# Institute of Technology Tralee

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## Database Concepts
## Lab 06 – Oracle SQL Developer

In this lab you will learn about:

- Oracle SQL Developer

## Before You Start:

During this lab, you will work the Oracle database **DVDSYS** which you created in your last session.

Quickly logon to SQL*Plus and check that the tables defined in the DVDSYS schema exist in your tablespace. If not, execute the script **DVDSYS.sql** to crete them.

## What is Oracle SQL Developer?

Oracle SQL Developer is a **free** graphical tool for database development. With SQL Developer, you can:
- Browse database objects (tables, queries, views, etc)
- Run SQL statements and SQL scripts
- Edit and debug PL/SQL statements (advanced database programming)

Below is a summary of the capabilities of SQL Developer. We will use those highlighted in red.

1.  Create Connections
2.  Browse Objects
3.  Create Objects
4.  Modify Objects
5.  Query and Update Data
6.  Export Data and DDL and Import Data
7.  Schema Copy and Compare
8.  Process Commands
9.  Edit PL/SQL
10. Run and Debug PL/SQL
11. Run and Create Reports
12. PL/SQL Unit Testing
13. Data Modeler Viewer
14. Migrate from Third Party Databases
15. Version Files
16. Review the Robust IDE

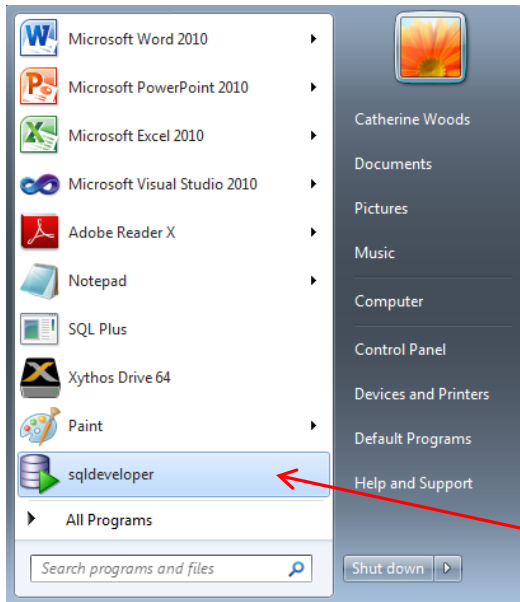For more information on SQL Developer, visit:

http://www.oracle.com/technetwork/developer-tools/sql-developer/what-is-sqldev-093866.html

Oracle provide an on-line tutorial which can be found at:
http://st-curriculum.oracle.com/tutorial/SQLDeveloper/index.htm

