

Course Project

Instructions: Design a database that stores information about a registration system. There are four tables in the “Registration System” database.

- Create a Registration script named i.e. **MyRegistration.sql**
- Use what you have learned in the course.
- The database should include four (4) tables with data.

Files to submit: zip file with the files below

- Registration script named i.e. **MyRegistration.sql**
- An .sql file that contains all the SELECT statements (single sql with all scripts)
- Screenshot of database diagram (created in SQL Server Management Studio)

Part I:

A. The database includes 4 tables.

- Sections
- Courses
- Rooms
- Faculty

B. Tables input information.

44320	ITCC-1401	T/TH	8:30AM	1:00PM	ESCT 2128	Uddin	111-11-1111
44322	ITCC-1404	T/TH	1:00PM	5:30PM	ESCT 2100	Uddin	111-11-1111
44324	ITSE-1450						
44287	COSC-1301	MWF	8:00AM	8:50AM	ESCT 2123	Chegwidden	222-22-2222
44289	BCIS-1305	MWF	9:00AM	9:50AM	ESCT 2123	Desassure	333-33-3333
44292	COSC-1436	DL			DL	Williams	444-44-4444
44294	COSC-1437	DL			DL	Williams	444-44-4444
44296	BCIS-1305	T/TH	8:30AM	10:55AM	ESCT 2125	Williams	444-44-4444

Courses Table Input Data: CourseID (Primary Key)

CourseID	Description	Credit
ITCC-1401	CISCO I	4
ITCC-1404	CISCO II	4
ITSE-1450	Systems Analysis and Design	4
ITSW-1407	Introduction to Database	4
BCIS-1305	Business Computer Applications	4
COSC-1301	Introduction to Computing	4
COSC-1436	Fundamentals of Programming I	4
COSC-1437	Fundamentals of Programming II	4

Faculty Table Input Data: FacultyID (Primary Key)

FacultyID	LName	FName	Street	City	State	ZipCode	Phone
111-11-1111	Uddin	MD	85 Halls Lane	Arlington	TX	76018	817-515-1111
222-22-2222	Chegwidden	James	2515 W. Abby Lane	Arlington	TX	76018	817-515-2222
333-33-3333	Desassure	Charles	658 Arbor Creek	Arlington	TX	76018	817-515-3333
444-44-4444	Williams	Gracie	15 Median Street	Arlington	TX	76018	817-515-4444

Room Table Input Data: Room# (Primary Key)

Room#	Seats
DL	25
ESCT 2100	20
ESCT 2123	30
ESCT 2125	30
ESCT 2128	24

Part II. Scripts and Database Diagram

A. Scripts to create for database validation

1. Write SELECT statements to return all column names and data in each table. Sort by the primary key value in ascending order.

Sections table:

	Section#	ID	ClassDay	StartTime	EndTime	Room#	Instructor	FacultyID
2	44289	BCIS-1305	MWF	9:00AM	9:50AM	ESCT 2123	Desassure	333-33-3333
3	44292	COSC-1436	DL			DL	Williams	444-44-4444
4	44294	COSC-1437	DL			DL	Williams	444-44-4444
5	44296	BCIS-1305	T/TH	8:30AM	10:55AM	ESCT 2125	Williams	444-44-4444
6	44300	COSC-1437	T/TH	11:00AM	1:25PM	ESCT 2128	Chegwidden	222-22-2222
7	44320	ITCC-1401	T/TH	8:30AM	1:00PM	ESCT 2128	Uddin	111-11-1111
8	44322	ITCC-1404	T/TH	1:00PM	5:30PM	ESCT 2100	Uddin	111-11-1111
9	44324	ITSE-1450						

Courses table:

	CourseID	Description	Credit
1	BCIS-1305	Business Computer Applications	4
2	COSC-1301	Introduction to Computing	4
3	COSC-1436	Fundamentals of Programming I	4
4	COSC-1437	Fundamentals of Programming II	4
5	ITCC-1401	CISCO I	4
6	ITCC-1404	CISCO II	4
7	ITSE-1450	Systems Analysis and Design	4
8	ITSW-1407	Introduction to Database	4

Faculty table:

	FacultyID	LName	FName	Street	City	State	ZipCode	Phone
1	111-11-1111	Uddin	MD	85 Halls Lane	Arlington	TX	76018	817-515-1111
2	222-22-2222	Chegwidden	James	2515 W. Abby Lane	Arlington	TX	76018	817-515-2222
3	333-33-3333	Desassure	Charles	658 Arbor Creek	Arlington	TX	76018	817-515-3333
4	444-44-4444	Williams	Gracie	15 Median Street	Arlington	TX	76018	817-515-4444

Room table:

	Room#	Seats
1	DL	25
2	ESCT 2100	20
3	ESCT 2123	30
4	ESCT 2125	30
5	ESCT 2128	24

2. Write a SELECT statement that joins the Sections table to the Rooms table and returns these columns:
Section#, ID, Instructor
a. Sort the result set by ID and then by Instructor in ascending order.

