BSCCS2001: SQL Query Practice Solution
Week 3

- The queries provided in this document are only one of the (possibly) many ways to find the required answer.

1. Write an SQL statement to find the names of teams that have played more than 3 matches. [QQ 2 points]

   [FLIS]

   Solution:

```
select name from teams where team_id in
    (select team_id
    from ((select host_team_id as team_id, count(*) as c
    from matches
    group by host_team_id)
    union all
    (select guest_team_id as team_id, count(*) as c
    from matches
    group by guest_team_id)) as t1
    group by team_id having sum(c) > 3
    )
```

2. Write an SQL statement to find the first name, last name of the faculty of the department having department code as "ME" and who have issued at least one book, such that there are no duplicate firstname-lastname pairs. [QQ: 2 points]

   [LIS]

   Solution:

```
select distinct faculty_fname, faculty_lname
from faculty natural join members natural join book_issue
where faculty.department_code = 'ME'
```

3. Write an SQL statement to find the number of book-titles issued on 11th August 2021. [QQ 2 points]

   [LIS]

Solution:

```
select count(title) from book_catalogue where isbn_no in
    (select isbn_no
    from book_issue a, book_copies b
    where a.accession_no=b.accession_no and
    a.doi='2021-08-11'
    )
```

4. Write an SQL statement to find the names of faculty (faculty_fname, faculty_lname) who did not issue any book. [QQ 2 points]

   [LIS]

Solution:

```
select faculty_fname,faculty_lname
from faculty
where faculty.id not in
(select members.id from members natural join book_issue
where members.id is not null)
```

5. Write an SQL statement to find the unique book titles which are issued to "PG" students but not to "UG" students. [QQ 2 points]

   [LIS]

Solution:

```
select distinct(title) from
    book_catalogue natural join book_copies natural join
    book_issue natural join members
    where member_type = 'PG'
except
select distinct(title) from
    book_catalogue natural join book_copies natural join
    book_issue natural join members
    where member_type = 'UG'
```