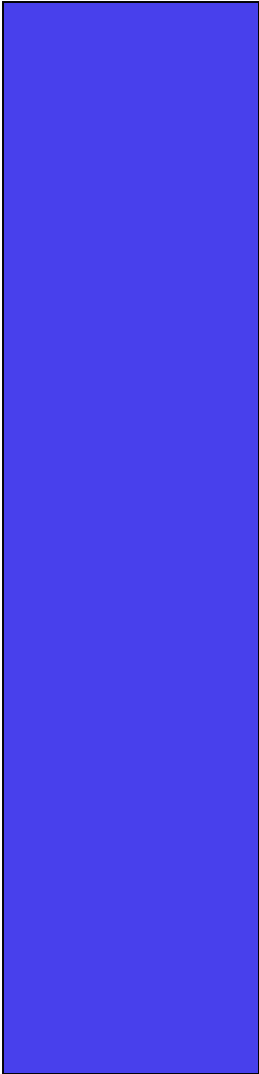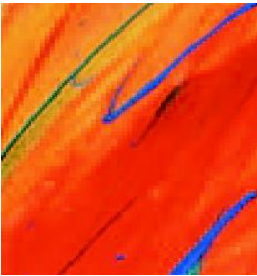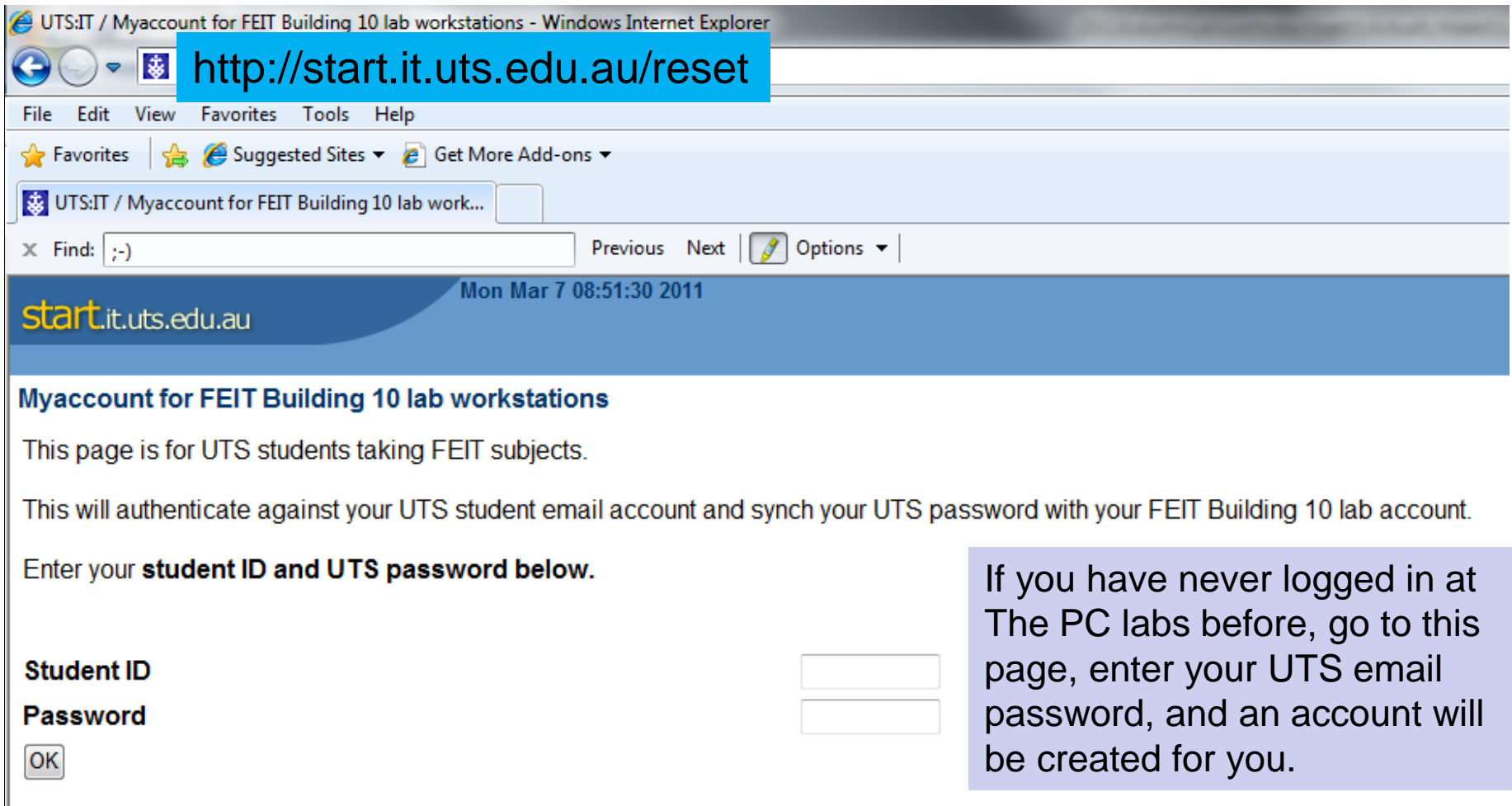# How to start
PostgreSQL in the **labs**

If you don't have an account to login in PC labs

UTS:IT / Myaccount for FEIT Building 10 lab workstations - Windows Internet Explorer

http://start.it.uts.edu.au/reset

File   Edit   View   Favorites   Tools   Help

⭐ Favorites | 👍 🅔 Suggested Sites ▾ 🅔 Get More Add-ons ▾

🌀 UTS:IT / Myaccount for FEIT Building 10 lab work...

✕ Find: ;-)   Previous   Next | 🖊 Options ▾ |

Mon Mar 7 08:51:30 2011

start.it.uts.edu.au

Myaccount for FEIT Building 10 lab workstations

This page is for UTS students taking FEIT subjects.

This will authenticate against your UTS student email account and synch your UTS password with your FEIT Building 10 lab account.
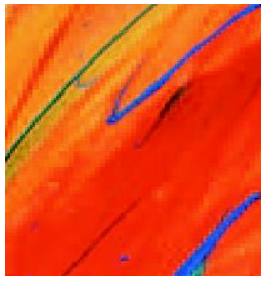
Enter your **student ID and UTS password below.**

If you have never logged in at The PC labs before, go to this page, enter your UTS email password, and an account will be created for you.

Student ID

Password

OK
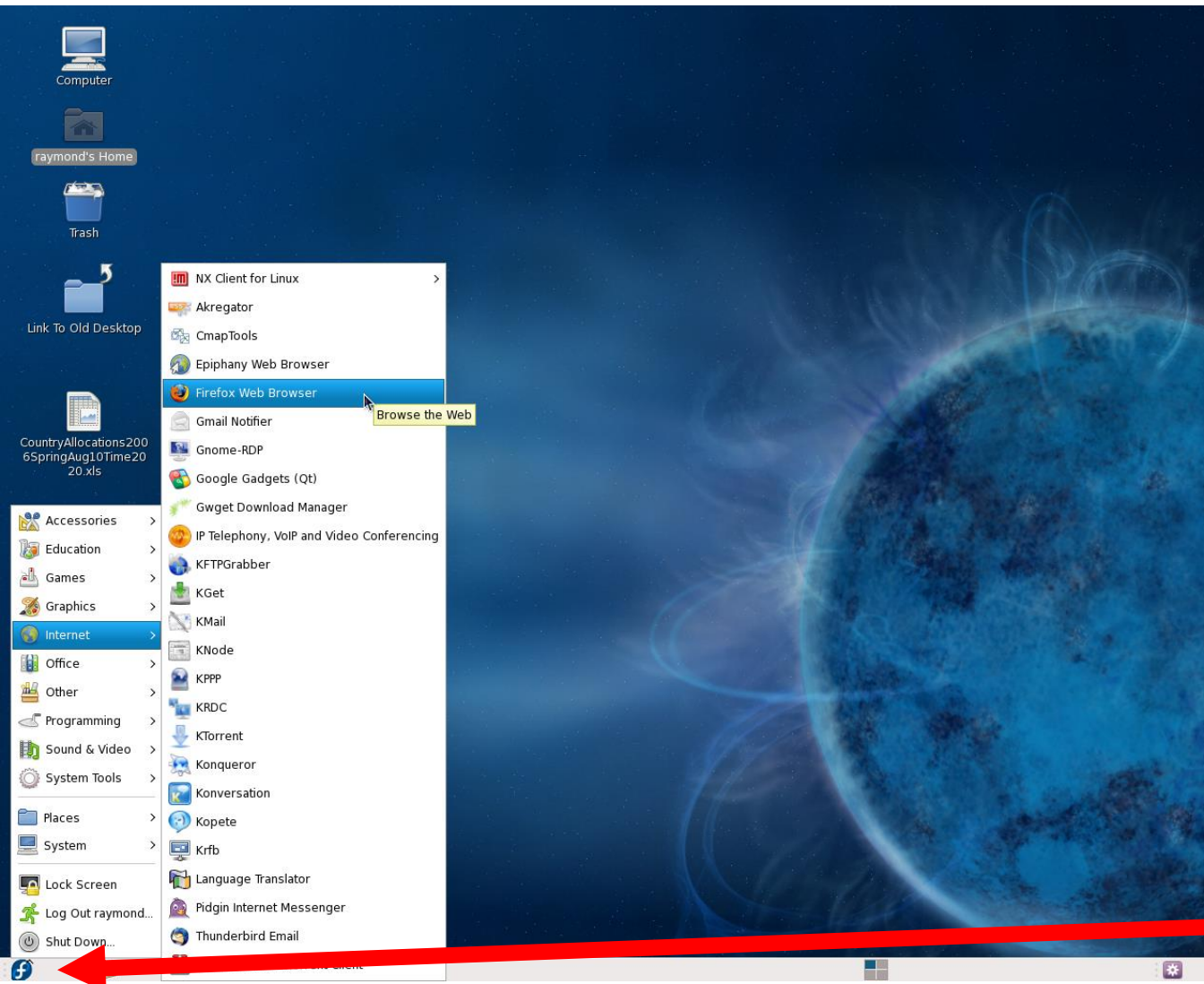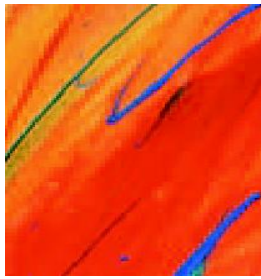
2

