

ASSIGNMENT 2 FRONT SHEET

Qualification	TEC Level 5 HND Diploma in Computing		
Unit number and title	Unit 04: Database Design & Development		
Submission date		Date Received 1st submission	
Re-submission Date		Date Received 2nd submission	
Student Name	Nguyễn Văn Nam Anh	Student ID	GCH200176
Class	GCH1001	Assessor name	Tran Thi Thoa
Student declaration I certify that the assignment submission is entirely my own work and I fully understand the consequences of plagiarism. I understand that making a false declaration is a form of malpractice.			
		Student's signature	

Grading grid

[illegible]

 **Summative Feedback:**

 **Resubmission Feedback:**

Grade:

Assessor Signature:

Date:

Signature & Date:

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Part 2: Database Development and Evaluation

I. Implementation (P2)

Code snippets to create each table

The code creates the Student table

```
Create table Student(  
StudentID nvarchar(50) not null,  
Name nvarchar(50) null,  
Class nvarchar(50) null,  
Phone int null,  
Mail nvarchar(50) null,  
Birthday date null,  
constraint [PK_Student] primary key (StudentID)  
);
```

The code creates the Teacher table.

```
Create table Teacher(  
TeacherID nvarchar(50) not null,  
TeacherName nvarchar(50),  
Phone int null,  
Mail nvarchar(50) null,  
constraint [PK_TeacherID] primary key (TeacherID)  
);
```

The code creates the Subjects table.

```
create table Subject(  

```

```
SubjectID nvarchar(50) not null,  
Name nvarchar(50) null  
constraint PK_SubjectID primary key (SubjectID)  
);
```

The code creates the Class table.

```
create table Class(  
ClassKey nvarchar(50) not null,  
SubjectID nvarchar(50) null,  
TeacherID nvarchar(50) null,  
DateStart date null,  
DateEnd date null,  
constraint PK_Class primary key (ClassKey)  
);  
alter table Class  
add constraint FK_SubjectID Foreign key (SubjectID) references Subject(SubjectID)  
alter table Class  
add constraint FK_TeacherID foreign key (TeacherID) references Teacher(TeacherID)  
alter table Class check constraint FK_TeacherID
```

The code creates the Session table.

```
create table Session(  
SessionKey nvarchar(50) not null,  
Slots nvarchar(50) null,  
Date date null,  
ClassKey nvarchar(50) null,  
Room nvarchar(50),  
constraint PK_SessionKey primary key (SessionKey)  
);  
alter table Session
```

```
add constraint FK_RoomworkKey foreign key (ClasssKey) references Class(ClassKey)
```

The code creates the Attendance table.

```
create table Attendance(  
SessionKey nvarchar(50) not null,  
StudentID nvarchar(50) not null,  
Status nvarchar(50) null,  
constraint [PK_SessionKey, PK_StudentID] primary key (SessionKey, StudentID)  
);  
alter table Attendance  
add constraint FK_Attendance_Session foreign key (SessionKey) references Session(SessionKey)  
alter table Attendance  
check constraint FK_Attendance_Session  
alter table Attendance  
add constraint FK_FK_Attendance_Session foreign key (StudentID) references Student(StudetnID)  
alter table Attendance  
check constraint FK_FK_Attendance_Session
```

Check statement

```
if (object_ID('Student') is not null)  
drop table student
```

```
create table student(  
StudentID nvarchar(50) Not null primary key,  
name nvarchar(50) NULL,  
class nvarchar(50) NULL,  
phone int NULL,  
birthday date NULL,  
mail nvarchar(50) NULL,  
constraint CK_student check(StudentID like 'gch[0-9][0-9][0-9][0-9][0-9]')  
)
```

