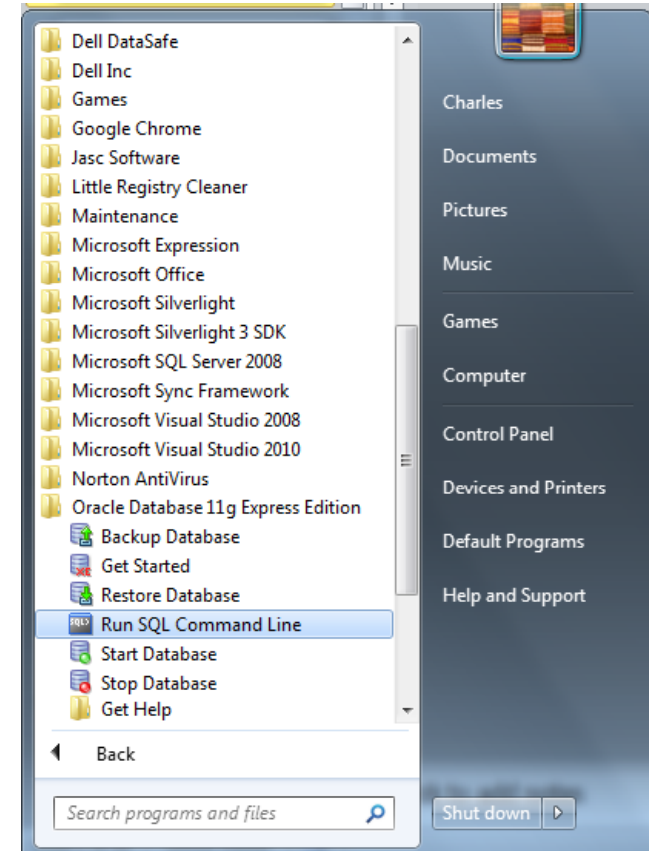


# Input Data into a Table with SQL

October 29, 2012

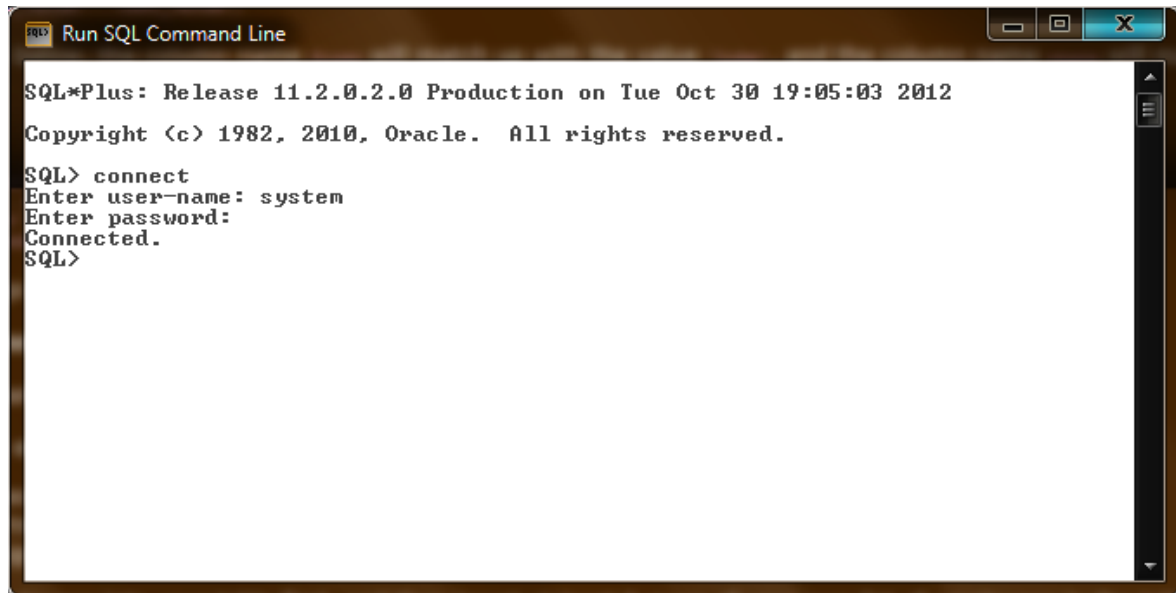
# Run SQL Command Line

We will begin this lesson with adding data into our address book table. On the Start menu, select Programs, then Oracle Database Express Edition and Run SQL Command Line.