Download Database Script files

Start a web browser ("firefox")

To download any of the of databases used in lectures, you will need to start a web browser.

From the symbol that looks like a funny "f" select "Internet" then "Firefox Web Browser".

Note: the "f" symbol may be in the top left hand corner of the Screen, not the lower left as shown here.
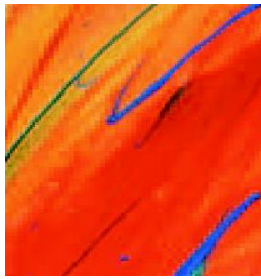
The funny "f" symbol

Downloading a database to your file space: e.g. boygirl

Go to

UTS Online→ Subject Materials →Week 7 → Database Scripts for PostgreSQL

then download the sample database (e.g. dbfile.txt or dbfile.sql)

```
Mozilla Firefox
File  Edit  View  History  Bo
  New Window      Ctrl+N
  New Tab         Ctrl+T
  Open Location...  Ctrl+L
  Open File...      Ctrl+O
  Close           Ctrl+W
  Save Page As...   Ctrl+S
  Send Link...
  Page Setup...
  Print Preview
  Print...          Ctrl+P
  Import...
  Work Offline
  Quit            Ctrl+Q
       CONSTRAINT girlNoPK PRIMARY KEY (girlNo)
);

Create table Boy
(
      boyNo           integer,
      boyName         char(10),
      girlNo          integer,
      boyMobile       char(10),

   CONSTRAINT boyNoPK  PRIMARY KEY (boyNo),
   CONSTRAINT girlNoFK FOREIGN KEY (girlNo) REFERENCES Girl
);


INSERT INTO Girl VALUES(1, 'Alice',   '0414 1234');
INSERT INTO Girl VALUES(2, 'Bonnie',  '0414 1235');

Insert into Boy VALUES( 1,'Adam',    1,   '0414 1236');
Insert into Boy VALUES( 2,'Bob',     2,   '0414 1237');
Insert into Boy VALUES( 3,'Charlie', 2,   '0414 1238');
Insert into Boy VALUES( 4,'Dennis',  null,  null);

-- raymond=> select * from Boy;
--
--  boyno |  boyname   | girlno | boyMobile
-- -------+------------+--------+------------
--      1 | Adam       |      1 | 0414 1236
--      2 | Bob        |      2 | 0414 1237
--      3 | Charlie    |      2 | 0414 1238
--      4 | Dennis     |        |
-- (4 rows)
--
--
-- raymond=> select * from Girl;
--
-- girlno | girlname | girlMobile
```
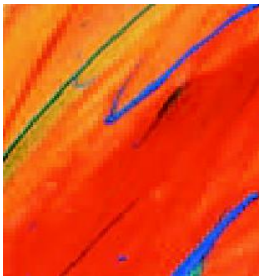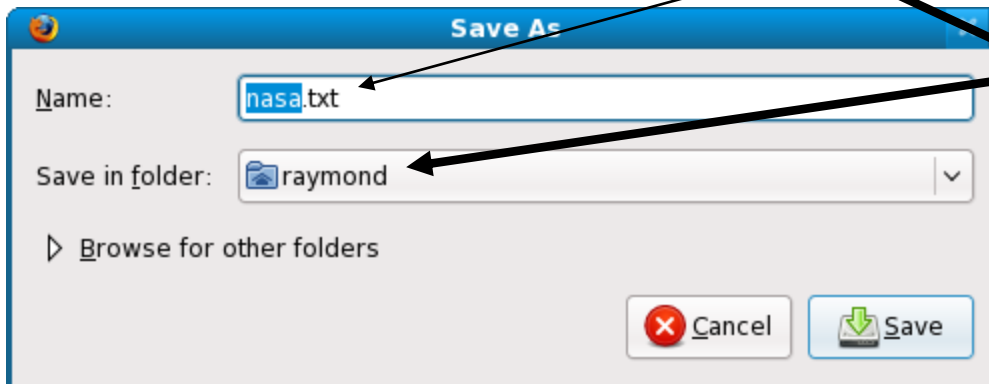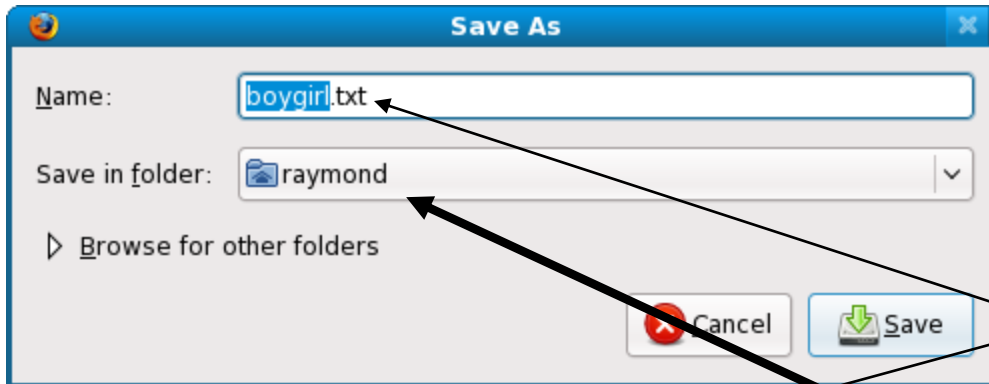
Open the file, then select
"Save page as"
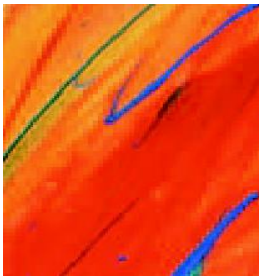on the "File" menu and save
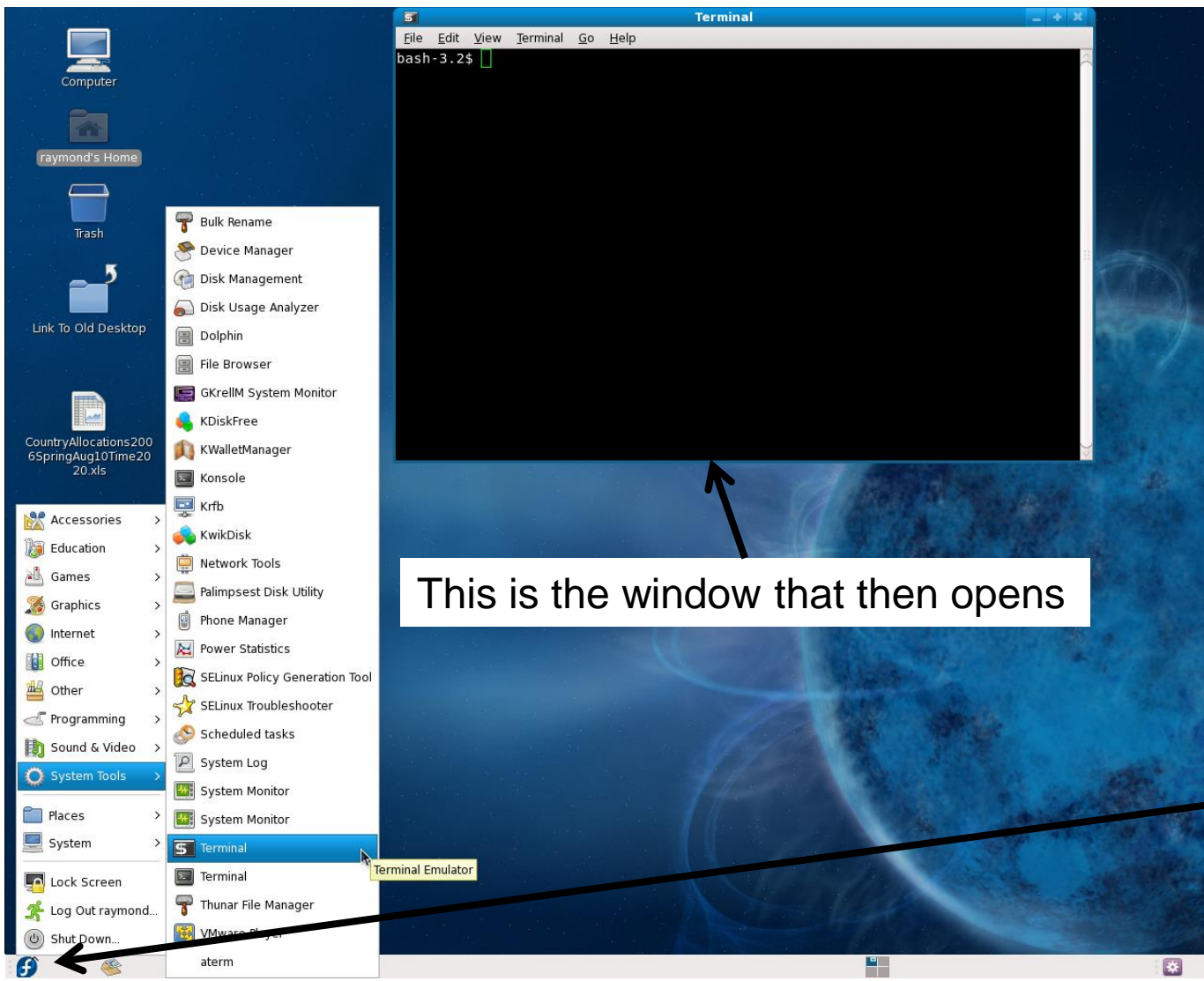the file in **your Home Folder**.