Code snippets to insert some sample data for each table

```
insert into Student (StudentID, name, ClassKey, Phone, mail, birthday) values(N'gch190645',N' Nguyen Văn Nam Anh',
N'gch0405', 0914162689, N'namanh@gmail.com.vn','20020308');
insert into Student (StudentID, name, ClassKey, Phone, mail, birthday) values(N'gch190646',N' Nguyen Văn Nam',
N'gch0405', 0151791646, N'nam@gmail.com.vn','20020408');
insert into Student (StudentID, name, ClassKey, Phone, mail, birthday) values(N'gch190647',N' Ngo Si Tien',
N'gch0405', 0997965146, N'sitien@gmail.com.vn','20020812');
insert into Student (StudentID, name, ClassKey, Phone, mail, birthday) values(N'gch190648',N' Phan Quôn Khải',
N'gch0405', 0654613397, N'quockhai@gmail.com.vn','20020608');
insert into Student (StudentID, name, ClassKey, Phone, mail, birthday) values(N'gch190649',N' Dương Văn Chiến',
N'gch0405', 0998746452, N'vanchien@gmail.com.vn','20021021');
insert into Student (StudentID, name, ClassKey, Phone, mail, birthday) values(N'gch190631',N' Nguyen D', N'gch0405',
0934514564, N'DD@gmail.com.vn','20020308');
insert into Student (StudentID, name, ClassKey, Phone, mail, birthday) values(N'gch190632',N' Nguyen Thu Hiền',
N'gch0405', 0969879413, N'thuhien@gmail.com.vn','20020126');
insert into Student (StudentID, name, ClassKey, Phone, mail, birthday) values(N'gch190633',N' Nguyen Thi Nhi',
N'gch0405', 0984613265, N'thinhi@gmail.com.vn','20020701');
insert into Student (StudentID, name, ClassKey, Phone, mail, birthday) values(N'gch190634',N' Nguyen Thu Huyền',
N'gch0405', 0135459746, N'thuhuyen@gmail.com.vn','20020915');
insert into Student (StudentID, name, ClassKey, Phone, mail, birthday) values(N'gch190635',N' Võ thị Sáu', N'gch0405',
0165489715, N'thisau@gmail.com.vn','20020414');
insert into Student (StudentID, name, ClassKey, Phone, mail, birthday) values(N'gch190636',N' Trần Văn Anh',
N'gch0405', 0164248146, N'vananh@gmail.com.vn','20020727');
```

```
insert into Teacher (TeacherID, TeacherName, phone, mail) values(N'Ma11111',N'Trương Quang
Vũ',0998461654,N'quangvu@gmail.com.vn');
insert into Teacher (TeacherID, TeacherName, phone, mail) values(N'Ma11112',N'Lê Thị Thanh
Hiền',0954878944,N'thanhhien@gmail.com.vn');
insert into Teacher (TeacherID, TeacherName, phone, mail) values(N'Ma11113',N'Lê Trọng
```

```
Hiếu',0154964,N'tronghieu@gmail.com.vn');
insert into Teacher (TeacherID, TeacherName, phone, mail) values(N'Ma11114',N'Lê Thanh
Thao',0164678942,N'thanhthao@gmail.com.vn');
insert into Teacher (TeacherID, TeacherName, phone, mail) values(N'Ma11115',N'Tạ Văn
Chí',0168998444,N'vanchi@gmail.com.vn');
insert into Teacher (TeacherID, TeacherName, phone, mail) values(N'Ma11116',N'Phạm Hải
Anh',0163428946,N'haianh@gmail.com.vn');
insert into Teacher (TeacherID, TeacherName, phone, mail) values(N'Ma11117',N'Đỗ Trọng
phụng',01648942,N'trongphung@gmail.com.vn');
insert into Teacher (TeacherID, TeacherName, phone, mail) values(N'Ma11118',N'Nguyễn Thế
Anh',016879846,N'theanh@gmail.com.vn');
insert into Teacher (TeacherID, TeacherName, phone, mail) values(N'Ma11119',N'Đỗ Thị Lan
Anh',0164984642,N'lananh@gmail.com.vn');
```

```
insert into Subject (SubjectID, Name) values (N'1831', N'database');
insert into Subject (SubjectID, Name) values (N'1832', N'C');
insert into Subject (SubjectID, Name) values (N'1833', N'C#');
insert into Subject (SubjectID, Name) values (N'1834', N'Networking');
insert into Subject (SubjectID, Name) values (N'1835', N'Maketing');
insert into Subject (SubjectID, Name) values (N'1836', N'IOT');
insert into Subject (SubjectID, Name) values (N'1837', N'Security');
insert into Subject (SubjectID, Name) values (N'1838', N'Cloud Computing');
insert into Subject (SubjectID, Name) values (N'1839', N'Design');
```

```
insert into Class(ClassKey, SubjectID, TeacherID,DateStart,DateEnd)
values(N'gch0401',N'1831',N'Ma11111','20220901','20221030');
insert into Class (ClassKey, SubjectID, TeacherID,DateStart,DateEnd)
values(N'gch0402',N'1832',N'Ma11112','20220907','20221030');
insert into Class (ClassKey, SubjectID, TeacherID,DateStart,DateEnd)
values(N'gch0403',N'1833',N'Ma11113','20220908','20221130');
insert into Class (ClassKey, SubjectID, TeacherID,DateStart,DateEnd)
```



```
values(N'gch0404',N'1834',N'Ma11114','20220909','20221130');
insert into Class (ClassKey, SubjectID, TeacherID,DateStart,DateEnd)
values(N'gch0405',N'1835',N'Ma11115','20220906','20221230');
insert into Class (ClassKey, SubjectID, TeacherID,DateStart,DateEnd)
values(N'gch0406',N'1836',N'Ma11116','20220905','20221230');
insert into Class (ClassKey, SubjectID, TeacherID,DateStart,DateEnd)
values(N'gch0407',N'1837',N'Ma11117','20220904','20221230');
insert into Class (ClassKey, SubjectID, TeacherID,DateStart,DateEnd)
values(N'gch0408',N'1838',N'Ma11118','20220903','20221130');
insert into Class (ClassKey, SubjectID, TeacherID,DateStart,DateEnd)
values(N'gch0409',N'1839',N'Ma11119','20220902','20221230');
```

```
insert into Session ( SessionKey, Slots, Date, ClassKey, Room) values(N'chapter1-
1620',N'1,2','20220901',N'gch0401',N'C11');
insert into Session ( SessionKey, Slots, Date, ClassKey, Room) values(N'chapter2-
1620',N'1,2','20220902',N'gch0401',N'C11');
insert into Session ( SessionKey, Slots, Date, ClassKey, Room) values(N'chapter3-
1620',N'1,2','20220903',N'gch0401',N'C11');
insert into Session ( SessionKey, Slots, Date, ClassKey, Room) values(N'chapter4-
1620',N'1,2','20220904',N'gch0401',N'C11');
insert into Session ( SessionKey, Slots, Date, ClassKey, Room) values(N'chapter5-
1620',N'1,2','20220905',N'gch0401',N'C11');
insert into Session ( SessionKey, Slots, Date, ClassKey, Room) values(N'chapter6-
1620',N'1,2','20220906',N'gch0401',N'C11');
insert into Session ( SessionKey, Slots, Date, ClassKey, Room) values(N'chapter1-
1621',N'3,4','20220901',N'gch0401',N'B13');
insert into Session ( SessionKey, Slots, Date, ClassKey, Room) values(N'chapter2-
1621',N'3,4','20220902',N'gch0401',N'B13');
insert into Session ( SessionKey, Slots, Date, ClassKey, Room) values(N'chapter3-
1621',N'3,4','20220903',N'gch0401',N'B13');
insert into Session ( SessionKey, Slots, Date, ClassKey, Room) values(N'chapter4-
1621',N'3,4','20220904',N'gch0401',N'B13');
insert into Session ( SessionKey, Slots, Date, ClassKey, Room) values(N'chapter7-
```