## Connecting to a Database

Open Sqldeveloper.
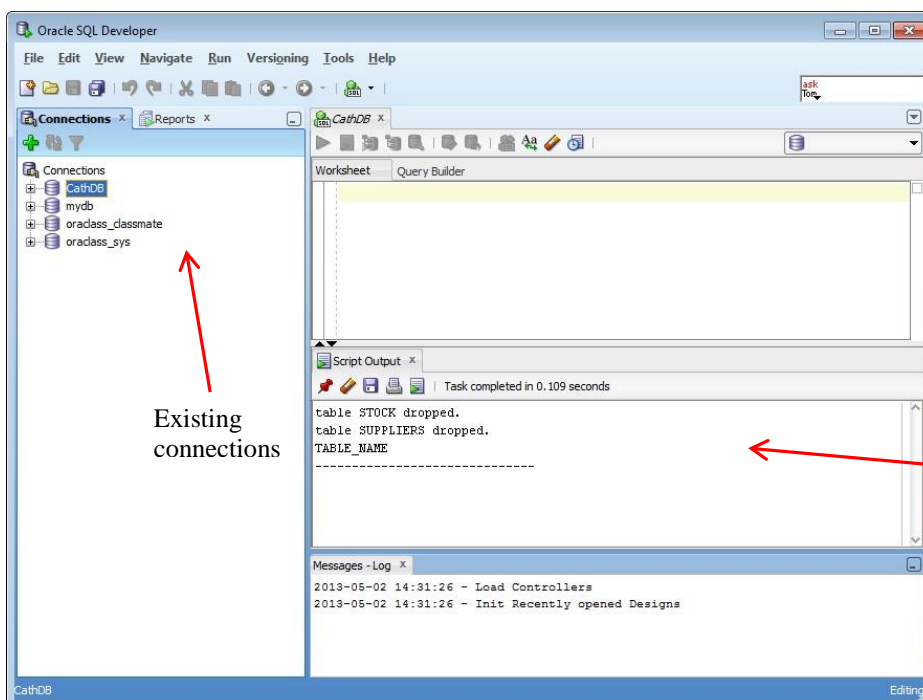


Temporary installation!

Select START → All Programs →Oracle →
pg → sqldeveloper
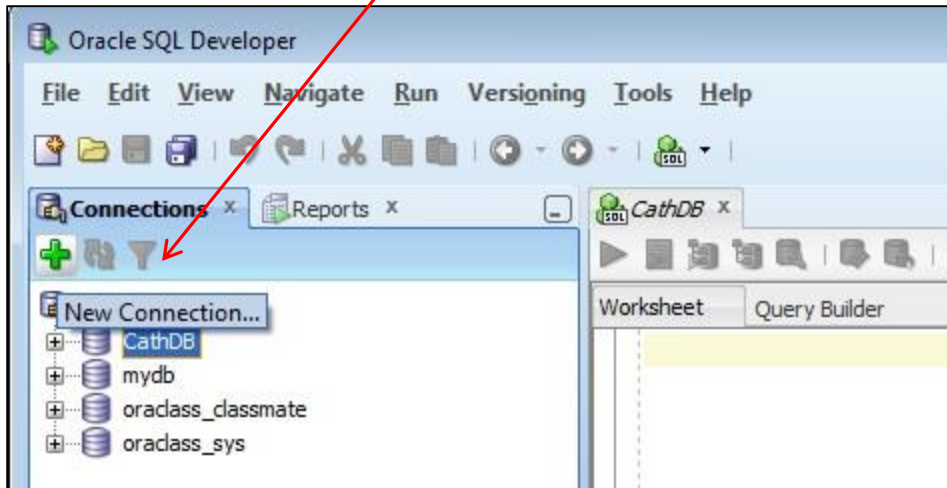
Start → Click

The following screen is displayed:



