1) SELECT B#, first_name || ' ' || last_name AS "Full Name"

FROM Students

WHERE deptname = 'CS' AND status = 'senior';


2) column "birth date" format a10

SELECT DISTINCT s.B#, first_name, last_name, bdate AS "birth date"

FROM Students s, enrollments e

WHERE s.B#=e.B#;


3) SELECT DISTINCT s.B#, first_name, last_name

FROM enrollments e, students s, courses c, classes cls

WHERE c.course#=cls.course#

AND c.prog_code=cls.prog_code

AND c.prog_code IN ('CS')

AND s.B#=e.B#

AND cls.classid=e.classid

INTERSECT

SELECT DISTINCT s.B#, first_name, last_name

FROM enrollments e, students s, courses c, classes cls

WHERE c.course#=cls.course#

AND c.prog_code=cls.prog_code

AND c.prog_code IN ('Math')

AND s.B#=e.B#

AND cls.classid=e.classid


4.1) SELECT B#, first_name, last_name

FROM students

WHERE B# NOT IN (SELECT B# FROM enrollments WHERE lgrade='A')

AND B# IN (SELECT B# FROM enrollments)

ORDER BY B#;

4.2)   SELECT DISTINCT s.B#, first_name, last_name

FROM students s, enrollments e

WHERE s.B#=e.B#

AND s.B# NOT IN (SELECT B# FROM enrollments e WHERE lgrade='A' AND

s.B#=e.B#)

ORDER BY B#;


5)  SELECT s.B#, first_name, last_name

FROM students s, enrollments e

WHERE s.B#=e.B#

AND s.B# NOT IN (SELECT DISTINCT B# FROM enrollments e WHERE lgrade IS NOT

NULL AND lgrade <> 'A';


6)   SELECT classid, prog_code, course#, semester, limit-class_size as seats_available

FROM classes

WHERE course#<500

AND year=2019

AND semester='Spring'


7)   SELECT B#, sum(credits) as total_credits

FROM course_credit cc, courses c, classes cls, enrollments e

WHERE cc.course#=c.course#

AND e.classid=cls.classid

AND cls.course#=c.course#

AND cls.prog_code=c.prog_code

AND lgrade IS NOT NULL

GROUP BY B#

8) SELECT prog_code, course#

FROM classes cls, students s, enrollments e

WHERE e.B#=s.B#

AND e.classid=cls.classid

GROUP BY cls.prog_code, course#

HAVING COUNT(*)=(SELECT attended FROM (SELECT COUNT(*) attended, prog_code,

course#

FROM classes cls, students s, enrollments e

WHERE e.B#=s.B#

AND e.classid=cls.classid

GROUP BY cls.prog_code, course#

ORDER BY 1 DESC)

WHERE rownum=1);

9) SELECT s.B#, first_name,last_name, COUNT(*) as number_of_classes

FROM students s, enrollments e

WHERE e.B#=s.B#

GROUP BY s.B#, first_name, last_name

HAVING COUNT(*)>=2;

10) SELECT DISTINCT cls.classid, cls.prog_code, course#

FROM classes cls, students s, enrollments e

WHERE e.B#=s.B#

AND e.classid=cls.classid

```
        AND s.status='junior';


11)     SELECT s.B#, first_name, last_name
        FROM enrollments e, students s, courses c, classes cls
        WHERE c.course#=cls.course#
        AND c.prog_code=cls.prog_code
        AND c.prog_code IN ('CS')
        AND s.B#=e.B#
        AND cls.classid=e.classid
        AND year=2019
        AND semester='Spring'


12)     SELECT year, semester, prog_code, course#
        FROM classes c
        GROUP BY year, semester, prog_code, course#
        HAVING COUNT(*)>=2
```