Pay special attention to underlined words. They help in writing queries

--List students who started between 2011 and 2012.

--There are two ways to write this query.

select \* from student where started >=2011 and started <= 2012

--or

select \* from student where started between 2011 and 2012

--List maximum course number in each department.

select department, max(coursenr) from course group by department

--List students where Career is UGRD and program is COMP-SCI or COMP-GAM.

select \* from student where Career = 'UGRD' AND (program = 'COMP-SCI' OR program = 'COMP-GAM')

--List students where Career is GRD and program is not PHD and not COMP-SCI.

select \* from student where Career = 'GRD' AND NOT (program = 'COMP-SCI') AND NOT( program = 'PHD')

--List students enrolled in courses

select s.\* from student s, enrolled e where s.sid = e.studentid  
  
--List all students who are members of Computer Science Society.  
select firstname, lastname, sid, name  
from student s, memberof m, studentgroup sg  
where s.sid = m.studentid and m.groupid = sg.gid and sg.name = 'Computer Science Society'

—Select all students whether presidents or not  
SELECT S.\*, SG.\*  
FROM student S LEFT OUTER JOIN studentgroup SG  
    ON S.SID = SG.PresidentID;

--Check if a student is a president of more than one studentgroup.

select \* from Studentgroup SG1, StudentGroup SG2 where sg1.gid != sg2.gid and sg1.presidentid = sg2.presidentid

  --List courses (both enrolled and non-enrolled courses) and their total enrollment by each quarter.

--Divide the query into two parts:

--List courses (both enrolled and non-enrolled courses). This is a left outer join.  
select \* from course left outer join enrolled on  
cid = courseid

--Then on the result of this query apply a group by because we wish to see total enrollment by each quarter.

--Attributes in select clause change to cid (a group by attribute) and count(studentid) representing total enrollment.

select cid,  count(studentid) from course left outer join enrolled on  
cid = courseid  
group by cid, quarter, year