	Section#	ID	Instructor
1	44289	BCIS-1305	Desassure
2	44296	BCIS-1305	Williams
3	44287	COSC-1301	Chegwidden
4	44292	COSC-1436	Williams
5	44300	COSC-1437	Chegwidden
6	44294	COSC-1437	Williams
7	44320	ITCC-1401	Uddin
8	44322	ITCC-1404	Uddin

3. Write a SELECT statement that returns these columns
a. The count of the number of rooms in the Rooms table
b. The maximum number of Seats in the Rooms table

	RoomCount	SeatMax
1	5	30

4. Write a SELECT statement that returns the Section#(s) and ID for the instructor Uddin.

	section#	id
1	44320	ITCC-1401
2	44322	ITCC-1404

5. Write an INSERT statement that adds this row to the Faculty table:

FacultyID:555-55-5555
 LName: Smith
 FName: John
 Address:2100 Southeast Parkway
 City: Arlington
 State: TX
 ZipCode: 76018
 Phone: 817-515-5555

	FacultyID	LName	FName	Street	City	State	ZipCode	Phone
1	111-11-1111	Uddin	MD	85 Halls Lane	Arlington	TX	76018	817-515-1111
2	222-22-2222	Chegwidden	James	2515 W. Abby Lane	Arlington	TX	76018	817-515-2222
3	333-33-3333	Desassure	Charles	658 Arbor Creek	Arlington	TX	76018	817-515-3333
4	444-44-4444	Williams	Gracie	15 Median Street	Arlington	TX	76018	817-515-4444
5	555-55-5555	Smith	John	2100 Southeast Parkway	Arlington	TX	76018	817-515-5555

- 5b. Write an UPDATE statement that modifies the Section table for Section# 44324. This statement should change the FacultyID column to 555-55-5555.

	Section#	ID	ClassDay	StartTime	EndTime	Room#	Instructor	FacultyID
2	44289	BCIS-1305	MWF	9:00AM	9:50AM	ESCT 2123	Desassure	333-33-3333
3	44292	COSC-1436	DL			DL	Williams	444-44-4444
4	44294	COSC-1437	DL			DL	Williams	444-44-4444
5	44296	BCIS-1305	T/TH	8:30AM	10:55AM	ESCT 2125	Williams	444-44-4444
6	44300	COSC-1437	T/TH	11:00AM	1:25PM	ESCT 2128	Chegwidden	222-22-2222
7	44320	ITCC-1401	T/TH	8:30AM	1:00PM	ESCT 2128	Uddin	111-11-1111
8	44322	ITCC-1404	T/TH	1:00PM	5:30PM	ESCT 2100	Uddin	111-11-1111
9	44324	ITSE-1450						555-55-5555

- 5c. Write a DELETE statement that deletes the row you updated in the previous step to the Section table. This statement should use the Section# column and FacultyID column to identify the row.

	Section#	ID	ClassDay	StartTime	EndTime	Room#	Instructor	FacultyID
1	44287	COSC-1301	MWF	8:00AM	8:50AM	ESCT 2123	Chegwidden	222-22-2222
2	44289	BCIS-1305	MWF	9:00AM	9:50AM	ESCT 2123	Desassure	333-33-3333
3	44292	COSC-1436	DL			DL	Williams	444-44-4444
4	44294	COSC-1437	DL			DL	Williams	444-44-4444
5	44296	BCIS-1305	T/TH	8:30AM	10:55AM	ESCT 2125	Williams	444-44-4444
6	44300	COSC-1437	T/TH	11:00AM	1:25PM	ESCT 2128	Chegwidden	222-22-2222
7	44320	ITCC-1401	T/TH	8:30AM	1:00PM	ESCT 2128	Uddin	111-11-1111
8	44322	ITCC-1404	T/TH	1:00PM	5:30PM	ESCT 2100	Uddin	111-11-1111

B. Create a database diagram that shows the relationships between the four tables. (Hint: Expand database > Database Diagram > right-click New Database Diagram ...)