1621',N'3,4','20220901',N'gch0401',N'B13');

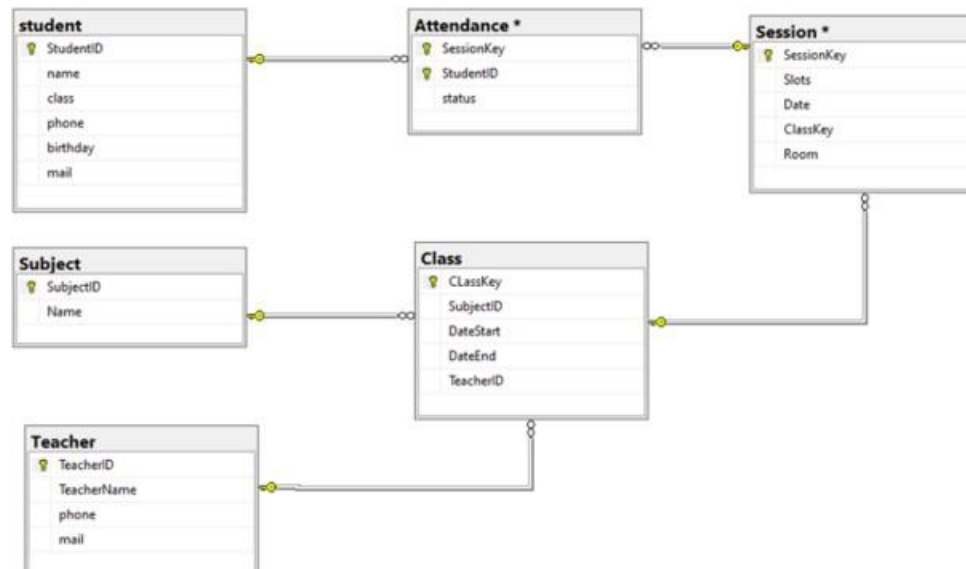
```
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1620', N'gch190645',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter2-1620', N'gch190645',N'absent');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1620', N'gch190647',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1620', N'gch190648',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1620', N'gch190649',N'absent');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1620', N'gch190631',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1620', N'gch190632',N'absent');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1620', N'gch190633',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1620', N'gch190634',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1620', N'gch190635',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1621', N'gch190645',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1621', N'gch190646',N'absent');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1621', N'gch190647',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1621', N'gch190648',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1621', N'gch190649',N'absent');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-
```

```

1621', N'gch190631',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-
1621', N'gch190632',N'absent');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-
1621', N'gch190633',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-
1621', N'gch190634',N'present');
insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-
1621', N'gch190635',N'present');


