

CS 265 Quiz 2

Name: _____KEY_____

Grade: ____/ 6

Honor code statement and signature: I understand that for this quiz I may NOT consult with other students regarding the quiz questions, nor can I share the quiz content before 8:00 AM Tuesday Jan 22 2013. I understand that I MAY consult the textbook, videos, course Web site, and my own notes, however. I understand that I can take NO LONGER than 15 minutes to complete the quiz from the time of download.

Your signature: _____

Consider the table **Driver (licenseNum, firstName, lastName, age)**, part of a simple driver registration database. Every row of Driver has a unique **licenseNum**.

1. Write a query in SQL to give the first and last names of all drivers that share a last name with another driver. (2 points)

```
SELECT DISTINCT d1.firstName, d1. LastName //DISTINCT optional this time
FROM Driver d1, Driver d2
WHERE d1.lastName = d2.lastName AND d1.licenceNum <> d2.licenseNum;
// or following ok (this time)
SELECT d1.firstName, d1. LastName
FROM Driver d1, Driver d2
WHERE d1.lastName = d2.lastName AND d1.firstName <> d2.firstName;
```

2. Given another relation **Voter (voterID, firstName, lastName, district)**, write a query in SQL to find all (first name, last name) pairs that are associated with a voter in district = '32', and also associated with a driver under the age of 25. Every row of Voter has a unique **voterID**

A) Write the query using the INTERSECT operator (2 points)

```
SELECT firstName, lastName //they can also use row variables like D (for Driver)
FROM Driver // and V for Voter
WHERE Driver.age < 25
INTERSECT
SELECT firstName, lastName
FROM Voter
WHERE Voter.district = '32'
```

B) Write the query WITHOUT using the INTERSECT operator (2 points)

```
SELECT Driver.firstName, Driver.lastName
FROM Driver, Voter
WHERE Driver.firstName = Voter.firstName AND Driver.lastName = Voter.lastName
AND Driver.age < 25 AND Voter.district = '32';
```