Editor window for
specifying queries

Existing
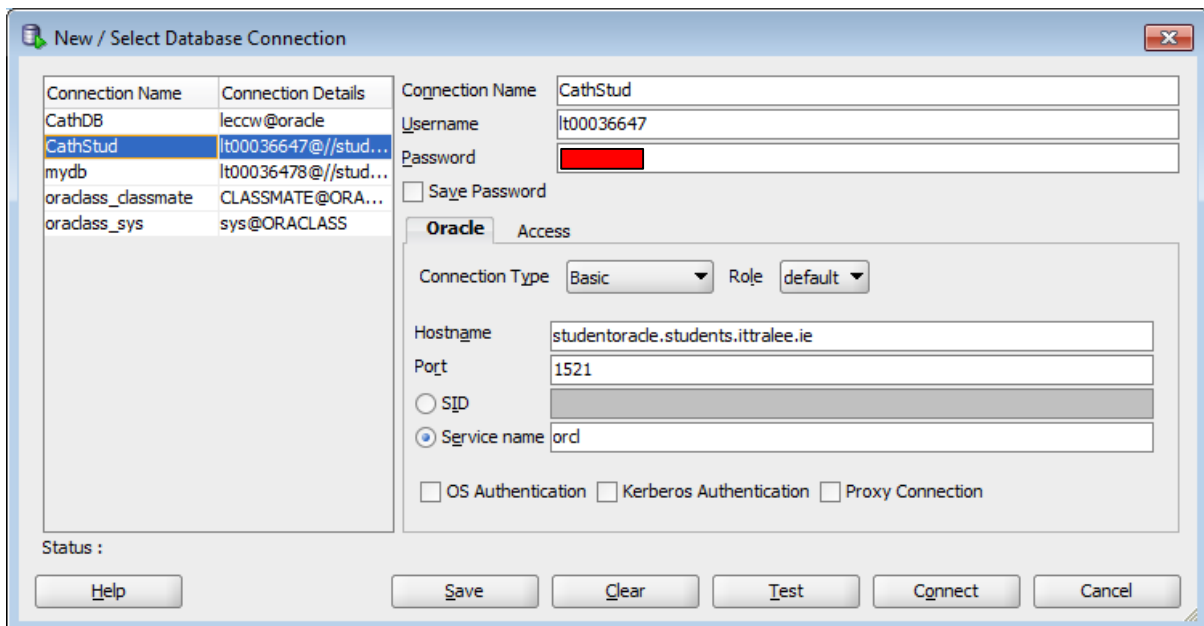connections

Result of query/script
execution

Create a new connection

Click on the 'add connection' icon.



Next, enter your username, password, Hostname and Service name as shown below:

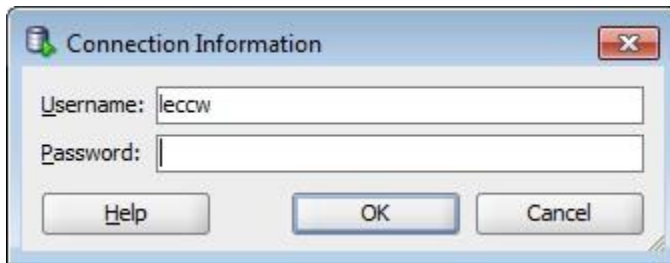The hostname is: **studentoracle.students.ittralee.ie**



Click 'Test' to see if the connection can be made.

If the test is successful, click 'Connect'.
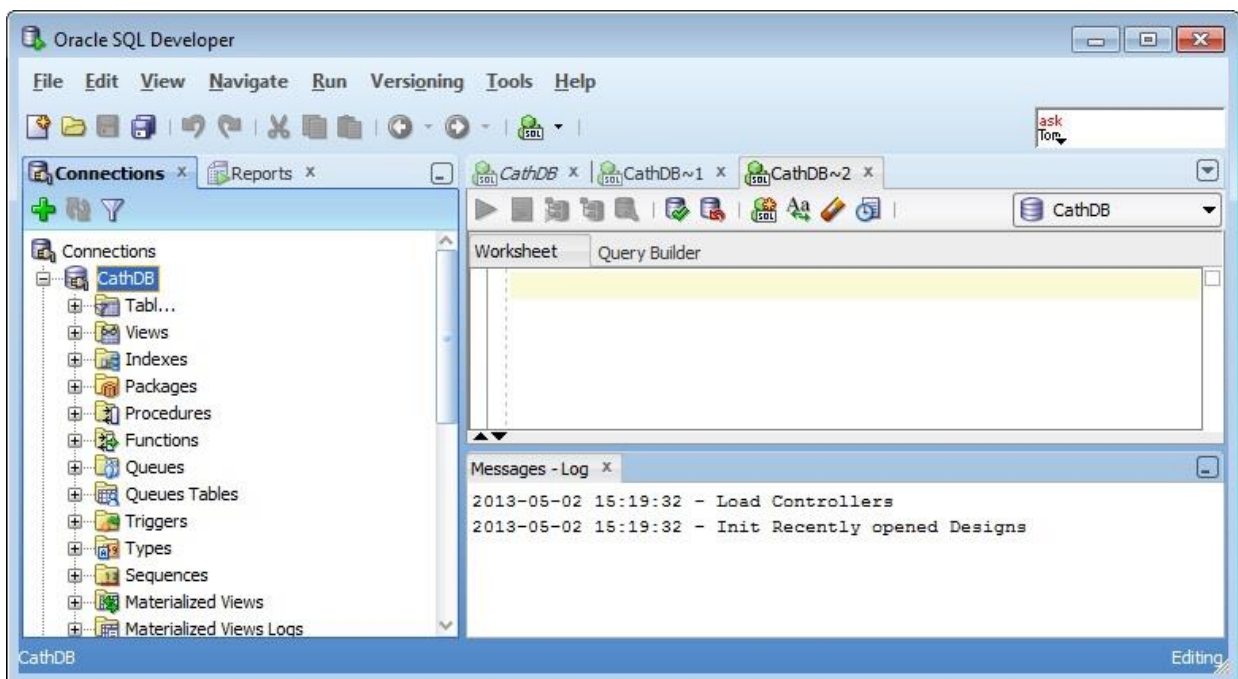
## Open an existing connection

Double click on the connection you wish to open.