Done

Save As

Before hitting "Save" in the "Save As" pop up window, make sure that:

1) The suffix of the file name is the same as the suffix of the file that you have downloaded. It should be ".txt" or ".sql".

2) The "Save in folder" shows your user name.

Start Using PostgreSQL

Starting a Window (1)
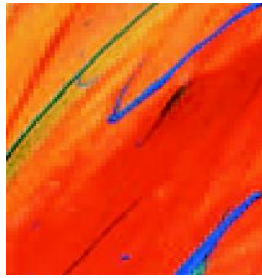
From the symbol that looks like a funny "f" select "System Tools" then "Terminal".

Note: the "f" symbol may be in the top left hand corner of the Screen, not the lower left as shown here.

The funny "f" symbol

This is the window that then opens

Starting a Window (2)
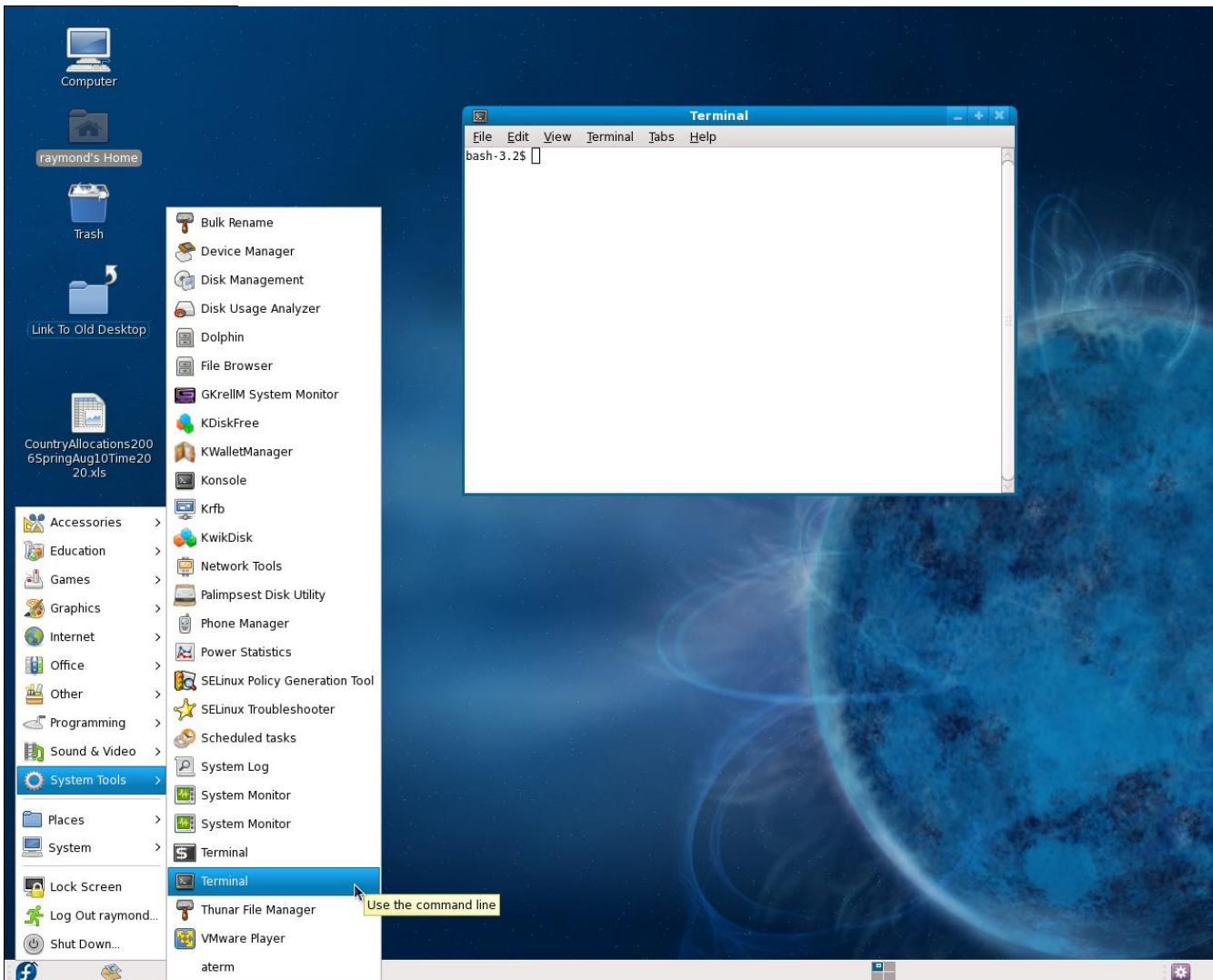
The window you opened with the instructions on the previous slide has white writing on a black background. If you prefer black writing on a white background, then from the funny "f" select "System Tools" then the lower of the two "Terminal" menu options.

PostgreSQL login

You need two login/passwords

- The first is the login/password you used to log into the lab PC.

- The second login/password is needed to use PostgreSQL.
  - In your UTS email, if you enrolled in this subject early enough, you should have received an email containing your PostgreSQL login/password ...

```
Your PostgreSQL account details are as follows

        Database:
        Username:
        Password:
```

your PostgreSQL user name listed twice here

your PostgreSQL password here

The sample email contains Username and Pass

Your PostgreSQL account details are as follows

    Database: vabehboo
    Username: vabehboo
    Password: 7HuesntT
    Database server: pgsqllab.it.uts.edu.au

Use the following command on UTS:IT Unix Servers or UTS:IT Linux workstations to connect:

rerun$ psql -h pgsqllab.it.uts.edu.au -U vabehboo vabehboo
and the password 7HuesntT when prompted for it.

Use the student Unix server rerun.it.uts.edu.au to connect to the server remotely (from outside of the UTS network). If you are unsure of how to connect to a unix server, see the documentation at http://wiki.it.uts.edu.au/start/Connecting_to_UTS:IT_UNIX_Servers .

Use these values when connecting to PostgreSQL through MS ACCESS with ODBC Connection.

