

Announcements:

- Every one should have a database on dbclass.cs.pdx.edu
- Piazza a problem
right one ~~✖~~ → Winter 2013 CS 386/586
wrong one ~~✖~~ → Spring 2013 CS 386/586
- Survey - if not here last week
- Demo 1 - tonight - during Activity 2

Student

<u>id</u>	<u>name</u>	<u>fac-id</u>
1	John	101
2	Sue	101

Faculty

<u>fac-id</u>	<u>name</u>
101	Waters
102	Rhodes

Student S \bowtie Faculty F
S.fac-id = F.fac-id

<u>id</u>	<u>name</u>	<u>fac-id</u>	<u>fname</u>
1	John	101	Waters
2	Sue	101	Waters

Select *
from Student S NATURAL JOIN Faculty F

(Select *
from Student s Natural Join Faculty f

equivalent to

(Select *
from Student S, Faculty f
where S.fac-id = f.fac-id
and S.name = f.name

practice with joins:

List the first, last,
and language whenever
the agent speaks the language.

List first, last, language and
language (for two different
languages) that the
agent speaks.

List first, last of agents
who speak at least two
languages. Use distinct.

select a.first, a.last, l.language
from agent a, language l
where a.agent-id = l.agent-id
and
l.lang-id = l.lang-id

from agent a join language l

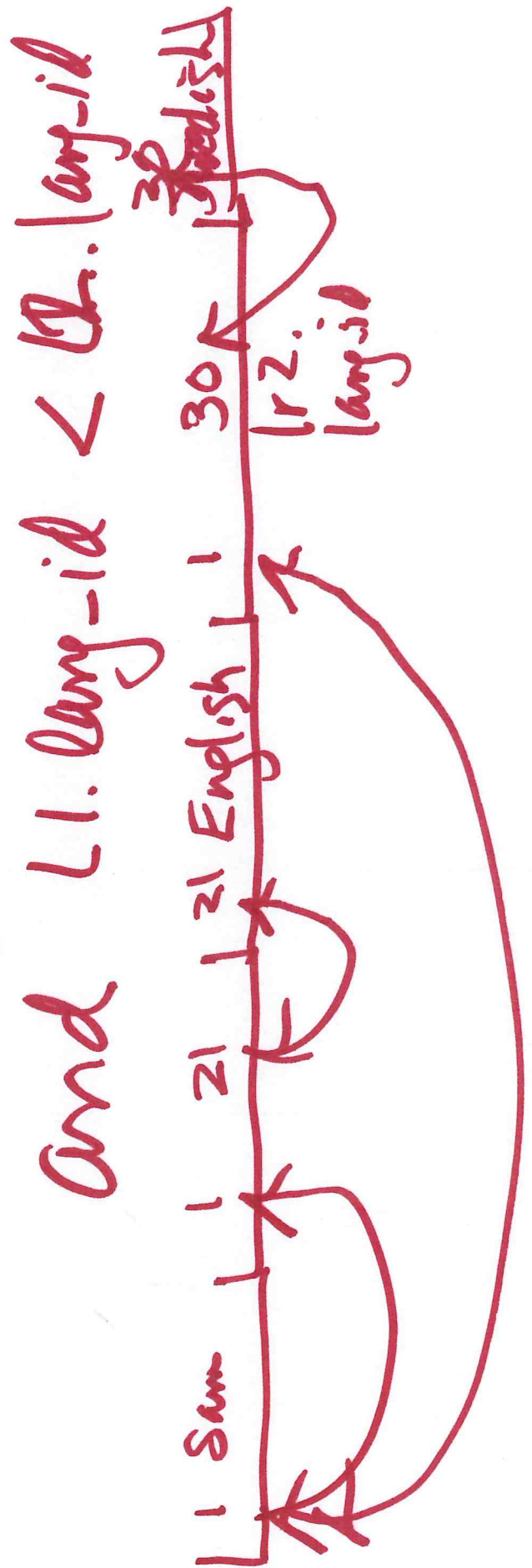
on a.agent-id = l.lang-id

~~l~~ join language l

on l.lang-id = l.lang-id

From agent a, language l1, language l2
 language l1, language l2

where 4 join conditions
 (exercise for the reader)



more practice with joins:

Employee (id, name, dept, boss)

Department (did, dname, mgr)

List id, name for each employee
with the id, name for their
boss.

List id, name, did, dname for
each employee with their
department.

List id, name, for each employee
where their boss is also
the manager of their department.