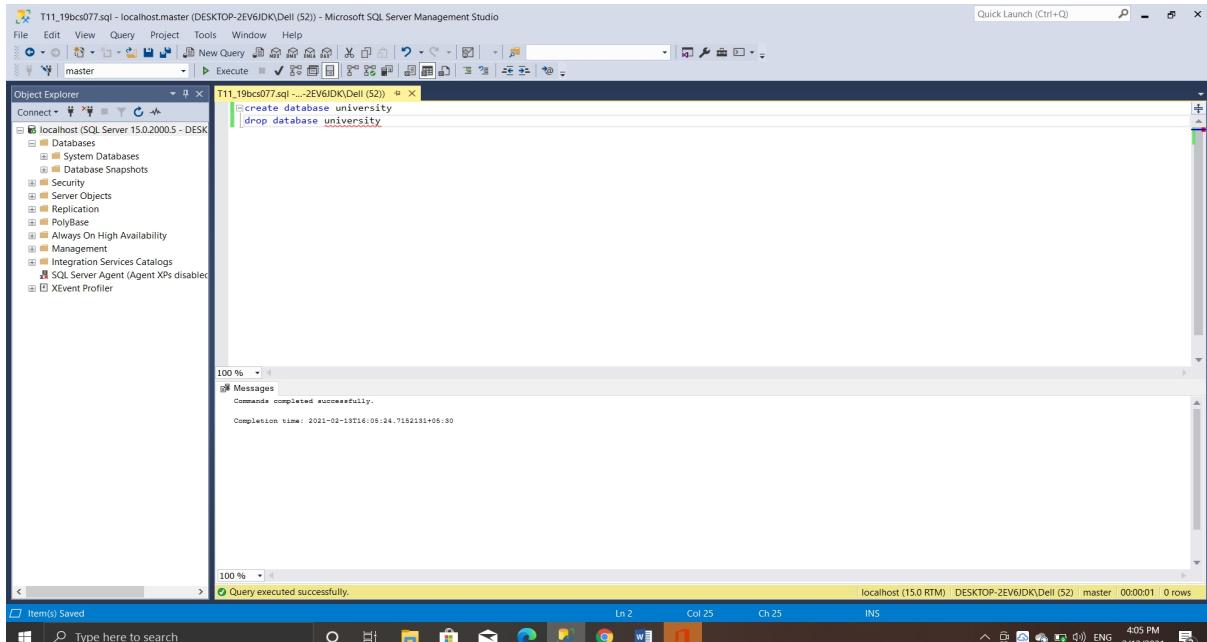


DATABASE MANAGEMENT SYSTEM

LAB ASSIGNMENT-02

Kiran vasantha nayaka I
19bcs054

1 Show how to create and drop a database



The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, the 'master' database is selected. In the center pane, a query window titled 'T11_19bcs077.sql - localhost.master (DESKTOP-2EV6IDK\DELL (S2)) - Microsoft SQL Server Management Studio' contains the following SQL code:

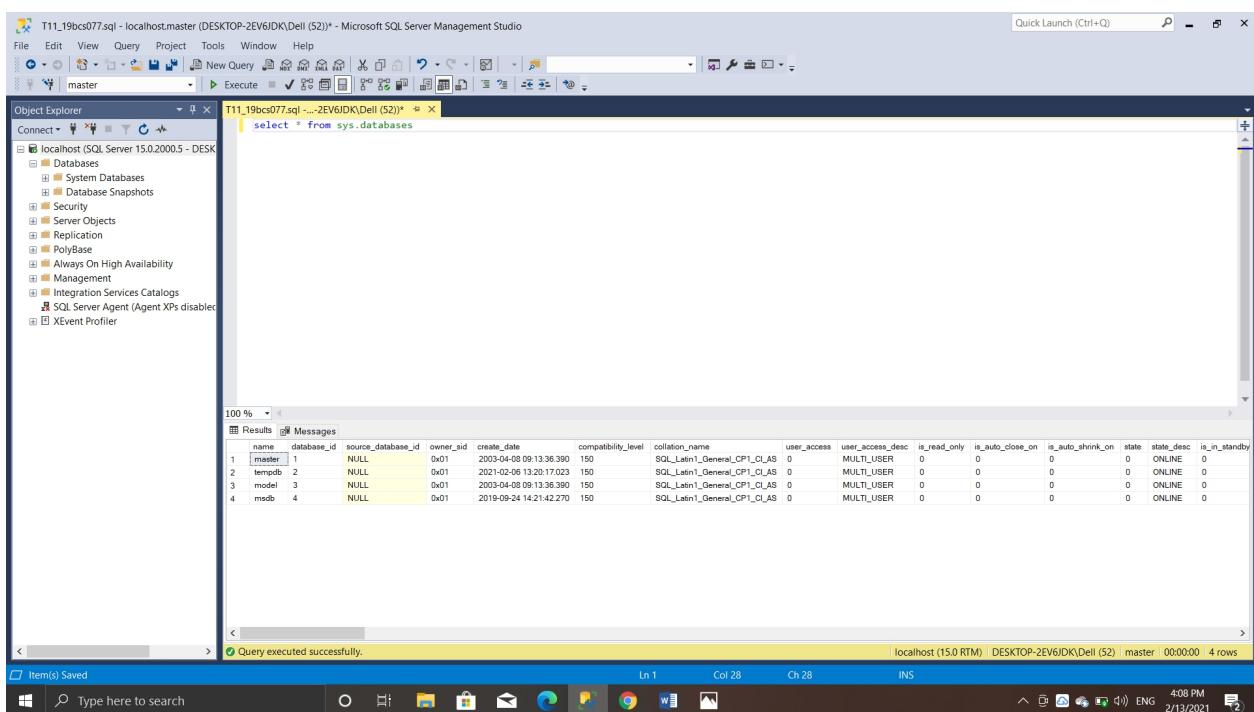
```
create database university
drop database university
```