# Connect to Oracle

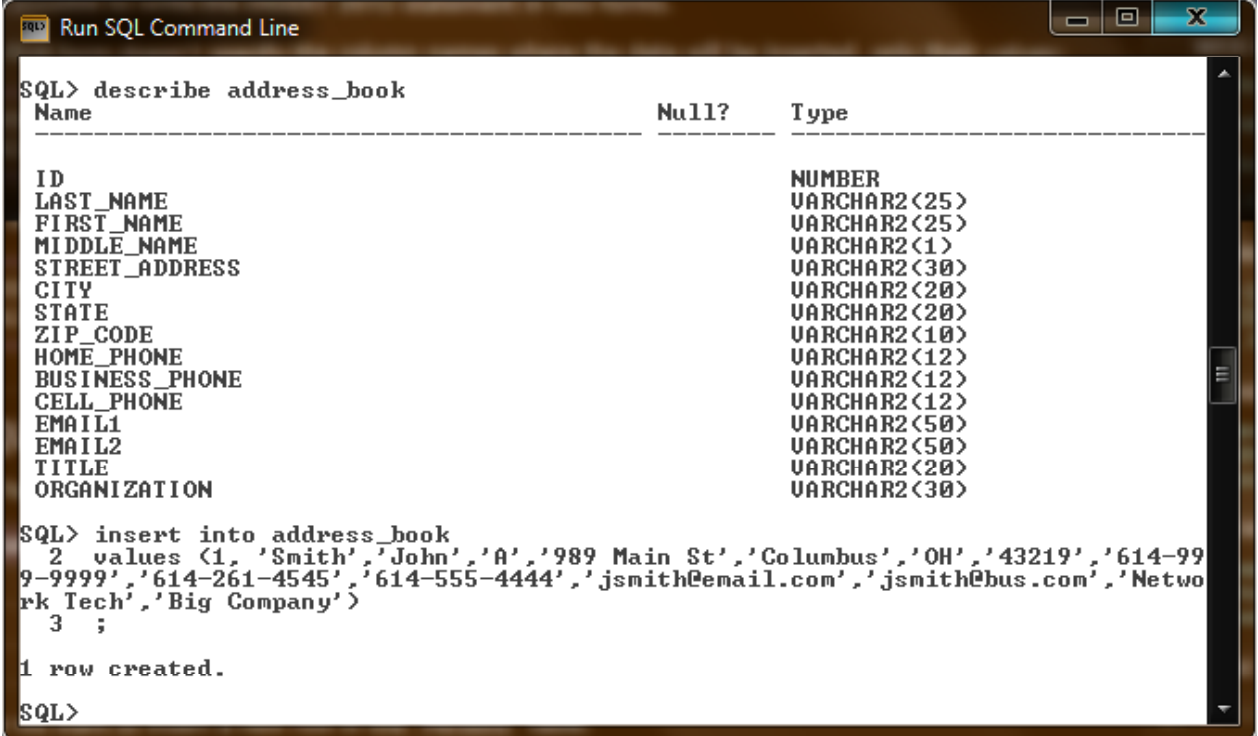
To connect to Oracle, we type connect when the Run SQL Command Line window appears. For the username, we input “system”. For our password, we use the same one we entered when we installed the Oracle Database Express on our computer.

A screenshot of a Windows-style window titled "Run SQL Command Line". The window contains a text area with the following text: "SQL\*Plus: Release 11.2.0.2.0 Production on Tue Oct 30 19:05:03 2012", "Copyright (c) 1982, 2010, Oracle. All rights reserved.", "SQL> connect", "Enter user-name: system", "Enter password:", "Connected.", and "SQL>". The window has a standard Windows title bar with minimize, maximize, and close buttons.

```
SQL*Plus: Release 11.2.0.2.0 Production on Tue Oct 30 19:05:03 2012
Copyright (c) 1982, 2010, Oracle. All rights reserved.
SQL> connect
Enter user-name: system
Enter password:
Connected.
SQL>
```

