

Alex Stewart

CS350 HW2

**Write some queries (DUE Week 3 - Friday night at midnight)**

```
MySQL [sunypoly]> select bdate,address
-> from employee
-> where fname='John' and minit='B' and lname='Smith';
+-----+-----+
| bdate      | address                               |
+-----+-----+
| 1955-01-09 | 731 Fondren, Houston, TX |
+-----+-----+
1 row in set (0.108 sec)

MySQL [sunypoly]> █
```

```
MySQL [sunypoly]> select fname,lname,address
-> from employee,department
-> where dnumber=dno and
->        dname='Research';
+-----+-----+-----+
| fname    | lname    | address                               |
+-----+-----+-----+
| Joyce    | English  | 5631 Rice, Houston, TX |
| Ramesh   | Narayan  | 971 Fire Oak, Humble, TX |
| John     | Smith    | 731 Fondren, Houston, TX |
| Franklin | Wong     | 638 Voss, Houston, TX |
+-----+-----+-----+
4 rows in set (0.108 sec)

MySQL [sunypoly]> █
```

```

MySQL [sunypoly]> (select distinct pnumber
-> from project,department,employee
-> where dnum=dnumber and mgrssn=ssn and lname='Smith')
-> union
-> (select pnumber
-> from project,works_on,employee
-> where pnumber=pno and essn=ssn and lname='Smith');
+-----+
| pnumber |
+-----+
|         1 |
|         2 |
+-----+
2 rows in set (0.109 sec)

MySQL [sunypoly]> █

```

### Question 1

a.

Missing area code

b.

I would make a new attribute area code under student

c.

advantage, can sort by different parts of name, can get different parts of name, don't always need to use full name

disadvantage, takes more memory, larger table

d.

Split information when it can be broken into multiple parts

don't split when you need all of it together and never apart

**e.**

design 1: table for each phone

design 2: table for each user

**Question 2:**

**a.**

```
SELECT Name
FROM STUDENT
WHERE Class=4 AND Major='CS';
```

**b.**

```
SELECT CourseName
FROM COURSE, SECTION
WHERE COURSE.CourseNumber=SECTION.CourseNumber AND Instructor='King'
AND (Year='2007' OR Year='2008');
```

**c.**

Select section.course\_number,section.semester,section.year,student.name

From Section, Student, Grade\_report

Where student.student\_number=Grade\_report.student\_number and

Grade\_report.section\_identifier = section.section\_identifier

and Instructor = 'King';

**d.**

Select Student.name, Course.course\_name, Course.course\_number,

Course.credit\_hours,Section.semester,Section.year,Grade\_report.grade

From Student, Course, Section, Grade\_report

Where Course.Course\_number = Section.Course\_number and

Section.Section\_identifier = Grade\_report.Section\_identifier

and Grade\_report.Student\_number = Student.Student\_number and Class = 04;