Below the code, the 'Messages' pane shows the execution results:

```
Commands completed successfully.
Completion time: 2021-02-13T16:08:24.7152131+05:30
```

The status bar at the bottom indicates 'localhost (15.0 RTM) DESKTOP-2EV6IDK\DELL (S2) master 00:00:01 0 rows'.

2 Show all the databases in the system



The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, the 'master' database is selected. In the center pane, a query window titled 'T11_19bcs077.sql - localhost.master (DESKTOP-2EV6IDK\DELL (S2)) - Microsoft SQL Server Management Studio' contains the following SQL code:

```
select * from sys.databases
```

The results pane displays a table of database information:

| name | database_id | source_database_id | owner_sid | create_date | compatibility_level | collation_name | user_access | user_access_desc | is_read_only | is_auto_close_on | is_auto_shrink_on | state | state_desc | is_in_standby |
|--------|-------------|--------------------|-----------|-------------------------|---------------------|--------------------------|-------------|------------------|--------------|------------------|-------------------|-------|------------|---------------|
| master | 1 | NULL | 0x01 | 2003-04-09 09:13:36.390 | 150 | SQL_Latin1_General_CI_AS | 0 | MULTI_USER | 0 | 0 | 0 | 0 | ONLINE | 0 |
| tempdb | 2 | NULL | 0x01 | 2003-02-06 13:20:17.023 | 150 | SQL_Latin1_General_CI_AS | 0 | MULTI_USER | 0 | 0 | 0 | 0 | ONLINE | 0 |
| model | 3 | NULL | 0x01 | 2003-04-09 09:13:36.390 | 150 | SQL_Latin1_General_CI_AS | 0 | MULTI_USER | 0 | 0 | 0 | 0 | ONLINE | 0 |
| msdb | 4 | NULL | 0x01 | 2019-09-24 14:21:42.270 | 150 | SQL_Latin1_General_CI_AS | 0 | MULTI_USER | 0 | 0 | 0 | 0 | ONLINE | 0 |

The status bar at the bottom indicates 'localhost (15.0 RTM) DESKTOP-2EV6IDK\DELL (S2) master 00:00:00 4 rows'.

3 create a table for your database

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, a database named 'university' is selected. In the center pane, a query window titled 'T11_19bcs077sql - localhost.master' contains the following SQL code:

```
use master;
create database university
use university;
create table department
(
    dept_name varchar(100) not null, dept_location varchar(100) not null, primary key (dept_name)
)
create table course
(
    course_id int, dept_name varchar(100) not null, i_id int not null, duration int not null, course_name varchar(20) not null, primary key (course_id)
)
create table instructor
(
    i_id int, dept_name varchar(100), head_by varchar(20), first_name varchar(50) not null, last_name varchar(50) not null, phone int not null, primary key (i_id)
)
create table student
(
    s_id int, first_name varchar(50) not null, last_name varchar(50) not null, phone int, primary key (s_id)
)
```

The 'Results' tab shows the execution of the 'use master;' command, followed by the creation of the 'university' database and its four tables. The table structures are displayed in the results grid.

4 Drop a table from your system

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, a database named 'university' is selected. In the center pane, a query window titled 'T11_19bcs077sql - localhost.university' contains the following SQL code:

```
create table section
(
    sec_id int not null , semester int not null , year_ int not null
)
select * from section*
drop table section
```

The 'Messages' tab shows the successful execution of the 'create table' and 'drop table' commands. The message indicates that the command completed successfully at 2021-02-13T16:35:13.2599180+05:30.

