

1)

```
a)
select *
from course
where credits > 3;

b)
select *
from classroom
where building = 'Watson' or building = 'Packard';

c)
select *
from course
where dept_name = 'Comp. Sci.';

d)
select course_id
from section
where semester = 'Fall';

e)
select *
from student
where tot_cred >45 and tot_cred <90;

f)
select *
from student
where name like '%a' or name like '%i' or name like '%u' or name like '%e' or name like '%o';

g)
select course_id
from prereq
where prereq_id = 'CS-101';
```

2)

```
a)
select dept_name,avg(salary)
from instructor
group by dept_name;

b)
select *
from department
where dept_name = (select dept_name
from (select dept_name,count(*)
from course
group by dept_name
order by count desc
limit 1 )as d);

c)
select dept_name,count(*)
from course
group by dept_name
order by count asc;
```

```

d)select id,name
from student
where id in (select id from(select id,count( course_id in
      (select course_id
      from (select *
      from course
      where dept_name = 'Comp. Sci.') as m))
from takes
group by id) as d
where count > 2 );
e)
select id,name,dept_name
from instructor
where dept_name = 'Biology' or dept_name = 'Philosophy' or dept_name = 'Music' ;
f)
select id,name
from instructor
where dept_name in (select dept_name
from (select course.course_id
from teaches,course
where teaches.year=2018) as d);

```

3)

```

a)
select *
from student
where id in (select id
from takes
where course_id in (select course_id
                     from course
                     where dept_name = 'Comp. Sci.') and grade = 'A' or grade = 'A-');
b)
select *
from instructor
where id in (select id
             from advisor
             where s_id in (select id
                             from takes
                             where grade='B-' or grade='C' or grade='C-' or grade='F'));
c)
select *
from course
where course_id in(select course_id
                   from takes
                   where grade != 'F' and grade != 'C');
d)
select *
from instructor
where id in (select id
             from advisor
             where s_id in (select id
                             from takes
                             where grade != 'A'));
e)
select distinct course_id
from section
where time_slot_id in (select time_slot.time_slot_id
from time_slot
where end_hr < 12);

```