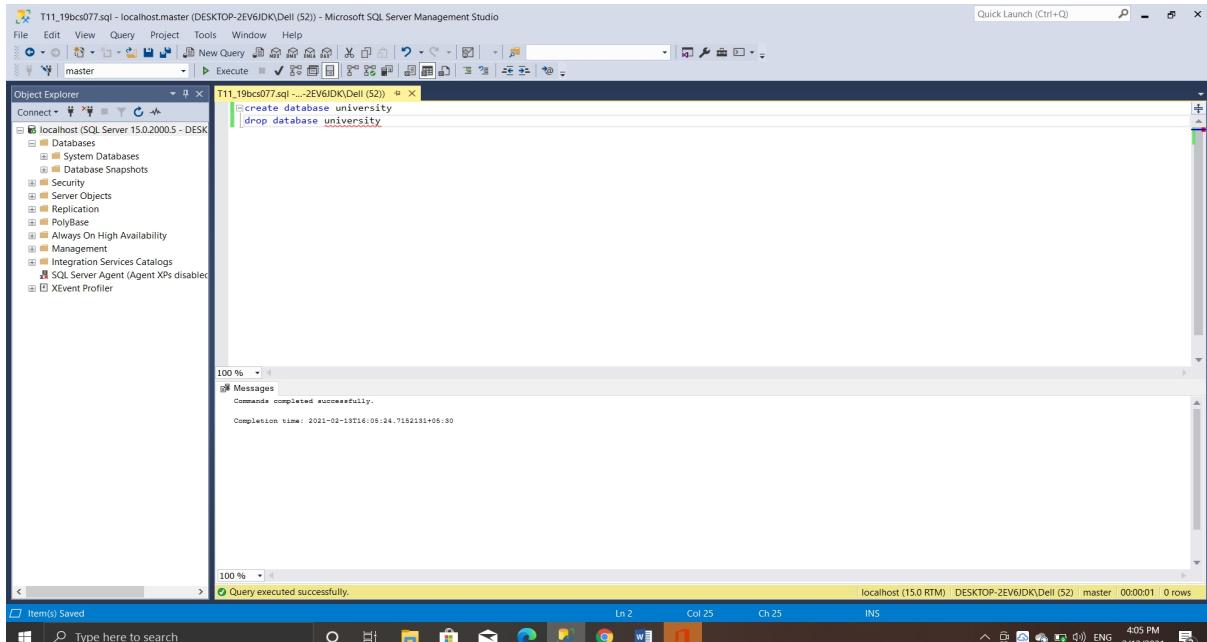


DATABASE MANAGEMENT SYSTEM

LAB ASSIGNMENT-02

banoth vijay
19bcs017

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:

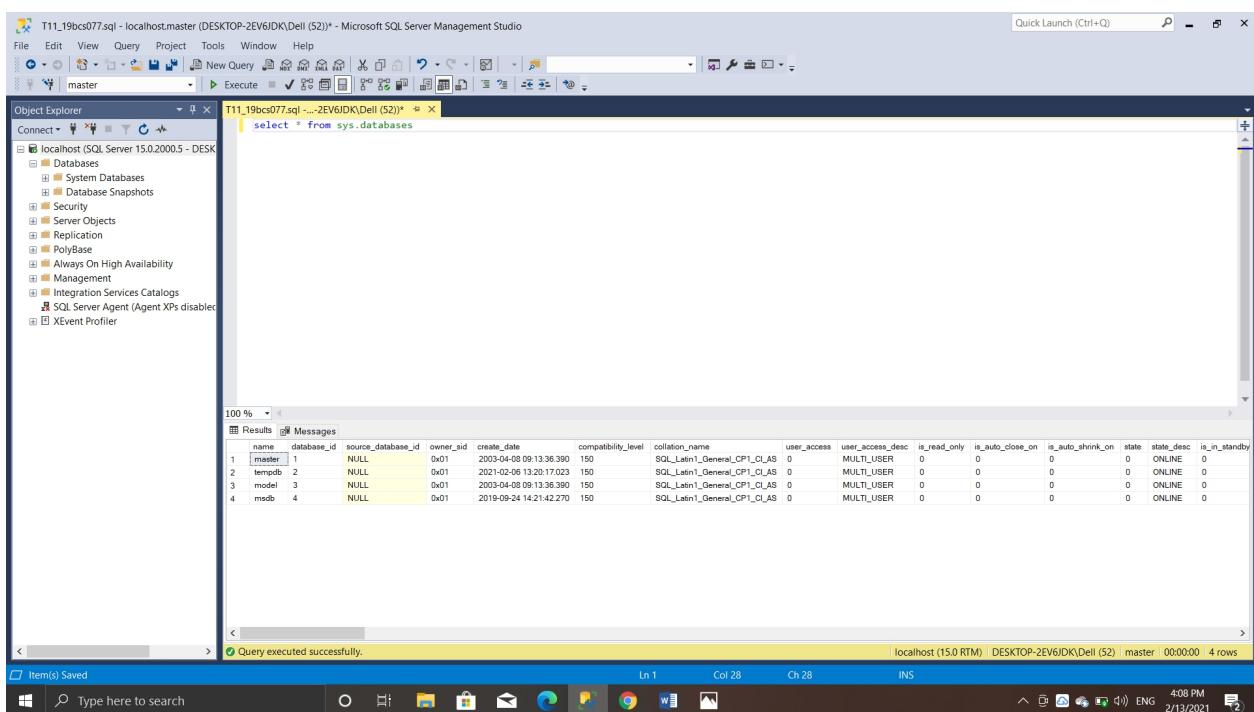
```
create database university
drop database university
```

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 listed below the command results.

At the bottom of the screen, the taskbar shows the date and time as 2/13/2021 4:15 PM.

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 completion of the commands. The output includes the compilation time: 2021-02-13T16:55:13.2599180+05:30.

At the bottom of the screen, the taskbar shows the date and time as 2/13/2021 4:35 PM.

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	updtrg
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)
)
```