    Database: vabehboo
    Server: ``pgsqllab.it.uts.edu.au"    Port: ``5432"
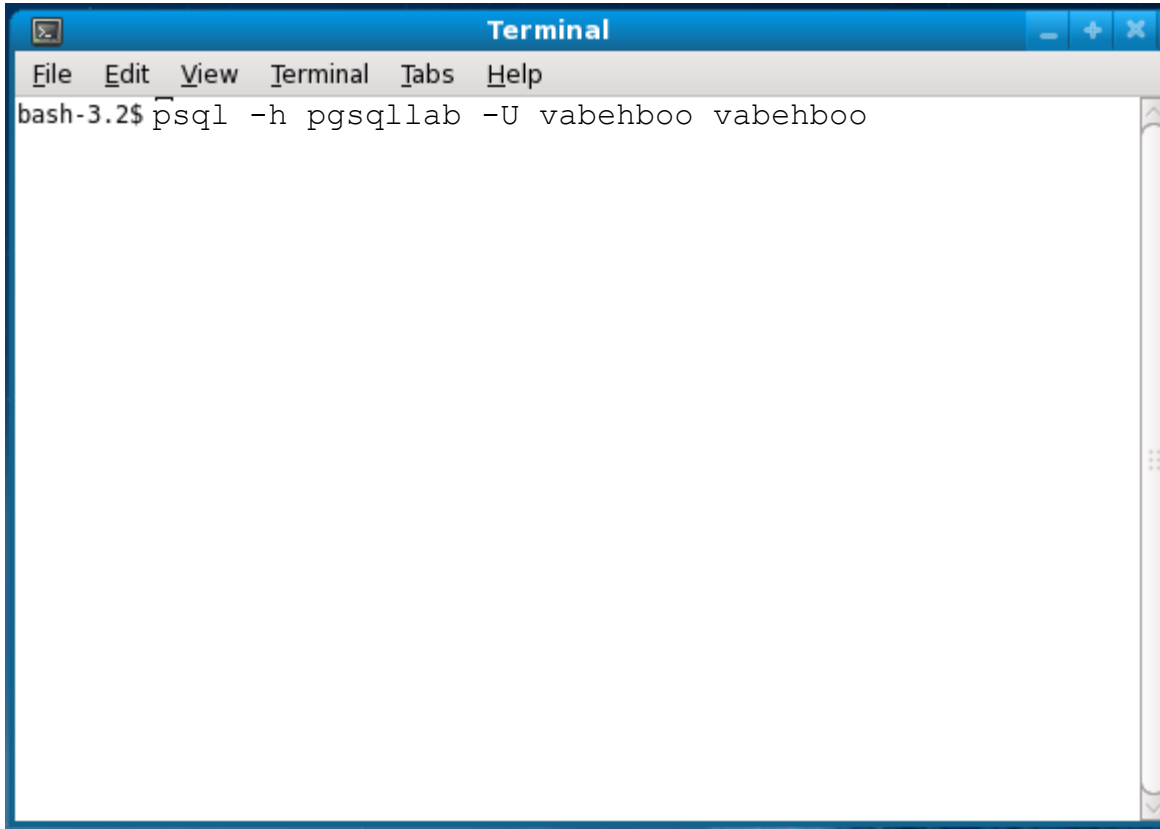   UserName: vabehboo   Password: 7HuesntT

If you need to change your password, login to PostgreSQL with your current details and try:

ALTER USER vabehboo WITH PASSWORD 'thenewpassword';
(don't forget the single quotes!)

Start PostgreSQL

```
Terminal
File  Edit  View  Terminal  Tabs  Help
bash-3.2$ psql -h pgsqllab -U vabehboo vabehboo
```

Type the command shown in the window, replacing "raymond" with **your** postgreSQL login name
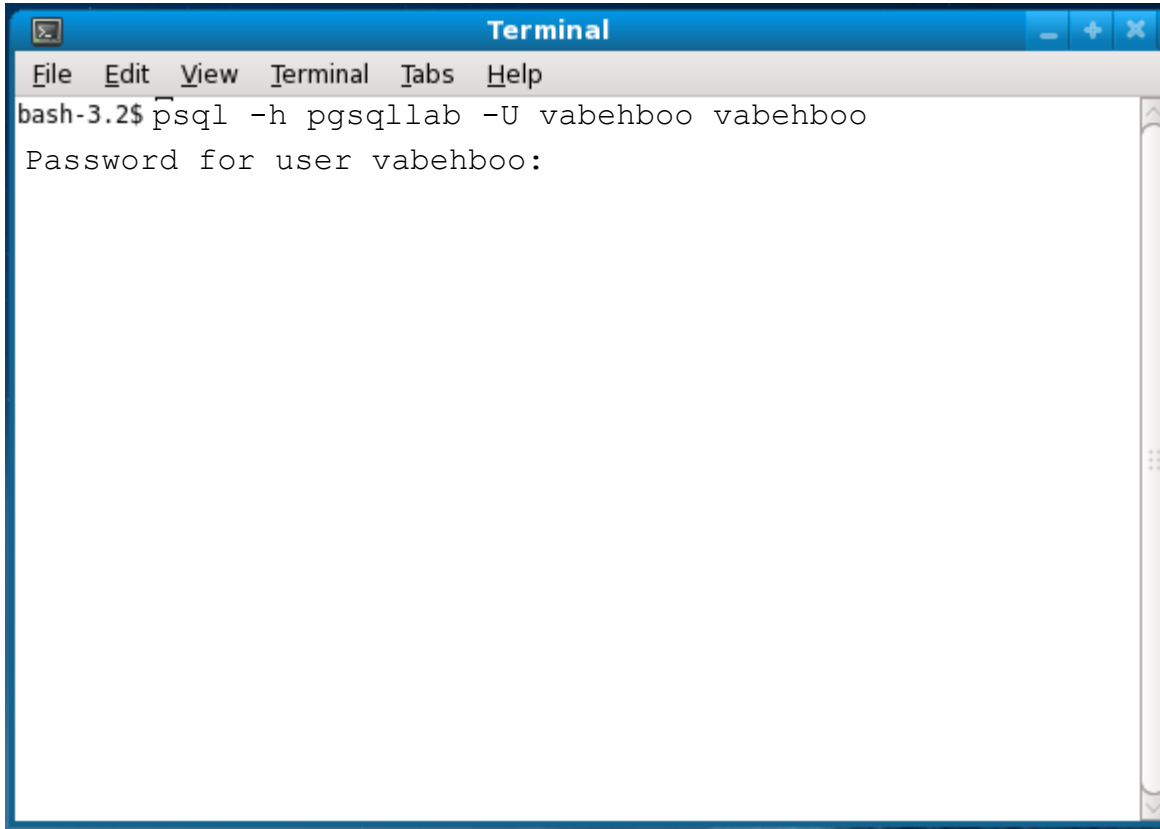
Note that "pgsqllab" is spelt with a double "l".

Here is the same command again, in a bigger font …

```
psql -h pgsqllab -U vabehboo vabehboo
```

Start PostgreSQL
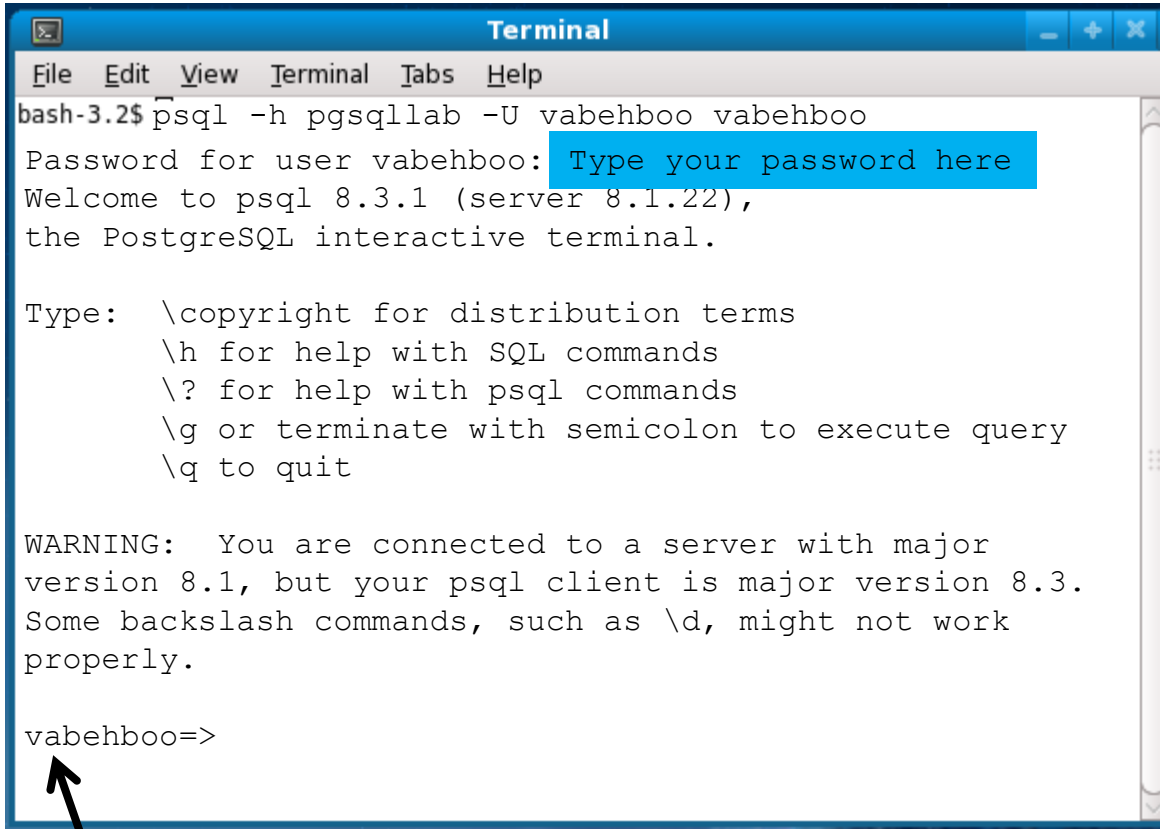
```
Terminal                                    _ + x

File  Edit  View  Terminal  Tabs  Help
bash-3.2$ psql -h pgsqllab -U vabehboo vabehboo
Password for user vabehboo:
```

You will then be prompted for your postgresql password, which is NOT the same as the password you used when you first logged in to the computer.