```


Generated Database Diagram of your Implementation



II. User Interfaces & Queries

- Interface, with each user interface, add:

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Academic Portal


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News

Class attendance

Search

!" [KHAO THI] Thay doi lich thi các mon

- " - [F2G_VOY} Thng bno vé dia diem ph.
- FGW HN thng bao Danh sach thi FE I
- ! . FGW HN thng bao Danh sach thi FE I
- [F2G VOV] Thng bao chuyrt dia diel
- - FGW HN thng bao Danh sách lhi FE r
- FGW-HN: Thng •a qich nghi hé năm
- FGW HN thng beo Danh sách thi ME
- : ' F2G-HN: Thng bno L;ich thi chi tiet c
- F2G-HN: Thng bno Loch thi FE cec m

[More](#)

Search for student information

Academic Portal

Class

GCH0401

GCH0402

GCH0403

GCH0404

GCH0405

GCH0406

GCH0407

GCH0408

GCH0409

GBH0911

GBH0912


GBH0913

```
--Code searcher class
```

```
SELECT ClassKey, StudentID
```

```
FROM student
```

```
select * from Class where ClassKey = N'gch0401';
```






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Academic Portal

Name	Attendance	Note
 Nguyễn Văn Nam Anh	<input type="checkbox"/> Present <input type="checkbox"/> Absent	<input style="width: 100%;" type="text"/>
 Nguyễn Văn Minh	<input type="checkbox"/> Present <input type="checkbox"/> Absent	<input style="width: 100%;" type="text"/>
 Nguyễn Quang Huy	<input type="checkbox"/> Present <input type="checkbox"/> Absent	<input style="width: 100%;" type="text"/>

```

SELECT * FROM Attendance
WHERE SessionKey= (select SessionKey from Session
where Slots='1'
and Date = '2020-09-01'
and ClassKey= 'gch0401'
and Room = 'C11')
```



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Thuộc Tổ chức Giáo dục **FPT**

Search



StudentID	name	class	phone	birthday	mail
GCH196021	Nguyễn D	GCH0405	0934514564	2002-08-03	DD@gmail.com.vn

Code search student information

```
select * from student
where StudentID = N'gch190631'
```

code update student


```
update student  
set phone = '012344'  
where StudentID = N'gch190631'
```

code delete student

```
delete student  
where StudentID = N'gch190631'
```

As a login student



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Academic Portal

News

- [KHAO THI] Thay đổi lịch thi các môn .
g bD h ta di
- FGC th , FE
- - FGW hN thông Uáo Daith sách thi FE i
- - [F2G VOVj Thom bra chuyen dna Liei
- 'FGW HN chonq hảo Danh sách rhi FE r
- FGW.HH: Thông bao Inch nghi he năm
- " " I " FGW HN thông báo Danh sách thi ME
- : - " ! . ! F2G-HH. Thdnq bao Lịch Chỉ chỉ tiết câ
- ' F ZG H H: Thdn9 hao Licfi ihi I-E các in:

Reports

- Attendance report

View attendance for Nguyễn Văn Nam Anh (AnhNVNGCH200176)

Select a campus/program, term, course ...