# Adding a Record to a Table

We will use the Insert function to add a record to the address\_book. We use the values function to describe the data. We will make the field ID a 1. We use commas to separate fields. We will place the text string inside single quotes such as 'Smith' for the last name.



```
Run SQL Command Line
SQL> describe address_book
Name                                     Null?   Type
-----
ID                                         NUMBER
LAST_NAME                                VARCHAR2(25)
FIRST_NAME                                VARCHAR2(25)
MIDDLE_NAME                               VARCHAR2(1)
STREET_ADDRESS                            VARCHAR2(30)
CITY                                       VARCHAR2(20)
STATE                                      VARCHAR2(20)
ZIP_CODE                                   VARCHAR2(10)
HOME_PHONE                                 VARCHAR2(12)
BUSINESS_PHONE                             VARCHAR2(12)
CELL_PHONE                                 VARCHAR2(12)
EMAIL1                                     VARCHAR2(50)
EMAIL2                                     VARCHAR2(50)
TITLE                                      VARCHAR2(20)
ORGANIZATION                              VARCHAR2(30)

SQL> insert into address_book
2 values (1, 'Smith', 'John', 'A', '989 Main St', 'Columbus', 'OH', '43219', '614-99
9-9999', '614-261-4545', '614-555-4444', 'jsmith@email.com', 'jsmith@bus.com', 'Netwo
rk Tech', 'Big Company')
3 ;

1 row created.
SQL>
```

We type insert into address\_book values (1, 'Smith', 'John', 'A', '989 Main St', 'Columbus', 'OH', '43219', '614-999-9999', '614-261-4545', '614-555-4444', 'jsmith@email.com', 'jsmith@bus.com', 'Network Tech', 'Big Company'); One row is created.

