

1 row created.

```
SQL> SELECT name FROM (SELECT * FROM professor WHERE empId IN (SELECT hod FROM department))
  2  MINUS
  3  SELECT name FROM (SELECT * FROM professor WHERE empId IN (SELECT hod FROM department))
  4  WHERE startYear > ANY(SELECT startYear FROM professor WHERE empId IN (SELECT hod FROM department));
```

NAME

McKinnon

```
SQL> SELECT cname FROM
  2  (SELECT * FROM course WHERE courseId IN
  3  (SELECT courseId FROM teaching WHERE empId IN
  4  (SELECT empId FROM
  5  (SELECT * FROM professor WHERE deptNo IN (SELECT deptId FROM department WHERE name = 'Biology')))))
  6  MINUS
  7  SELECT cname FROM
  8  (SELECT * FROM course WHERE courseId IN
  9  (SELECT courseId FROM teaching WHERE empId IN
 10  (SELECT empId FROM
 11  (SELECT * FROM professor WHERE deptNo IN (SELECT deptId FROM department WHERE name = 'Biology')) WHERE startYear > ANY
 12  (SELECT startYear FROM professor WHERE deptNo IN (SELECT deptId FROM department WHERE name = 'Biology'))));
```

CNAME

Arabic

```
SQL> CREATE TABLE course_temp AS
  2 SELECT * FROM course INNER JOIN department ON course.deptNo = department.deptId;
```

Table created.

```
SQL> SELECT Cname,name FROM course_temp WHERE courseId in
  2 (SELECT courseId FROM (SELECT courseId, count(prereqcourse) AS abc FROM prerequisite WHERE courseId in
  3 (SELECT courseId FROM course WHERE deptNo in (SELECT deptNo FROM course GROUP by deptNo)) group by courseId) WHERE abc in (SELECT max(abc)
  4 FROM(SELECT courseId, count(prereqcourse) AS abc FROM prerequisite WHERE courseId in
  5 (SELECT courseId FROM course WHERE deptNo = 2) group by courseId) ));
```

| CNAME | NAME |
|-------------------------|------------|
| Rock and Roll | Marketing |
| Ponzi Schemes | Civil Eng. |
| Graph Theory | Psychology |
| Operating Systems | Psychology |
| Game Programming | Comp. Sci. |
| Embedded Systems | Finance |
| Immunology | Biology |
| Differential Geometry | Statistics |
| International Practicum | History |
| Electron Microscopy | Mech. Eng. |
| Groups and Rings | Civil Eng. |

| CNAME | NAME |
|-------------------------|-------------|
| Elastic Structures | English |
| International Practicum | Comp. Sci. |
| Game Programming | Cybernetics |
| World History | Athletics |

15 rows selected.

```
SQL> SELECT empId,avg(cnt) FROM teaching INNER JOIN
  2  (SELECT courseId AS cId,count(rollNo) AS cnt FROM (
  3  SELECT teaching.courseId, teaching.empId, enrollment.rollNo, teaching.YEAR FROM teaching INNER JOIN enrollment ON teaching.courseId =enrollment.courseId WHERE teaching.year = any(2002,2003,2004)) group by
courseId) ON teaching.courseId=cId
  4  group by empId;
```

| EMPID | AVG(CNT) |
|-------|----------|
| ----- | ----- |
| 99052 | 22.5 |
| 41930 | 16.5 |
| 22591 | 23 |
| 43779 | 18 |
| 28400 | 26 |
| 73623 | 22 |
| 79081 | 21.25 |
| 25946 | 23 |
| 80759 | 22 |
| 90643 | 12 |
| 77346 | 22 |

| EMPID | AVG(CNT) |
|-------|------------|
| ----- | ----- |
| 28097 | 22 |
| 34175 | 23.3333333 |
| 74420 | 27 |
| 6569 | 20.3333333 |
| 42782 | 19 |
| 3199 | 21 |
| 36897 | 23.5 |

18 rows selected.

```
SQL> SELECT courseId,count(rollNo) FROM enrollment WHERE YEAR=2004 and sem ='even' and courseId in  
2  (SELECT courseId FROM course WHERE deptNo in (SELECT deptId FROM department WHERE name='Comp. Sci.')} ) group by courseId;
```

```
COURSEID  COUNT(ROLLNO)
```

```
-----  -
```

```
747          24
```

```
571          22
```

```
SQL>
```