tables', and several system tables like 'dbo.team_2_billing', 'dbo.team_2_customer', 'dbo.team_2_CustomerInfo', 'dbo.team_2_menu', 'dbo.team_2_reservation', and 'dbo.team_2_rooms'. The 'Query Editor' in the center shows the following SQL script:

```
Use team_2_hotel;  
  
DROP TABLE team_2_menu;  
CREATE TABLE team_2_menu(  
    customer_id int NOT NULL,  
    order_id_no 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 team_2_menu;
```

The 'Results' pane at the bottom shows the column headers for the query result: 'customer_id', 'order_id_no', 'order_date', 'order_amount', and 'gst_amount'. A status bar at the bottom indicates 'Query executed successfully.' and provides details about the execution: 'localhost (15.0 RTM) | LAPTOP-724QSKMF\Rohit ... | team_2_hotel | 00:00:00 | 0 rows'.