... then see report

CAMPUS/PROGRAM	TERM	COURSE						
English	Spring 2019	Database Design & Development(1622)(GCH1001,start 11/01/2022)						
F2G	Summer 2019	Website Design & Development(1633)(GCH1001,start 11/01/2022)						
TOP-UP BA	Fall 2019	Professional Practice(1620)(GCH1001,start 14/03/2022)						
TOP-UP GD	Spring 2020	Academic English for non-business(AEG115)(GCH1001,start 15/03/2022)						
TOP-UP SE	Summer 2020							
	Fall 2020							
	Spring 2021							
	Summer 2021							
	Fall 2021							
	Spring 2022							

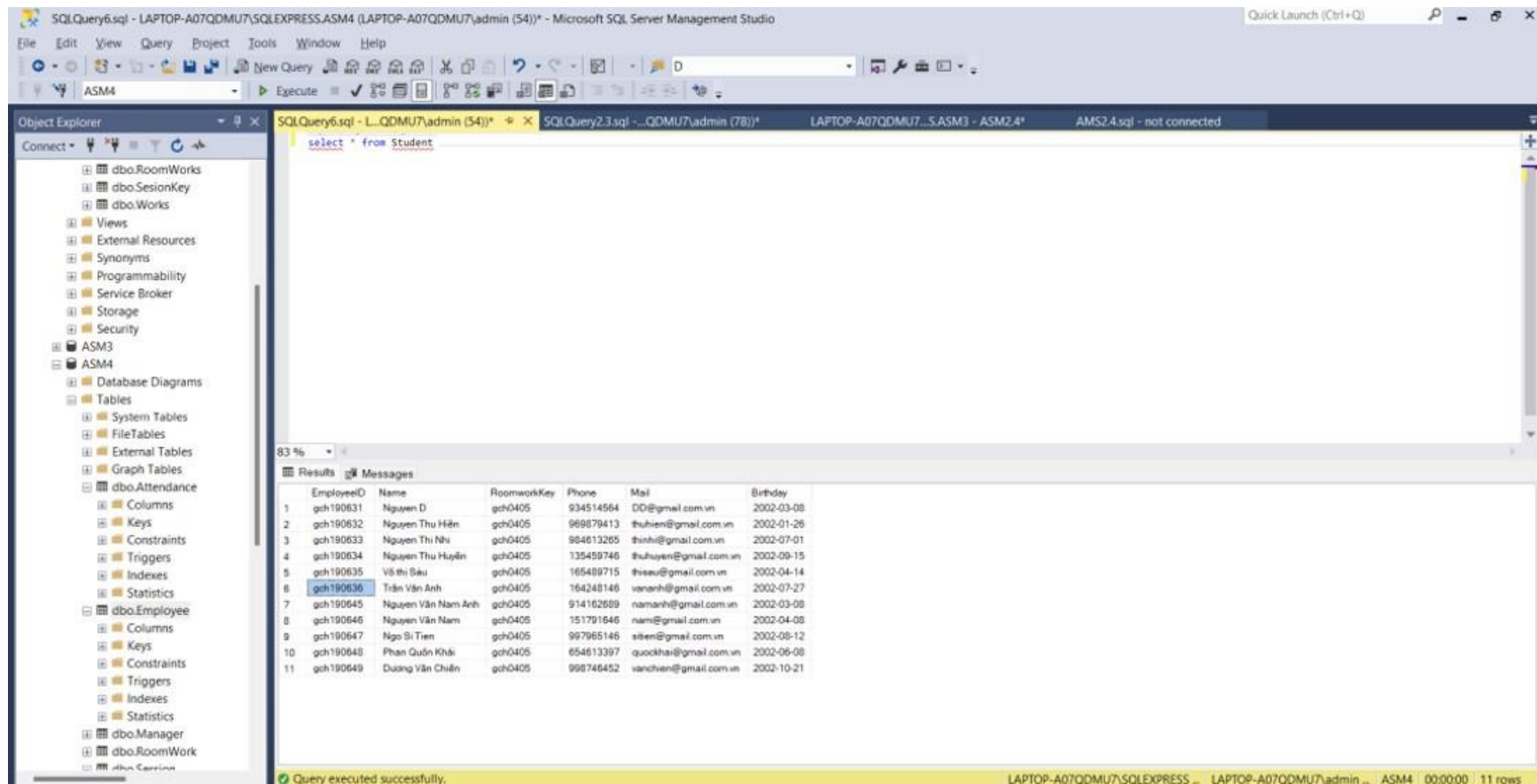
NO.	DATE	SLOT	LECTURER	GROUP NAME	ATTEDANCE STATUS	LECTURER'S COMMENT
1	Mon(14/03)	4	sondn21	GCH1001	Present	
2	Mon(14/03)	5	sondn21	GCH1001	Present	
3	Mon(14/03)	6	sondn21	GCH1001	Present	
4	Wed(16/03)	4	sondn21	GCH1001	Absent	
5	Wed(16/03)	5	sondn21	GCH1001	Present	
6	Wed(16/03)	6	sondn21	GCH1001	Present	
7	Mon(21/03)	4	sondn21	GCH1001	Present	
8	Mon(21/03)	5	sondn21	GCH1001	Present	
9	Mon(21/03)	6	sondn21	GCH1001	Present	
10	Wed(23/03)	4	sondn21	GCH1001	Present	
11	Wed(23/03)	5	sondn21	GCH1001	Present	
12	Wed(23/03)	6	sondn21	GCH1001	Present	

```

SELECT * FROM Attendance
WHERE SessionKey= (select SessionKey from Session
where Slots='1'
and Date = '2020-09-01'
and ClassKey= 'gch0401'
and Room = 'C11')
and StudentID = N'gch190631'

