

```
SQL>
SQL> -- Question 1
SQL> -- a. Find Name of person in committees who is not a member
SQL> SELECT committees.name FROM committees
  2  LEFT JOIN member
  3      ON committees.name = member.name
  4  WHERE member.name IS NULL;
```

NAME

Hritik

```
SQL>
SQL> -- b. Find the Name of member who is not in committees list
SQL> SELECT member.name FROM member
  2  LEFT JOIN committees
  3      ON member.name = committees.name
  4  WHERE committees.name IS NULL;
```

NAME

Rakesh

```
SQL>
SQL> -- c. Find the name of person in committees having same age
SQL> --      (Add column age in committees and set value 20,20,30 respectively)
SQL> ALTER TABLE committees ADD age NUMBER(2);
```

Table altered.

```
SQL> UPDATE committees SET age = 20 WHERE committee_id = '101';
```

1 row updated.

```
SQL> UPDATE committees SET age = 20 WHERE committee_id = '102';
```

1 row updated.

```
SQL> UPDATE committees SET age = 30 WHERE committee_id = '103';
```

1 row updated.

```
SQL>
SQL> SELECT a.name FROM committees a, committees b
  2  WHERE a.age = b.age AND a.name <> b.name;
```

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NAME
-----
Suresh
Ramesh
```

```
SQL>
SQL>
SQL> -- Question 2
SQL> -- Find the roll number and names of students who have taken atleast one course taught by his or her advisor.
SQL> SELECT DISTINCT(student.rollNo), student.name FROM student
  2  INNER JOIN enrollment
  3      ON student.rollNo = enrollment.rollNo
  4  INNER JOIN teaching
  5      ON student.advisor = teaching.empId
  6  WHERE enrollment.courseId = teaching.courseId;
```

```
ROLLN  NAME
-----
10076  Duan
10481  Grosch
10204  Mediratta
10663  Okaf
15883  Marques
10917  Morales
14869  Palmer
15487  Januszewski
```

```
16057 Wicki
11377 Jr
107 Shabuno
10834 More
15457 Arinb
```

13 rows selected.

```
SQL>
SQL>
SQL> -- Question 3
SQL> -- What are those courses that are either pre-requisites of 608 or pre-requisites of
SQL> -- the prerequisites of the course 608(give course numbers, and course names)?
SQL> SELECT DISTINCT(course.courseId), course.cname FROM course
  2   INNER JOIN prerequisite
  3       ON course.courseId = prerequisite.preReqCourse
  4  WHERE prerequisite.courseId = '608'
  5       OR prerequisite.courseId IN (SELECT preReqCourse FROM prerequisite WHERE courseId = '608');
```

COURSEID	CNAME
421	Aquatic Chemistry
634	Astronomy
864	Heat Transfer

```
SQL>
SQL>
SQL> -- Question 4
SQL> -- Find all the students who have not taken any course offered by the teachers of course 319
SQL> SELECT DISTINCT(student.rollNo), student.name FROM student
  2  MINUS
  3  SELECT DISTINCT(student.rollNo), student.name FROM student
  4  INNER JOIN enrollment
  5      ON student.rollNo = enrollment.rollNo
  6  INNER JOIN (SELECT a.courseId FROM teaching a, teaching b WHERE a.empId = b.empId AND b.courseId = '319') c
  7      ON c.courseId = enrollment.courseId;
```

ROLLN	NAME
-----	-----
10267	Rzecz
10269	Hilberg
10454	Ugarte
10556	Reed
10705	Terauchi
10727	Allard
10736	Veselovsky
108	Dhav
1080	Xue
1087	Roses
10904	Jerns
10917	Morales
11076	Prasad
11083	Kerridge
11095	Schultz
1110	Tzeng
11126	Englund
11152	Al-Tahat
11195	Shiang
11202	Heckman
11377	Jr
11441	Betho
11453	Yamashita
11604	Neff
11682	Juol
12069	Skeen
12216	Griffiths
12711	Malagoli
13023	Serrano
13352	Gorsky
13495	Srini
13506	Patrick
13511	Adam

```
55000 Levitan
55009 Pohlem
55170 Ivanov
55238 Thadani
```

913 rows selected.

SQL>

SQL>

SQL> -- Question 5

SQL> -- Find roll no of students who have got S grade in all prerequisites of the course 760

```
SQL> SELECT DISTINCT(enrollment.rollNo) FROM enrollment
  2   INNER JOIN (SELECT DISTINCT(preReqCourse) FROM prerequisite WHERE courseId = '760') a
  3       ON enrollment.courseId = a.preReqCourse
  4  WHERE enrollment.grade = 'S';
```

ROLLN

13408

10454

1367

15030

SQL>

SQL>

SQL> -- Question 6

SQL> -- Find name and roll no of student who have taken course multiple times

```
SQL> SELECT DISTINCT(student.rollNo), student.name FROM student
  2   INNER JOIN (SELECT a.rollNo FROM enrollment a, enrollment b
  3       WHERE a.rollNo = b.rollNo AND a.courseId = b.courseId AND (a.sem <> b.sem OR a.year <> b.year)) e
  4       ON student.rollNo = e.rollNo;
```

no rows selected

SQL> |