**CS 157A Fall 2020 Homework 4**

Points: 10 (each question is 1 point)

**Part 1: SQL questions**

The following queries are based on the census data (**census-summary.sql**)

1. which native countries have "land" in their name?

=select distinct native\_country from census where native\_country like “%land%”;

1. what is the average education years for people having a native country that is not the US?

=select avg(education) from census where native\_country not like "United\_States";

1. how many different native countries are found in the data set?

=select count(distinct native\_country) from census;

**Part 2: SQL questions**

The following queries are based on the **courses-ddl.sql** and **courses-small.sql** data

1. what are the names of all students who have taken some course? Don't show duplicates.

= select distinct(name) from student where tot\_cred > 0;

1. what are the names of departments that offer 4-credit courses? Don't list duplicates.

=select distinct(dept\_name) from course where credits = 4;

1. How many B grades have been given to physics majors?

= select count(\*) from student natural join takes where dept\_name='Physics Major' and grade='B';

count(\*)

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0

1. What is the average total credits of students who have taken CS-319?

= select avg(tot\_cred) from student natural join course where course\_id = "CS-319";

1. What is the average total credits of students who have taken CS-101?

=select avg(tot\_cred) from student natural join course where course\_id = "CS-101";

1. What are the course IDs of courses taught by instructor Katz?

= select course\_id from course natural join instructor where name ="Katz";

1. What are the course IDs of all courses offered by instructor Crick's department?

=select course\_id from instructor natural join department natural join course where name="Crick";