```

Delete statement



SQLQuery6.sql - LAPTOP-A07QDMU7\SQLEXPRESS.ASM4 (LAPTOP-A07QDMU7\admin (54))* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Object Explorer

- Connect
- Server: LAPTOP-A07QDMU7\SQLEXPRESS.ASM4
 - dbo.RoomWorks
 - dbo.SessionKey
 - dbo.Works
 - Views
 - External Resources
 - Synonyms
 - Programmability
 - Service Broker
 - Storage
 - Security
 - ASM3
 - ASM4
 - Database Diagrams
 - Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.Attendance
 - Columns
 - Keys
 - Constraints
 - Triggers
 - Indexes
 - Statistics
 - dbo.Employee
 - Columns
 - Keys
 - Constraints
 - Triggers
 - Indexes
 - Statistics
 - dbo.Manager
 - dbo.RoomWork
 - dbo.Session

SQLQuery6.sql - L...QDMU7\admin (54))* x SQLQuery2.3.sql - ...QDMU7\admin (78))* LAPTOP-A07QDMU7...S.ASM3 - ASM2.4* AMS2.4.sql - not connected

select * from Student

83 %

Results Messages

	EmployeeID	Name	RoomworkKey	Phone	Mail	Birthday
1	gch190631	Nguyen D	gch0405	934514564	DD@gmail.com.vn	2002-03-08
2	gch190632	Nguyen Thu Hien	gch0405	969879413	thuhien@gmail.com.vn	2002-01-26
3	gch190633	Nguyen Thi Nhi	gch0405	984613265	tnhi@gmail.com.vn	2002-07-01
4	gch190634	Nguyen Thu Huyen	gch0405	135459746	thuhuyen@gmail.com.vn	2002-09-15
5	gch190635	Võ thi Sáu	gch0405	165489715	thiseau@gmail.com.vn	2002-04-14
6	gch190636	Trần Văn Anh	gch0405	164248146	vananh@gmail.com.vn	2002-07-27
7	gch190645	Nguyen Văn Nam Anh	gch0405	914162609	namanh@gmail.com.vn	2002-03-08
8	gch190646	Nguyen Văn Nam	gch0405	151791646	namn@gmail.com.vn	2002-04-08
9	gch190647	Ngo Si Tien	gch0405	997965146	siten@gmail.com.vn	2002-06-12
10	gch190648	Phan Quôn Khái	gch0405	654613397	quockhai@gmail.com.vn	2002-06-08
11	gch190649	Dương Văn Chiến	gch0405	998746452	vanchien@gmail.com.vn	2002-10-21

Query executed successfully. LAPTOP-A07QDMU7\SQLEXPRESS ... LAPTOP-A07QDMU7\admin ... ASM4 00:00:00 11 rows

I will delete the employee whose code is gch190636

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar indicates the connection is to 'LAPTOP-A07QDMU7\SQLEXPRESS,ASM4 (LAPTOP-A07QDMU7\admin (54))'. The Object Explorer on the left shows the database structure, including tables like 'dbo.RoomWorks', 'dbo.SesionKey', 'dbo.Works', and 'dbo.Employee'. The SQL Query Editor in the center contains the following SQL code:

```
select * from Student
--Delete statement
delete student
where studentID = N'gch190636'36'
```

The Results pane at the bottom displays the output of the query, showing 10 rows of data from the 'Student' table. The status bar at the bottom indicates 'Query executed successfully.' and '10 rows'.