Start PostgreSQL

```
Terminal                                              _  +  x
File  Edit  View  Terminal  Tabs  Help
bash-3.2$ psql -h pgsqllab -U vabehboo vabehboo
Password for user vabehboo: Type your password here
Welcome to psql 8.3.1 (server 8.1.22),
the PostgreSQL interactive terminal.

Type:  \copyright for distribution terms
       \h for help with SQL commands
       \? for help with psql commands
       \g or terminate with semicolon to execute query
       \q to quit

WARNING:  You are connected to a server with major
version 8.1, but your psql client is major version 8.3.
Some backslash commands, such as \d, might not work
properly.

vabehboo=>
```
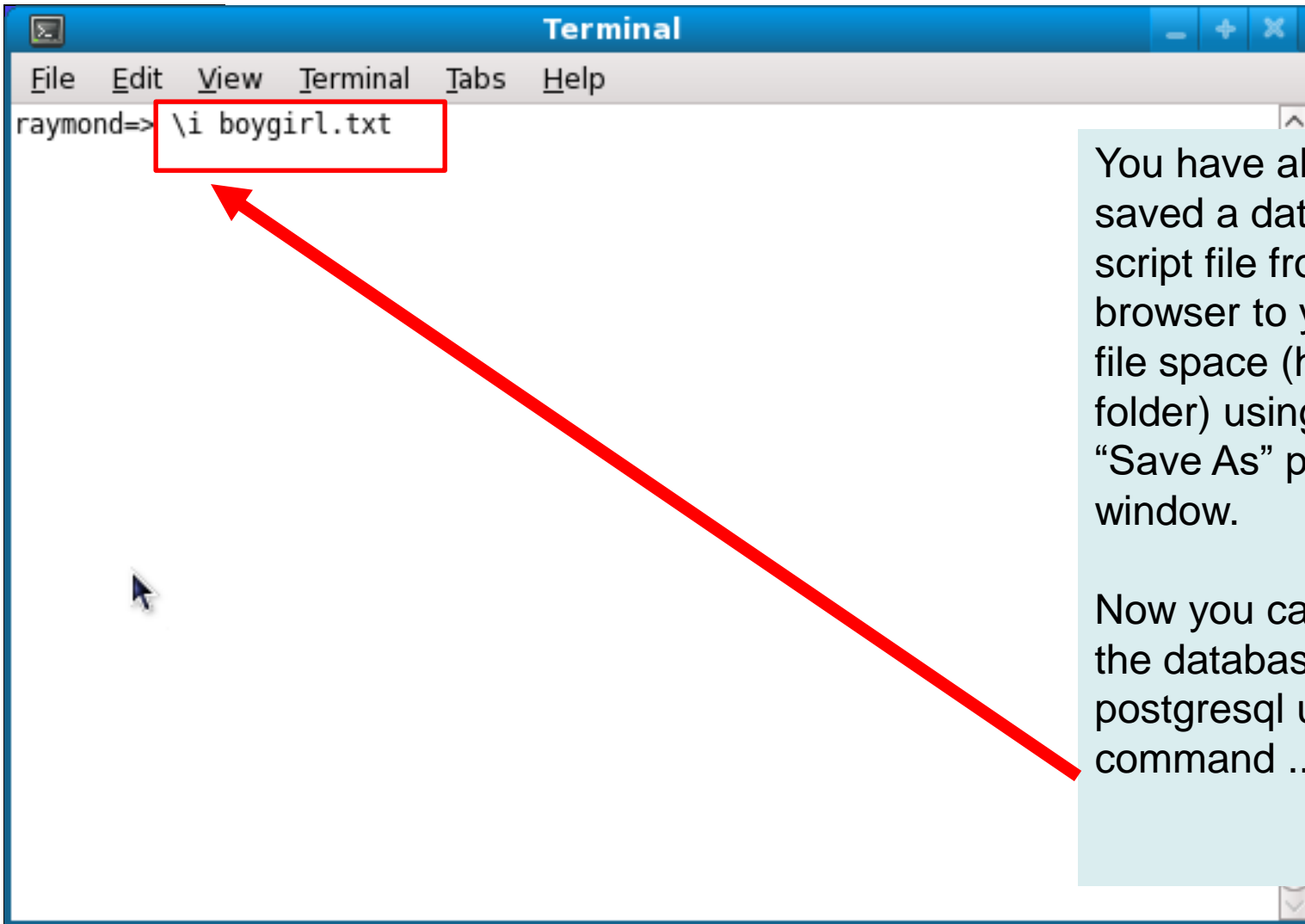
Your login name will be here, not "raymond"

After typing your password, you will get some information similar to what is shown here.

NOTE: the bottom line of the information will not show "raymond", but instead will show your login name. That line is a "**prompt**" for you to provide a command. 14

Uploading into postgreSQL

```
Terminal

File   Edit   View   Terminal   Tabs   Help

raymond=> \i boygirl.txt
```

You have already saved a database script file from a web browser to your own file space (home folder) using the "Save As" pop up window.

Now you can upload the database into postgresql using the command ...

\i

Successful Upload of boygirl.txt

```
Terminal
File   Edit   View   Terminal   Tabs   Help
raymond=> \i boygirl.txt
DROP TABLE
DROP TABLE
psql:boygirl.txt:16: NOTICE:  CREATE TABLE / PRIMARY KEY will create implicit in
dex "girlnopk" for table "girl"
CREATE TABLE
psql:boygirl.txt:28: NOTICE:  CREATE TABLE / PRIMARY KEY will create implicit in
dex "boynopk" for table "boy"
CREATE TABLE
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
raymond=>
```

A successful upload of the "boygirl.txt" database will produce output like this. You can ignore this output; the "notice" lines and the "INSERT 0 1" lines are **not** error messages.

Uploading into postgreSQL: e.g. nasa.txt and/or nasa2.txt
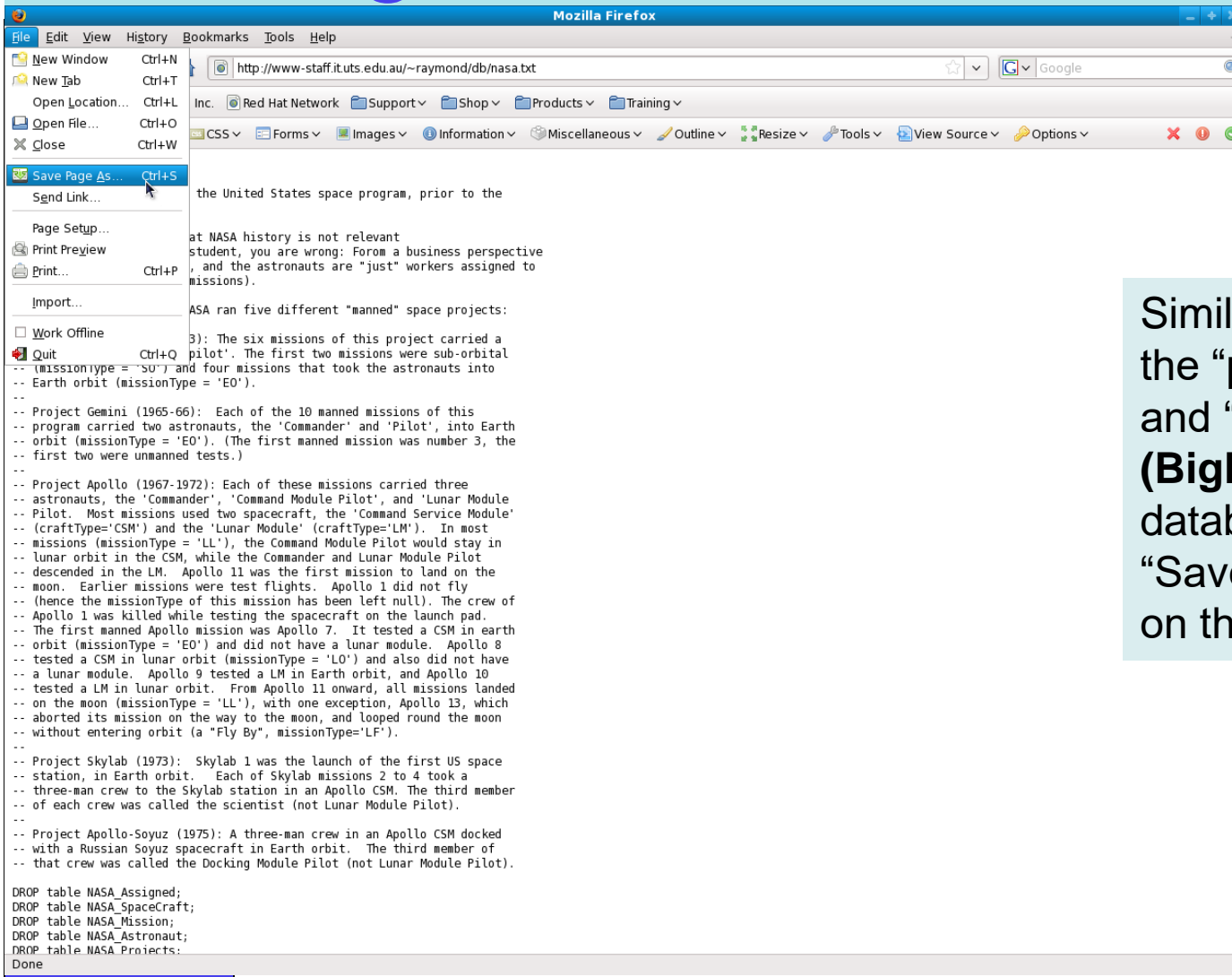
Similarly for downloading the "**pizza (dbpizza.txt)**" and "**Pine Valley (BigPVFC.txt)**" databases, first select "Save page as" on the "File" menu.

