

Assignment 7

Use joining to answer all the queries.

Answer the following questions for the classschedule database:

1. Display the class roster, including student name, for all students enrolled in section 2714 of ISM 4212.

```
select student.student_id, student_name,  
section.semester, course_id  
from student, registration, section  
where registration.student_id = student.student_id and  
section.section_no = registration.section_no and  
registration.section_no = 2714 and  
course_id = 'ISM 4212';
```

For the adulliteracy database, add a tutor report table with the following data: tutor_report (match_id, month, hours, lessons) where (match_id and month) form a PK and match_id is a FK.

match_id	month	hours	lessons
1	6-08	8	4
4	6-08	8	6
5	6-08	4	4
4	7-08	10	5
1	7-08	4	2

```
Soln: create table tutor_report(match_id tinyint(3)  
unsigned not null auto_increment, month  
varchar(5) not null, hours int, lessons int, primary  
key(match_id, month))engine=innodb;
```

```
alter table tutor_report add constraint  
fk_tutor_report foreign key (match_id) references  
match_history(match_id) on delete restrict on  
update restrict;
```

```
insert into tutor_report(month, hours, lessons)
values ('6-08', 8, 4), ('6-08', 8, 6), ('6-08', 4, 4), ('7-
08', 10, 5), ('7-08', 4, 2);
```

1. List all active students in June by student id. Include the number of hours received tutoring and how many lessons they completed.

```
select student_id, hours, lessons
from match_history, tutor_report
where match_history.match_id = tutor_report.match_id
and month like "6-%" and end_date is null;
```

Answer the following questions for the stayHome database:

1. List all videos along with the name of the director.

```
SELECT catalogNo, title, category, v.directNo,
directorName
FROM video v, Director d
WHERE v.directorNo = d. DirectorNo;
```

2. List all videos along with the name of the director, the names of the actors, and their associated roles.

```
SELECT v.catalogNo, title, category, directorName,
actorName, character
FROM video v, Director d, Actor a, Role r
WHERE d.directorNo = v.directorNo AND
v.catalogNo = r.catalogNo AND r.actorNo = a.actorNo;
```

3. List the number of videos handled by each staff member.

```
SELECT r.staffNo, r.memberNo, COUNT (*) AS
numVideos
FROM rentalAgreement s, Registration r
WHERE s.memberNo = r.memberNo
GROUP BY r.staffNo, r.memberNo
ORDER BY r.staffNo, r.memberNo;
```

Answer the following questions for the hotelBooking database:

4. List the number of rooms in each hotel in London.

```
SELECT hotelNo, COUNT(roomNo) AS count FROM Room r, Hotel h
WHERE r.hotelNo = h.hotelNo AND city = 'London'
GROUP BY hotelNo;
```

5. List the number of rooms in each hotel [Note: No need to use the joining to answer this query].

```
SELECT hotelNo, COUNT(roomNo) AS count FROM Room GROUP BY hotelNo;
```

6. List the details of all rooms at the Grosvenor Hotel, including the name of the guest staying in the room, if the room is occupied.

```
SELECT r.* FROM Room r LEFT JOIN
(SELECT g.guestName, h.hotelNo, b.roomNo FROM Guest g, Booking b, Hotel h
WHERE g.guestNo = b.guestNo AND b.hotelNo = h.hotelNo AND
hotelName= 'Grosvenor' AND
dateFrom <= CURRENT_DATE AND
dateTo >= CURRENT_DATE) AS grosvenorDetail ON r.hotelNo =
grosvenorDetail.hotelNo AND r.roomNo = grosvenorDetail.roomNo;
```

7. List the rooms that are currently unoccupied at the Grosenor Hotel.

```
SELECT * FROM Room r
WHERE roomNo NOT IN
(SELECT roomNo FROM Booking b, Hotel h
WHERE (dateFrom <= CURRENT_DATE AND
dateTo >= CURRENT_DATE) AND
b.hotelNo = h.hotelNo AND hotelName = 'Grosvenor');
```