EmployeeID	Name	RoomworkKey	Phone	Mail	Birthday	
1	gch190631	Nguyen D	gch0405	934514564	DD@gmail.com.vn	2002-03-08
2	gch190632	Nguyen Thu Hien	gch0405	969879413	thuhien@gmail.com.vn	2002-01-26
3	gch190633	Nguyen Thi Nhi	gch0405	984613265	thinh@gmail.com.vn	2002-07-01
4	gch190634	Nguyen Thu Huyen	gch0405	135459746	thuhuyen@gmail.com.vn	2002-09-15
5	gch190635	Võ thi Sâu	gch0405	165489715	thieu@gmail.com.vn	2002-04-14
6	gch190645	Nguyen Văn Nam Anh	gch0405	914162689	namanh@gmail.com.vn	2002-03-08
7	gch190646	Nguyen Văn Nam	gch0405	151791646	nam@gmail.com.vn	2002-04-08
8	gch190647	Ngo Si Tien	gch0405	997965146	aitien@gmail.com.vn	2002-08-12
9	gch190648	Phan Quôn Khai	gch0405	654613397	quockhai@gmail.com.vn	2002-06-08
10	gch190649	Dương Văn Chiến	gch0405	998746452	vanchien@gmail.com.vn	2002-10-21

Update statement

Then I will update the phone number of the employee there

The screenshot shows the Microsoft SQL Server Management Studio interface. The query editor contains the following SQL code:

```
select * from Student

--Delete statement
delete student
where studentID = N'gch190636'

--Update statement
update Student
set phone = 0165489715
where StudentID = N'gch190635'
```

The Results pane displays the following table:

	EmployeeID	Name	RoomworkKey	Phone	Mail	Birthday
1	gch190631	Nguyen D	gch0405	934514564	DD@gmail.com.vn	2002-03-08
2	gch190632	Nguyen Thu Hien	gch0405	969879413	thuhien@gmail.com.vn	2002-01-26
3	gch190633	Nguyen Thi NHI	gch0405	964013265	thinhnhi@gmail.com.vn	2002-07-01
4	gch190634	Nguyen Thu I huyen	gch0405	135459746	thuhuyen@gmail.com.vn	2002-09-15
5	gch190635	Võ Thị Sáu	gch0405	165489715	thysau@gmail.com.vn	2002-04-14
6	gch190636	Trần Văn Anh	gch0405	164248146	vananh@gmail.com.vn	2002-07-27
7	gch190645	Nguyen Văn Nam Anh	gch0405	914162609	namanh@gmail.com.vn	2002-03-08
8	gch190646	Nguyen Văn Nam	gch0405	151791646	nam@gmail.com.vn	2002-04-08
9	gch190647	Ngo Si Tien	gch0405	997965146	siten@gmail.com.vn	2002-08-12
10	gch190648	Phan Quân Khải	gch0405	654613397	quockhai@gmail.com.vn	2002-06-08
11	gch190649	Dương Văn Chiến	gch0405	998746452	vanchien@gmail.com.vn	2002-10-21

The status bar at the bottom indicates: "Query executed successfully. LAPTOP-A07QDMU7\SQLEXPRESS ... LAPTOP-A07QDMU7\admin ... ASM4 00:00:00 11 rows".

After the update

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar indicates the connection is to 'LAPTOP-A07QDMU7\SQLEXPRESS,ASM4 (LAPTOP-A07QDMU7\admin (54))'. The menu bar includes File, Edit, View, Query, Project, Tools, Window, and Help. The toolbar contains icons for New Query, Open, Save, Execute, and other standard database operations.

The Object Explorer on the left shows the database structure, including tables like dbo.RoomWorks, dbo.SessionKey, and dbo.Works. The main query editor displays the following SQL script:

```

select * from Student
---Delete statement
delete student
where studentID = N'gch190636'
---Update statement
update Student
set phone = 0165489715
where StudentID = N'gch190635'
  
```

The Results pane at the bottom shows the output of the query, displaying a table with 11 rows and 6 columns: EmployeeID, Name, RoomworkKey, Phone, Mail, and Birthday.

EmployeeID	Name	RoomworkKey	Phone	Mail	Birthday	
1	gch190631	Nguyen D	gch0405	934514564	DD@gmail.com.vn	2002-03-08
2	gch190632	Nguyen Thu Hien	gch0405	968079413	thuhien@gmail.com.vn	2002-01-26
3	gch190633	Nguyen Thi Nhi	gch0405	984613265	thinh@gmail.com.vn	2002-07-01
4	gch190634	Nguyen Thu Huyen	gch0405	135459746	thuhuyen@gmail.com.vn	2002-09-15
5	gch190635	Vũ Thị Sáu	gch0405	9875461	thieu@gmail.com.vn	2002-04-14
6	gch190636	Trần Văn Anh	gch0405	164240146	vananh@gmail.com.vn	2002-07-27
7	gch190645	Nguyen Văn Nam Anh	gch0405	914162609	namanh@gmail.com.vn	2002-03-08
8	gch190646	Nguyen Văn Nam	gch0405	151751646	nam@gmail.com.vn	2002-04-08
9	gch190647	Ngo Sĩ Tiên	gch0405	997965146	sitien@gmail.com.vn	2002-08-12
10	gch190648	Phan Quốc Khải	gch0405	654613397	quockhai@gmail.com.vn	2002-06-08
11	gch190649	Đường Văn Chiến	gch0405	968746452	vanchien@gmail.com.vn	2002-10-21

