

Dealing with the glue system

Introduction to Oracle

- Log onto grace system
 - ssh glue.umd.edu
 - ssh linux.glue.umd.edu
- Go into the class directory
 - cd /afs/glue.umd.edu/class/spring2014/cmssc/424/0201
- Go into public directory
cd public/Mondial_dataset
- Start oracle
tap oraclient
 - Your SID is 'dbclass1'
- Start sqlplus
sqlplus
- Enter user name and password that were emailed to you
- To change your password
 - alter user <username> identified by <pass>;

Load tables

- Copy Mondial_dataset from public directory to your own
 - `cp -r ../../public/Mondial_dataset .`
 - `cd Mondial_dataset`
- Start sqlplus
 - `sqlplus`
- Create tables
 - `@ create`
- Load data
 - `@ data`
- If you need to trash everything
 - `@ drop`

Basic Query Structure

- A typical SQL query has the form:

select A_1, A_2, \dots, A_n
from r_1, r_2, \dots, r_m
where P

- A_i represents an attribute
 - R_i represents a relation
 - P is a predicate.
- The result of an SQL query is a relation.

Sample queries

- Find the country code for the United States

```
SELECT code  
FROM country  
WHERE name = 'United States'
```

- Find the population of the United States

```
SELECT population  
FROM country  
WHERE code = 'USA'
```

- Find countries that border the United States

```
SELECT country1  
FROM borders  
WHERE country2 = 'USA'
```