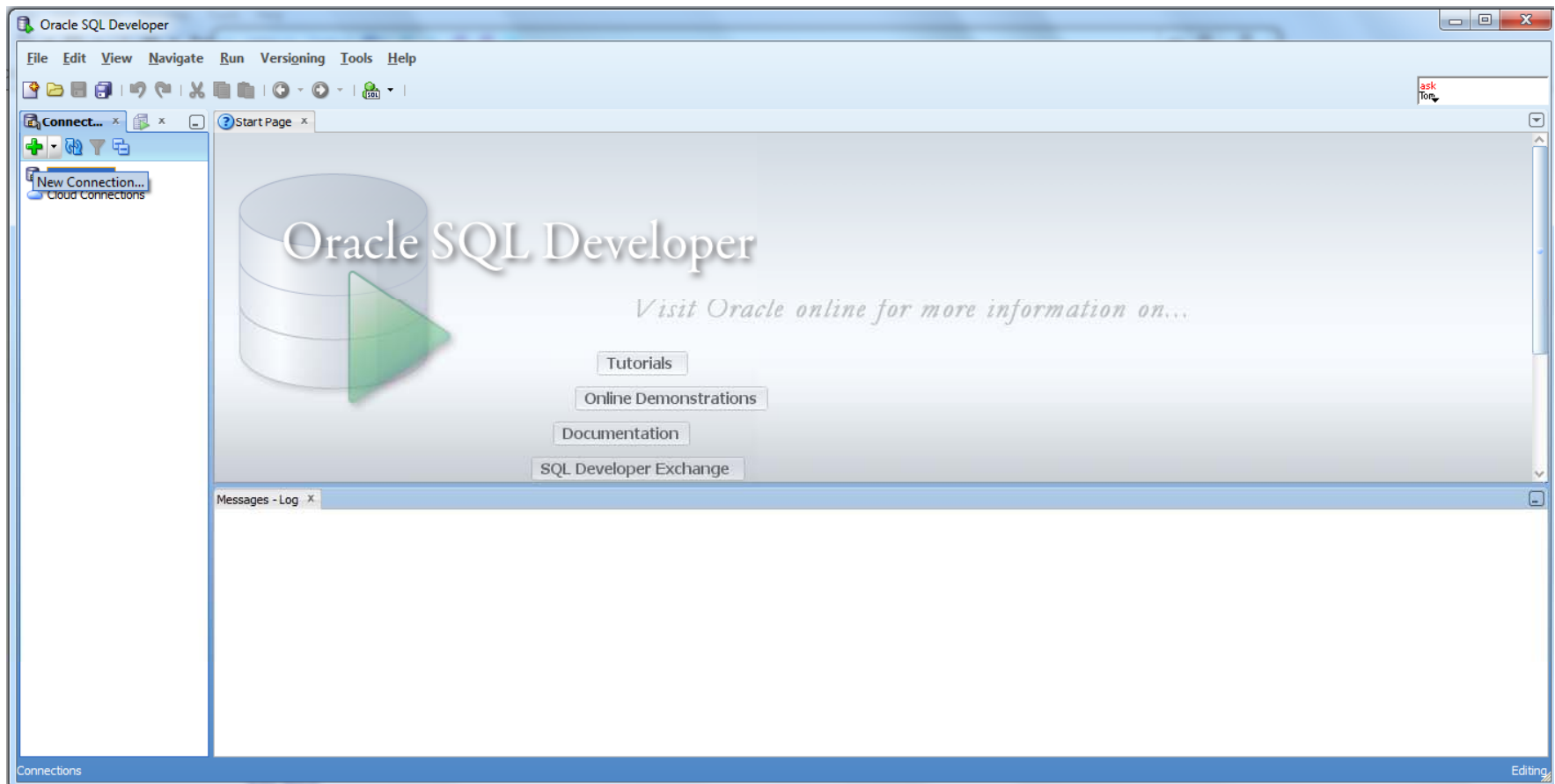
# Input More Records

| ID | LAST_... | FIRST... | MIDDLE... | STREET_ADD... | CITY        | . | ZIP... | HOME_PHONE   | BUSINESS_P... | CELL_PHONE   | EMAIL1           | EMAIL2         | TITLE        | ORGANIZATI  |
|----|----------|----------|-----------|---------------|-------------|---|--------|--------------|---------------|--------------|------------------|----------------|--------------|-------------|
| 1  | Smith    | John     | A         | 989 Main St   | Columbus OH |   | 43219  | 614-999-9999 | 614-261-4545  | 614-555-4444 | jsmith@email.com | jsmith@bus.com | Network Tech | Big Company |
| 2  | Jones    | Jill     | S         | 1143 Front St | Columbus OH |   | 43220  | 614-888-7777 | 614-554-5656  | 614-466-1111 | bjones@email.com | bjones@bus.com | LAN Mgr      | Big Company |
| 3  | Adams    | Tyrone   | T         | 55 1st St     | Columbus OH |   | 43214  | 614-664-3333 | 614-321-0000  | 614-444-8888 | tadams@email.com | tadams@bus.com | Admin Assist | Big Company |

We will then key in records 2 and 3. We want to keep the fields in order, so we will take our time to enter the data. Then go ahead and exit the SQL Command Line application.

To view the table fully, we will open the SQL Developer application for the first time.

# View the Table in SQL Developer



Open SQL Developer and click on the green plus sign in the left pane to create a new connection.

# New Select Database Connection

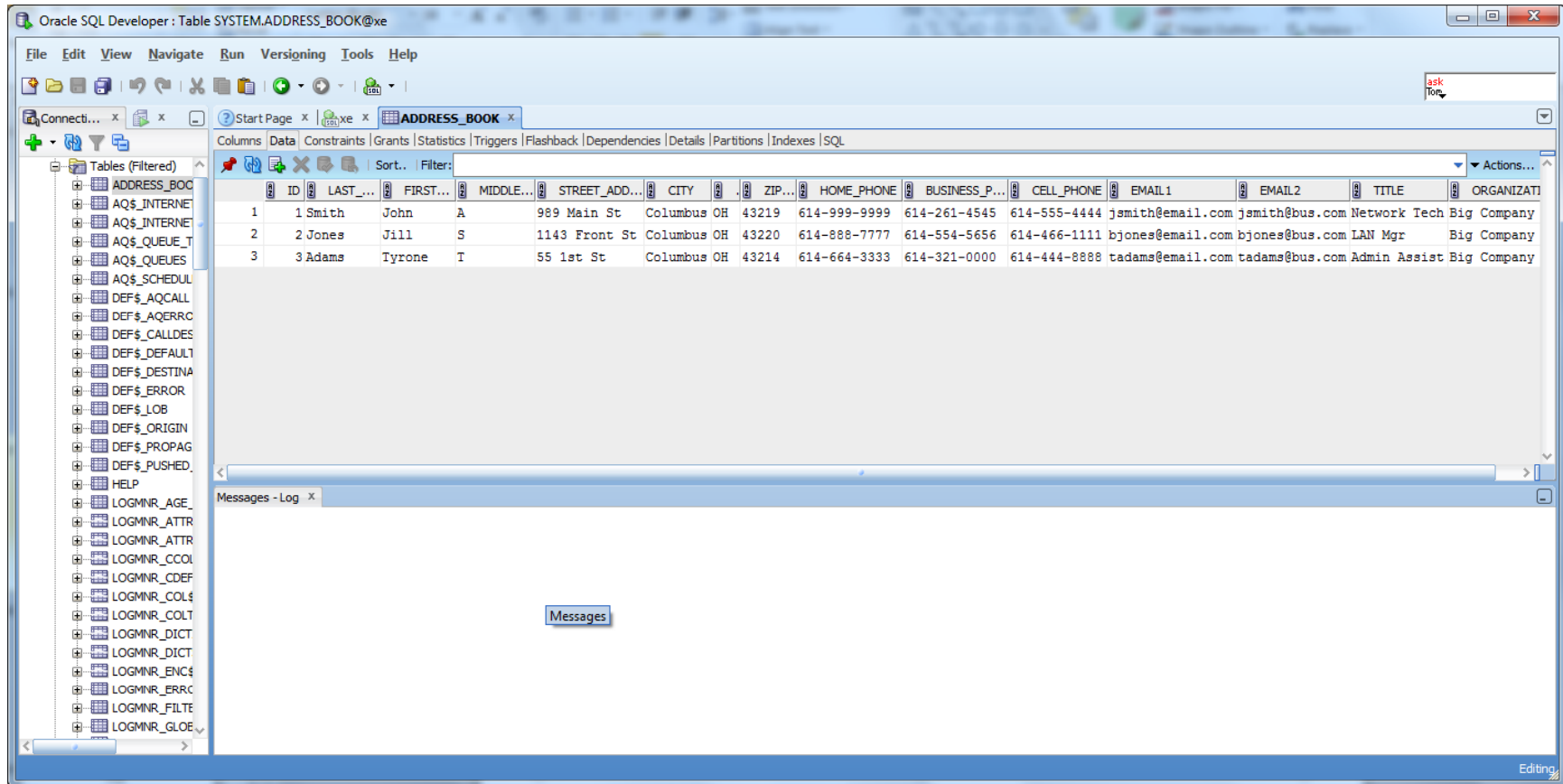
The screenshot shows a dialog box titled "New / Select Database Connection". It has two tabs: "Connection Name" and "Connection Details". The "Connection Details" tab is active. The fields are as follows:

- Connection Name: xe
- Username: system
- Password: masked with dots
- Save Password
- Oracle Access section:
  - Connection Type: Basic (dropdown)
  - Role: default (dropdown)
  - Hostname: localhost
  - Port: 1521
  - SID: xe
  - Service name: (empty)
  - OS Authentication
  - Kerberos Authentication
  - Proxy Connection

At the bottom, there is a "Status:" label and a row of buttons: Help, Save, Clear, Test, Connect, and Cancel. The "Connect" button is highlighted.

We will make the connection name xe, the username system and the password we use the same one we entered when we installed the Oracle Database Express on our computer. We press the connect button.

# Viewing the Records



The screenshot shows the Oracle SQL Developer interface. The left pane displays a tree view of tables, with 'ADDRESS\_BOOK' selected. The main pane shows the 'Data' tab for the 'ADDRESS\_BOOK' table, displaying three records. The columns are: ID, LAST\_NAME, FIRST\_NAME, MIDDLE\_INITIAL, STREET\_ADDRESS, CITY, STATE, ZIP, HOME\_PHONE, BUSINESS\_PHONE, CELL\_PHONE, EMAIL1, EMAIL2, TITLE, and ORGANIZATION.

| ID | LAST... | FIRST... | MIDDLE... | STREET_ADD... | CITY        | ... | ZIP... | HOME_PHONE   | BUSINESS_P... | CELL_PHONE   | EMAIL1           | EMAIL2         | TITLE        | ORGANIZATI  |
|----|---------|----------|-----------|---------------|-------------|-----|--------|--------------|---------------|--------------|------------------|----------------|--------------|-------------|
| 1  | 1 Smith | John     | A         | 989 Main St   | Columbus OH |     | 43219  | 614-999-9999 | 614-261-4545  | 614-555-4444 | jsmith@email.com | jsmith@bus.com | Network Tech | Big Company |
| 2  | 2 Jones | Jill     | S         | 1143 Front St | Columbus OH |     | 43220  | 614-888-7777 | 614-554-5656  | 614-466-1111 | bjones@email.com | bjones@bus.com | LAN Mgr      | Big Company |
| 3  | 3 Adams | Tyrone   | T         | 55 1st St     | Columbus OH |     | 43214  | 614-664-3333 | 614-321-0000  | 614-444-8888 | tadams@email.com | tadams@bus.com | Admin Assist | Big Company |

Expand table in the left pane and click on address\_book. Click on the data tab. The three records we created with the SQL Command Line are in the address\_book table.