The command to search for Student

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar indicates the connection is to 'LAPTOP-A07QDMU7\SQLEXPRESS:ASM4 (LAPTOP-A07QDMU7\admin (54))'. The Object Explorer on the left shows the database structure, including tables like 'dbo.Attendance', 'dbo.Student', 'dbo.Teacher', 'dbo.Class', 'dbo.Session', and 'dbo.Subject'. The SQL Query Editor in the center contains the following query:

```

select * from Student
--Delete statement
delete student
where studentID = 'gch190636'
--Update statement
update Student
set phone = 0165489715
where StudentID = 'gch190635'
--Find Student--
select * from Student
where StudentID = 'gch190631'
  
```

The Results pane at the bottom shows the output of the query, displaying a single row of student information:

EmployeeID	Name	RoomworkKey	Phone	Mail	Birthday	
1	gch190631	Nguyen D	gch0405	934514564	DD@gmail.com.vn	2002-03-08

The status bar at the bottom indicates 'Query executed successfully.' and '1 rows'.

The statement deletes the entire table

~~delete~~ Attendance; ---delete all attendance panel information
~~delete~~ Student; -----delete all Student panel information
~~delete~~ Teacher; --delete all Teacher panel information
~~delete~~ Class --delete all Class panel information
~~delete~~ Session--delete all Session panel information
~~delete~~ Subject;--delete all Subject panel information

Test the system

Test	Test title	Inut detail	Expect result	status
1	Insert into student	<code>insert into Student (StudentID, name, ClassKey, Phone, mail, birthday) values(N'gch190631',N' Nguyen D', N'gch0405', 0934514564, N'DD@gmail.com.vn','20020308');</code>	added	pass
2	Update student	<code>update Student set phone = '012344' where StudentID = N'gch190631'</code>	updated	pass
3	Delete student	<code>delete Student where StudentID = N'gch190631'</code>	updated	pass
4	Insert into teacher	<code>insert into Teacher (TeacherID, TeacherName, phone, mail) values(N'Ma11111',N'Trương Quang Vũ',0998461654,N'quangvu@gmail.com.vn');</code>	Added	pass
5	Update teacher	<code>update Teacher set mail = 'index@gamil.com.vn' where TeacherID = N'ma11111'</code>	Updated	pass
6	Delete teacher	<code>delete Teacher where TeacherID = N'ma11111'</code>	Deleted	pass
7	Insert into subject	<code>insert into Subject (SubjectID, Name) values (N'1831', N'database');</code>	Added	pass
8	Update subject	<code>update Subject set Name =N'database' where SubjectID = 1831</code>	Updated	pass
9	Delete subject	<code>delete Subject where SubjectID = N'1831'</code>	Deleted	pass
10	Insert into Class	<code>insert into Class(ClassKey,SubjectID,TeacherID,DateStart,DateEnd) values(N'gch0401',N'1831',N'Ma11111','20220901','20221030');</code>	Added	pass
11	Update class	<code>update Class set DateStart = N'20221031' where ClassKey = N'GCH0401'</code>	Updated	pass
12	Delete class	<code>delete Class Where ClassKey = N'GCH0401'</code>	Deleted	pass
13	Insert into Session	<code>insert into Session (SessionKey, Slots, Date, ClassKey,</code>	Added	pass

		Room) values(N'chapter1-1620',N'1,2','20220901',N'gch0401',N'C11');		
14	Update session	update Session set Room = N'C12' where SessionKey = N'chapter1- 1620'	Updated	pass
15	Delete session	delete Session where SessionKey = N'chapter1-1621'	Deleted	pass
16	Insert into Ateendace	insert into Attendance(SessionKey, StudentID, status) values (N'chapter1-1620', N'gch190645',N'present');	Added	pass
17	Update attendace	update Attendance set status = N'absent' where StudentID = N'gch190645'	Updated	pass
18	Delete attendance	delete Attendance where StudentID = N'gch190645'	Deleted	pass