Creating Databases

CREATE DATABASE mydb;

• Creates a database named "mydb" with default parameters and the current user as the owner

• Unfortunately, beyond that, different DBMSs vary in specifics
Creating Databases

• PostgreSQL
  – Supports multiple databases in single server
  – Running more than one server on a machine is generally a bad idea

• MySQL
  – Only one actual database per server
    • CREATE DATABASE is actually an alias for CREATE SCHEMA
  – Possible to run multiple servers on a single machine
    • Ports must be different
Creating Databases

• PostgreSQL

CREATE DATABASE name
  [ [ WITH ] [ OWNER [ = ] user_name ] ]
  [ TEMPLATE [ = ] template ]
  [ ENCODING [ = ] encoding ]
  [ LC_COLLATE [ = ] lc_collate ]
  [ LC_CTYPE [ = ] lc_ctype ]
  [ TABLESPACE [ = ] tablespace ]
  [ CONNECTION LIMIT [ = ] connlimit ] ]
Creating Databases

- MySQL

CREATE {DATABASE | SCHEMA} [IF NOT EXISTS] name
  [ [DEFAULT] CHARACTER SET [=] charset_name
  | [DEFAULT] COLLATE [=] collation_name ]
Creating Databases

- PostgreSQL
  - A schema is a collection of tables (and other objects) *inside* of a database

```
CREATE SCHEMA myschema;

CREATE TABLE myschema.mytable ...;
```
Creating Users

• Unfortunately, the SQL standard leaves user and role management up to each DBMS implementation
  – PostgreSQL provides "CREATE USER", which is actually an alias for "CREATE ROLE"

```
CREATE ROLE auser WITH LOGIN PASSWORD '12345';
```