Tutorial 6
SQL

Classroom Exercise

Question 1

(i)

```
SELECT    Pname
FROM      PROF, DEPT
WHERE     DEPT.Dname = PROF.Dname AND Numphds < 50;
```

(iii)

```
SELECT    Sname, Dname
FROM      COURSE C, ENROLL E, MAJOR M, STUDENT S
WHERE     C.Cname = 'Database Systems' AND
          C.Dname =  E.Dname AND C.Cno = E.Cno AND
          E.Sid = M.Sid  AND   E.Sid = S.Sid;
```

(iv)

```
SELECT Distinct  CDname,   C.Cno, C.Cname
FROM      COURSE C, Section S1, Section S2
WHERE
          S1.Dname = S2.Dname  AND  S1.Cno  =  S2.Cno  AND
     S1.Sectno <> S2.Sectno  AND  S1.PName  <>  S2.PName   AND
          S1.Dname = C.Dname  AND S1.Cno = C.Cno
```

Question 2

(i)

```
SELECT    DISTINCT wa1.issueID, wa1.articleID
FROM      WordAppears wa1, WordIs wi1, WordAppears wa2, WordIs wi2
WHERE     wa1.issueID = wa2.issueID AND wa1.articleID = wa2.articleID
          AND wa1.wordID = wi1.wordID AND wa2.wordID = wi2.wordID
          AND wi1.wordText = 'politician' AND
          wi2.wordText = 'corruption';
```

Question 3

(b) Find the names of all employees in the database who live in the same cities and on the same streets as do their managers. Assume that all people work for at most one company. Each company has at most one manager, who is also an employee of the same company.

Solution:

```
SELECT p.employee-name
FROM employee p, employee r, manages m
WHERE p.employee-name = m.employee-name
AND m.manager-name = r.employee-name
AND p.street = r.street AND p.city = r.city;
```

Question 4

```
SELECT  DINSTINT F.Drinker
FROM     Likes AS L, Frequent AS F,
          Serve AS S
WHERE  L.Drinker = F.Drinker
          AND F.Bar = S.Bar
          AND L.Beer = S.Beer
```