Successful Upload of nasa.txt

```
Terminal
File  Edit  View  Terminal  Tabs  Help
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
raymond=>
```
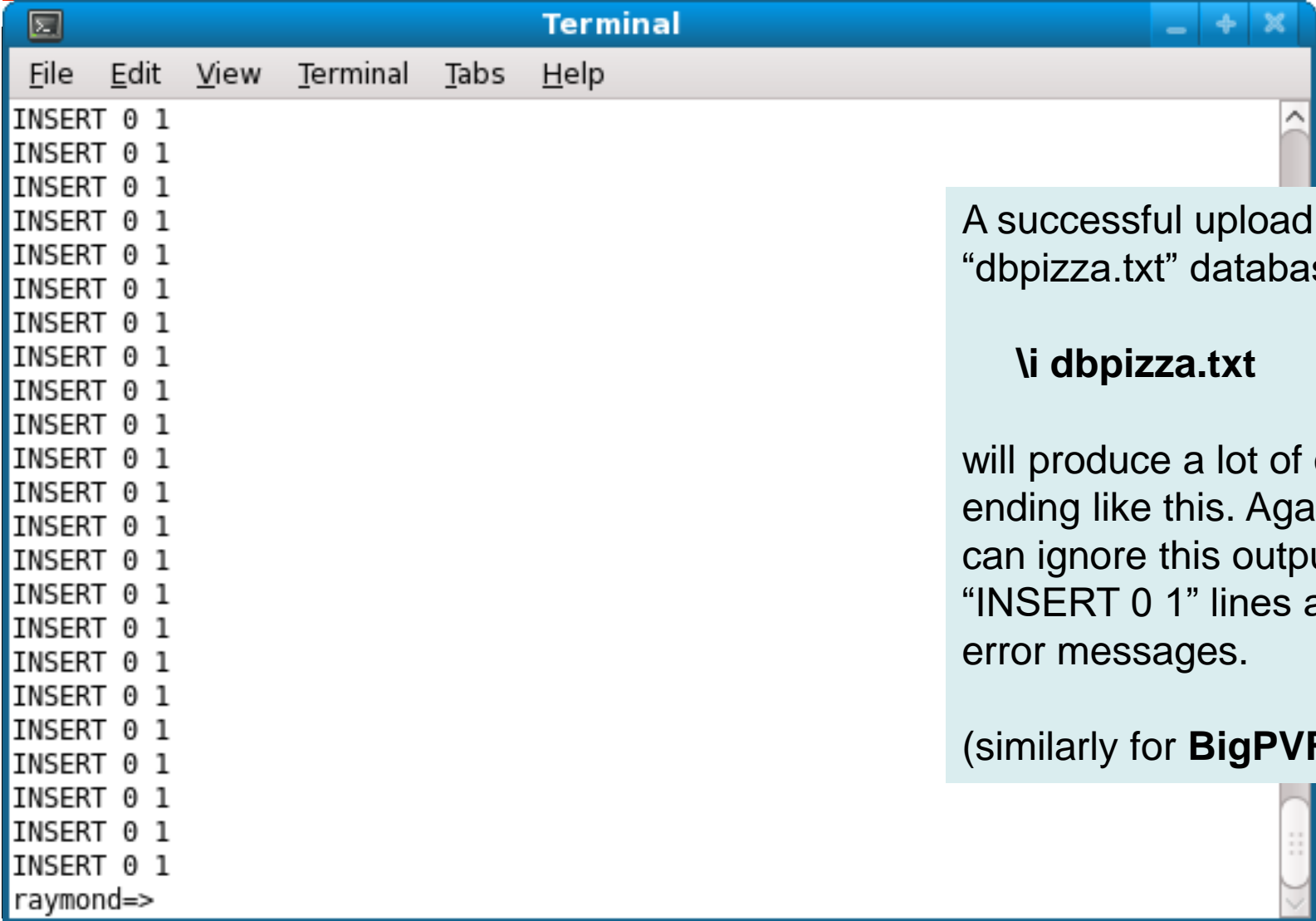
A successful upload of the "dbpizza.txt" database ...
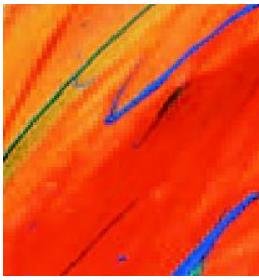
   \i dbpizza.txt

will produce a lot of output, ending like this. Again, you can ignore this output; the "INSERT 0 1" lines are **not** error messages.

(similarly for **BigPVFC.txt**)

Select * from Boy;

```
                                                Terminal                              _  +  x
File   Edit   View   Terminal   Tabs   Help
raymond=> select * from Boy;
 boyno |   boyname   | girlno | boymobile
-------+-------------+--------+------------
     1 | Adam        |      1 | 0414 1236
     2 | Bob         |      2 | 0414 1237
     3 | Charlie     |      2 | 0414 1238
     4 | Dennis      |        |
(4 rows)

raymond=> █
```

Try running ...

   select * from Boy;

And see if you get output like this.

Don't forget to end the command with a semi-colon.

The missing semi-colon

```
                            Terminal                          _  +  X
File  Edit  View  Terminal  Tabs  Help
raymond=> select * from Boy
raymond-> ;
 boyno |  boyname  | girlno | boymobile
-------+-----------+--------+-----------
     1 | Adam      |      1 | 0414 1236
     2 | Bob       |      2 | 0414 1237
     3 | Charlie   |      2 | 0414 1238
     4 | Dennis    |        |
(4 rows)

raymond=>
```

Try running that command again, but this time leave off the semi-colon ...
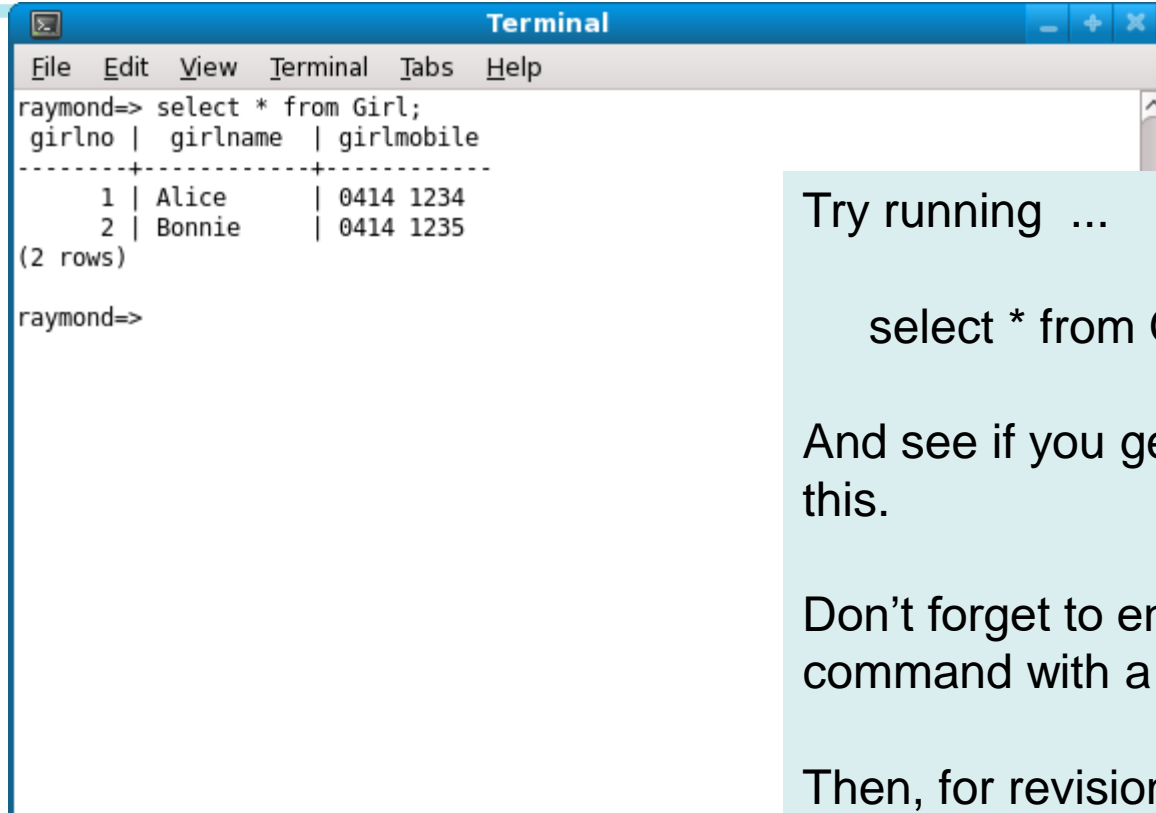
  select * from Boy

You will then get a second prompt, like this ...

  raymond->

Notice how this second prompt has a single dash "-", not "=" like in the first prompt. The "-" in the second prompt is telling you that you haven't finished typing the command. If you then type the semi-colon, you will get the rest of the output shown.