5 Show how to check the schema of the table

T11_19bcs077.sql - localhost.university (DESKTOP-2EV6JDK\DELL (52)) - Microsoft SQL Server Management Studio

```
select * from INFORMATION_SCHEMA.COLUMNS
where TABLE_NAME = 'course'
```

Results Messages

| TABLE_CATALOG | TABLE_SCHEMA | TABLE_NAME | COLUMN_NAME | ORDINAL_POSITION | COLUMN_DEFAULT | IS_NULLABLE | DATA_TYPE | CHARACTER_MAXIMUM_LENGTH | CHARACTER_OCTET_LENGTH | Numeric_Precision | Numeric_Precision |
|---------------|--------------|------------|-------------|------------------|----------------|-------------|-----------|--------------------------|------------------------|-------------------|-------------------|
| 1 university | dbo | course | course_id | 1 | NULL | NO | int | NULL | NULL | 10 | 10 |
| 2 university | dbo | course | dept_name | 2 | NULL | NO | varchar | 100 | 100 | NULL | NULL |
| 3 university | dbo | course | i_id | 3 | NULL | NO | int | NULL | NULL | 10 | 10 |
| 4 university | dbo | course | duration | 4 | NULL | NO | int | NULL | NULL | 10 | 10 |
| 5 university | dbo | course | course_name | 5 | NULL | NO | varchar | 20 | 20 | NULL | NULL |

Query executed successfully.

6 Show all the tables from the database

T11_19bcs077.sql - localhost.university (DESKTOP-2EV6JDK\DELL (52)) - Microsoft SQL Server Management Studio

```
select * from SYSOBJECTS where xtype='U';
```

Results Messages

| name | id | xtype | uid | info | status | base_schema_ver | replinfo | parent_obj | crtdate | fcacid | schema_ver | state_schema_ver | type | userstat | sysstat | indexdel | refdate | version | deltrig | instrg | updtrig |
|--------------|-----------|-------|-----|------|--------|-----------------|----------|------------|-------------------------|--------|------------|------------------|------|----------|---------|----------|-------------------------|---------|---------|--------|---------|
| 1 department | 581577110 | U | 1 | 0 | 0 | 0 | 0 | 0 | 2021-02-13 16:25:43.530 | 0 | 0 | 0 | U | 1 | 3 | 0 | 2021-02-13 16:25:43.530 | 0 | 0 | 0 | |
| 2 course | 613577224 | U | 1 | 0 | 0 | 0 | 0 | 0 | 2021-02-13 16:25:43.557 | 0 | 0 | 0 | U | 1 | 3 | 0 | 2021-02-13 16:25:43.557 | 0 | 0 | 0 | |
| 3 instructor | 645577338 | U | 1 | 0 | 0 | 0 | 0 | 0 | 2021-02-13 16:25:43.560 | 0 | 0 | 0 | U | 1 | 3 | 0 | 2021-02-13 16:25:43.560 | 0 | 0 | 0 | |
| 4 student | 677577452 | U | 1 | 0 | 0 | 0 | 0 | 0 | 2021-02-13 16:25:43.560 | 0 | 0 | 0 | U | 1 | 3 | 0 | 2021-02-13 16:25:43.560 | 0 | 0 | 0 | |

Query executed successfully.

7 Create a table using select statement

T11_19bcs077.sql - localhost.university (DESKTOP-2EV6JDK\DELL (52)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query Execute

Object Explorer

localhost (SQL Server 15.0.2000.5 - DESKTOP-2EV6JDK\DELL (52))

university

Tables

Course

Department

Instructor

Student

Messages

(3 rows affected)

Completion time: 2021-02-13T17:42:50.2265361+05:30

Ln 56 Col 70 Ch 70 INS

Query executed successfully.

localhost (15.0 RTM) DESKTOP-2EV6JDK\DELL (52) university 00:00:00 0 rows

Ready Type here to search

Windows Taskbar: File Explorer, Mail, Edge, Google Chrome, File, 5:42 PM, ENG, 2/13/2021

```
where TABLE_NAME = 'course'
select * from SYSOBJECTS where xtype='U';/

select dept_name , dept_location into new_department from department;
```

8 Create a table which has derived attribute

T11_19bcs077.sql - localhost.university (DESKTOP-2EV6JDK\DELL (52)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query Execute

Object Explorer

localhost (SQL Server 15.0.2000.5 - DESKTOP-2EV6JDK\DELL (52))

university

Tables

student_details

Messages

Commands completed successfully.

Completion time: 2021-02-13T17:57:30.6539583+05:30

Ln 74 Col 5 Ch 2 INS

Query executed successfully.

localhost (15.0 RTM) DESKTOP-2EV6JDK\DELL (52) university 00:00:00 0 rows

Ready Type here to search

Windows Taskbar: File Explorer, Mail, Edge, Google Chrome, File, 5:57 PM, ENG, 2/13/2021

```
create table student_details
(
    s_id int,
    first_name varchar (50) not null,
    last_name varchar (50) not null,
    dob date not null,
    age as datediff (year,dob,getdate()),
    phone int ,
    primary key (s_id)
)
```