Select * from Girl;

```
Terminal
File  Edit  View  Terminal  Tabs  Help
raymond=> select * from Girl;
 girlno |  girlname  | girlmobile
--------+-----------+-----------
      1 | Alice     | 0414 1234
      2 | Bonnie    | 0414 1235
(2 rows)

raymond=>
```

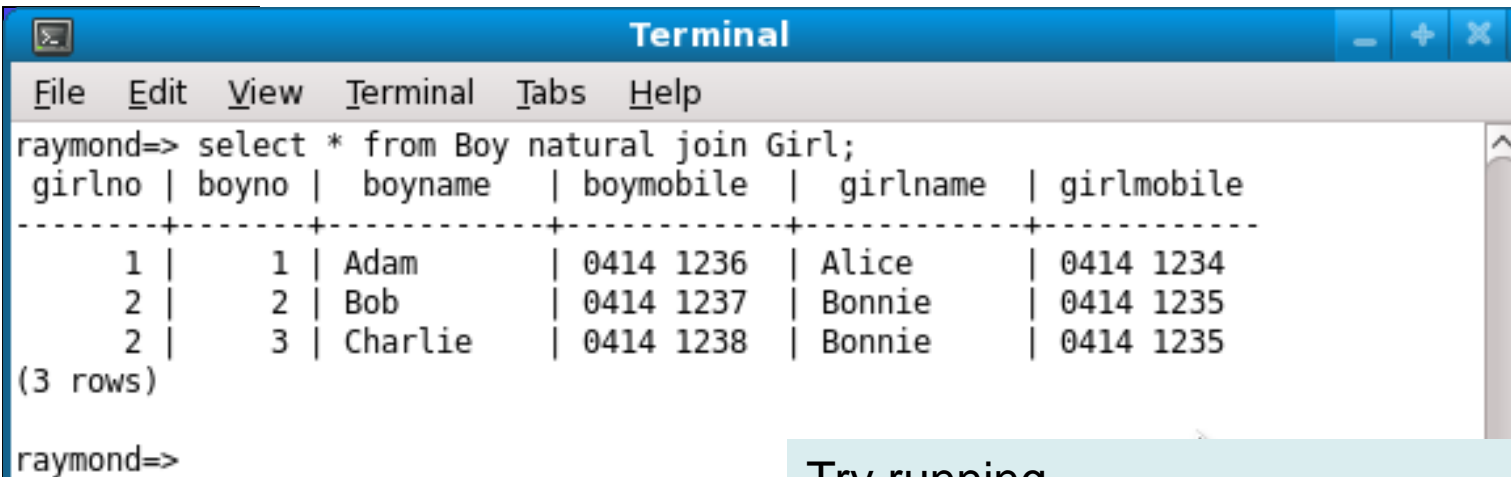Try running ...

   select * from Girl;

And see if you get output like this.

Don't forget to end the command with a semi-colon.

Then, for revision, type the command again, leaving off the semi-colon.

select * from Boy natural join Girl;
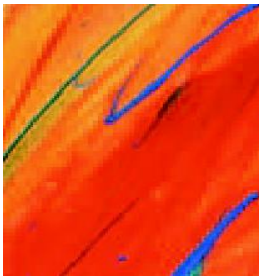
```
Terminal
File  Edit  View  Terminal  Tabs  Help
raymond=> select * from Boy natural join Girl;
 girlno | boyno |  boyname  |  boymobile  |  girlname  | girlmobile
--------+-------+-----------+-------------+------------+------------
      1 |     1 | Adam      | 0414 1236   | Alice      | 0414 1234
      2 |     2 | Bob       | 0414 1237   | Bonnie     | 0414 1235
      2 |     3 | Charlie   | 0414 1238   | Bonnie     | 0414 1235
(3 rows)

raymond=>
```
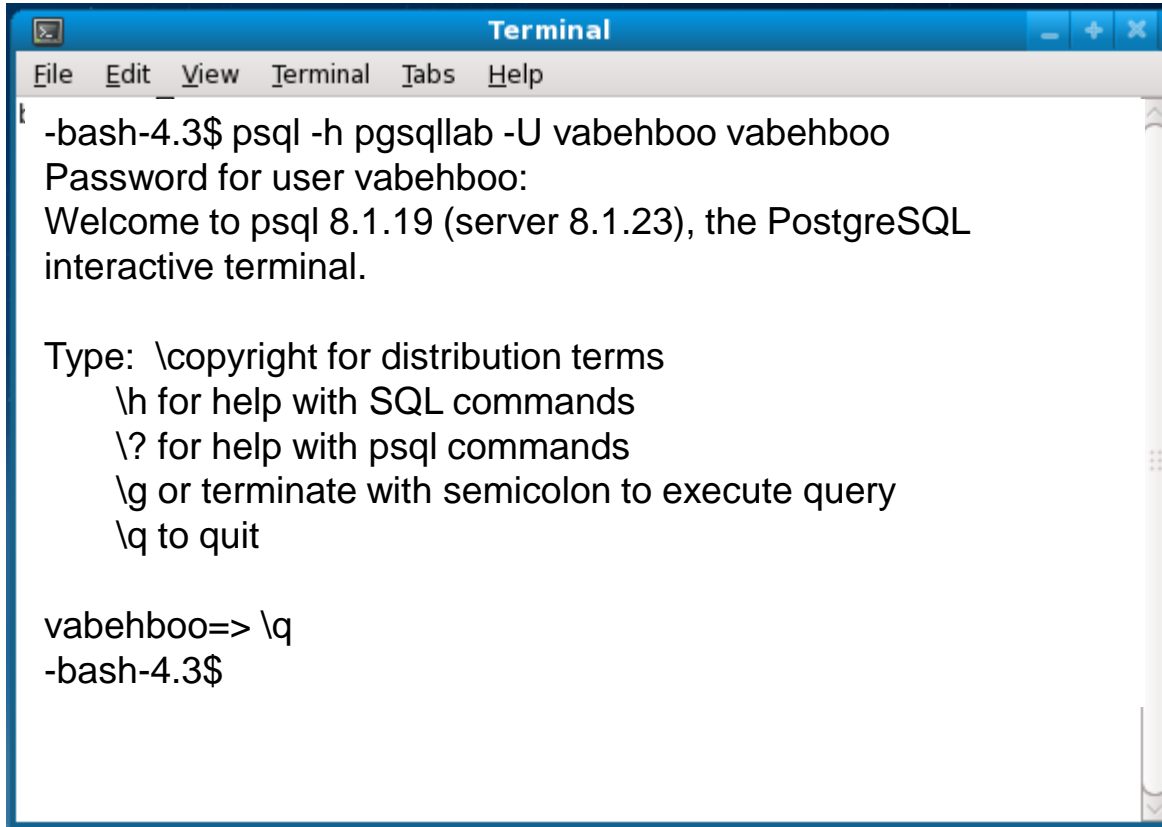
Try running ...

    select * from Boy natural join Girl;

And that's the end of this introduction. If you are finishing up now, see earlier slides that tell you how to logout, first using "\q", then "exit", And then logout from the machine itself.

Quitting PostgreSQL

Quitting PostgreSQL

```
Terminal                                    _  +  x
File  Edit  View  Terminal  Tabs  Help

-bash-4.3$ psql -h pgsqllab -U vabehboo vabehboo
Password for user vabehboo:
Welcome to psql 8.1.19 (server 8.1.23), the PostgreSQL
interactive terminal.

Type:  \copyright for distribution terms
       \h for help with SQL commands
       \? for help with psql commands
       \g or terminate with semicolon to execute query
       \q to quit

vabehboo=> \q
-bash-4.3$
```

You can exit postgresql at any time by typing …

\q

… at the prompt.
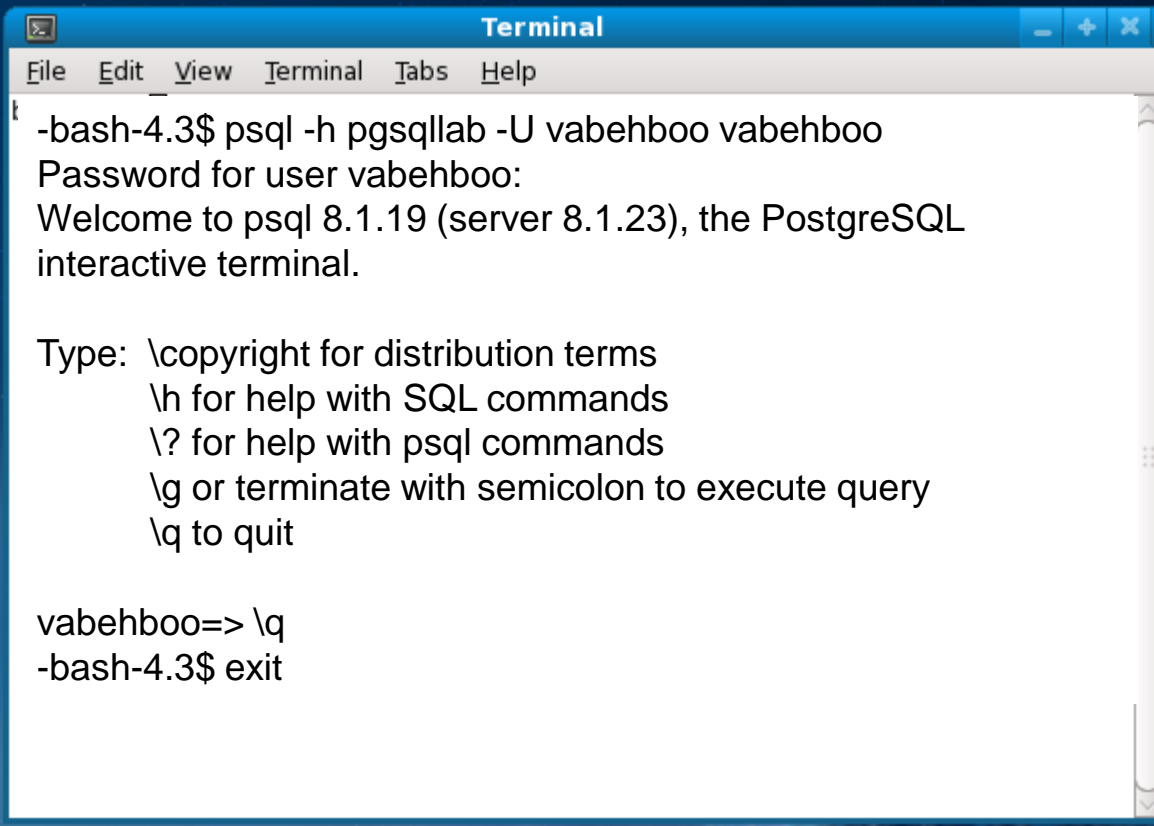
In fact, practice that now, and then restart postgresql.

You should never have to retype the long "psql" command again …

```
                psql -h pgsqllab -U vabehboo vabehboo
```

… instead, use the up arrow key ↑ to scroll back though your history
and just hit enter when you see the long "psql" command.

Exiting the command window


```
Terminal
File  Edit  View  Terminal  Tabs  Help

-bash-4.3$ psql -h pgsqllab -U vabehboo vabehboo
Password for user vabehboo:
Welcome to psql 8.1.19 (server 8.1.23), the PostgreSQL
interactive terminal.

Type:  \copyright for distribution terms
       \h for help with SQL commands
       \? for help with psql commands
       \g or terminate with semicolon to execute query
       \q to quit

vabehboo=> \q
-bash-4.3$ exit
```
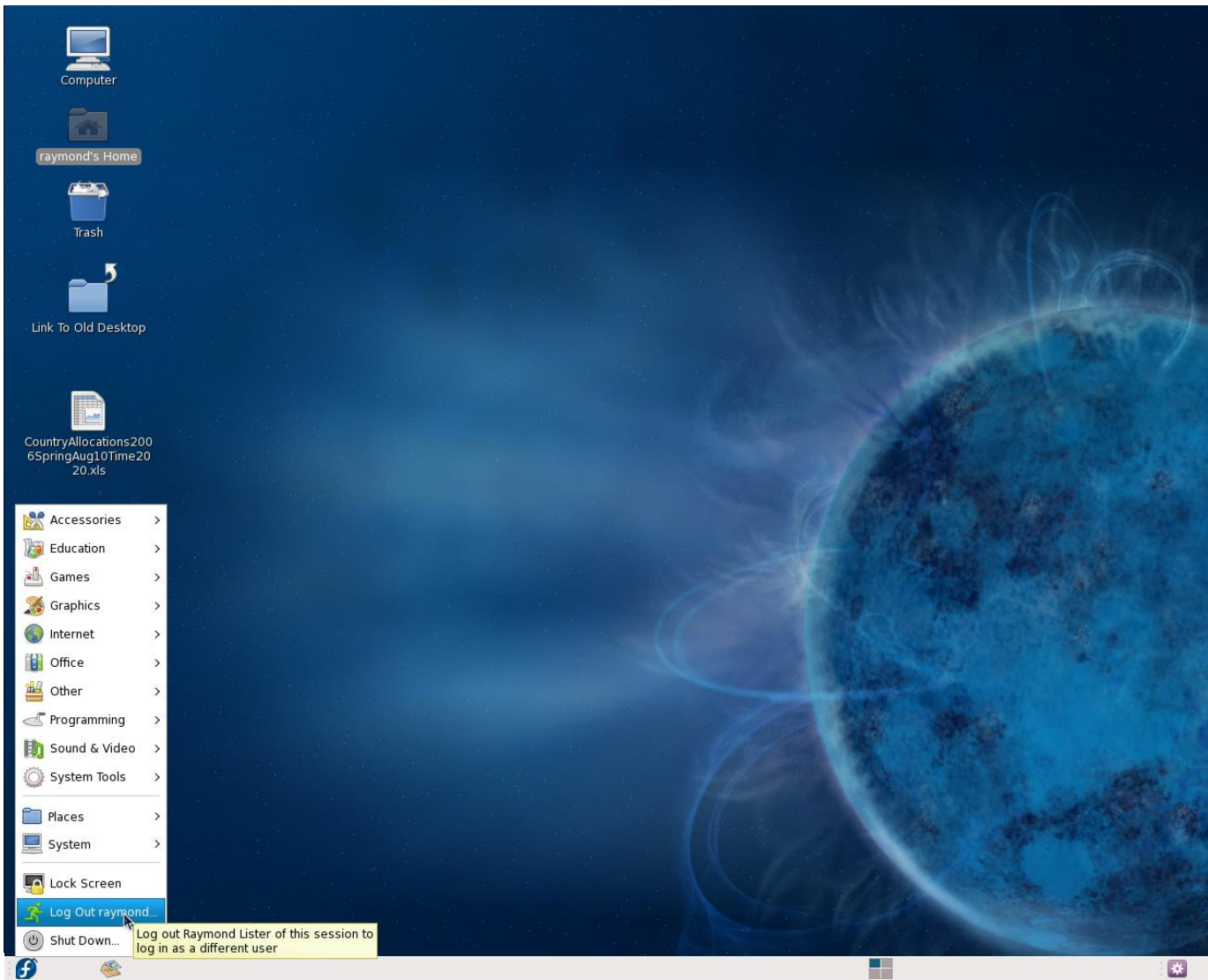
When you finish a session using postgresql, after you have typed \q to exit postgresql, you exit the command window by typing "exit".
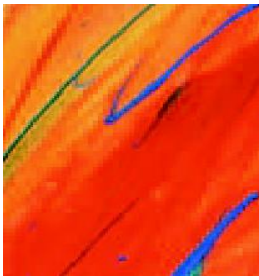
The window will disappear.

Logging out of the machine

And when you are
finished a session
in the lab, logout from
The machine by choos
the "log out" option off
menu.

Computer

raymond's Home

Trash

Link To Old Desktop

CountryAllocations200
6SpringAug10Time20
20.xls

Accessories >
Education >
Games >
Graphics >
Internet >
Office >
Other >
Programming >
Sound & Video >
System Tools >

Places >
System >

Lock Screen
Log Out raymond...
Shut Down...

Log out Raymond Lister of this session to
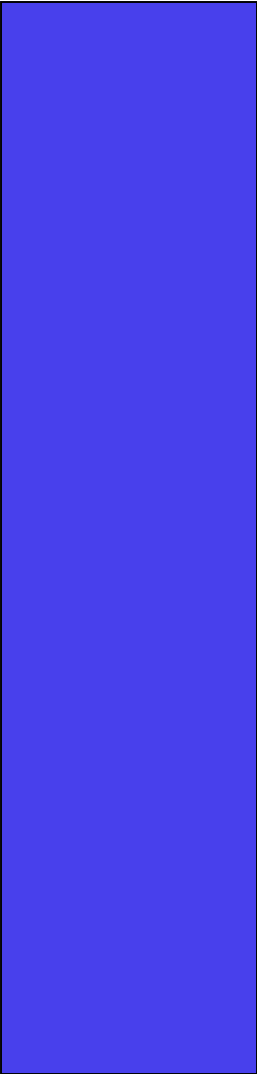log in as a different user

26

Change PostgreSQL Password

Change PostgreSQL Password

After login to PostgreSQL with your current username and password, use the following command to change your password:

ALTER USER "your_user_name" WITH PASSWORD 'new_password';