The following is displayed:



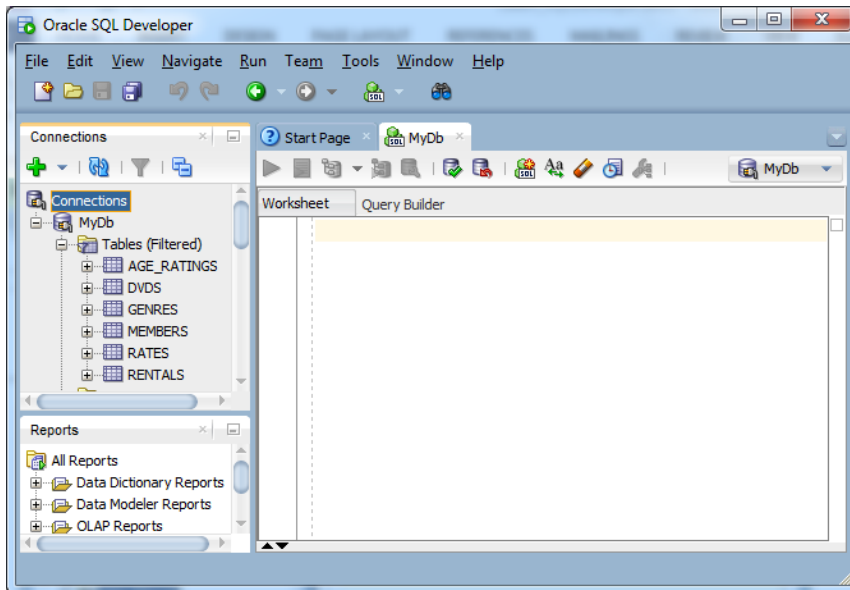Enter the password you entered when you created the connection.

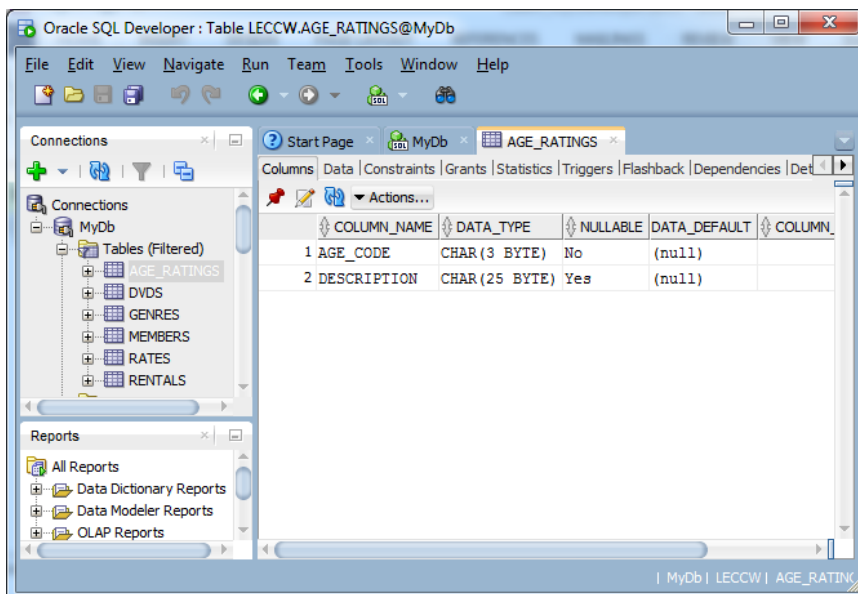If successful, the following screen is presented:

## Browse Objects

Expand the *Tables* tab
You will see a list of tables which exist in your tablespace.



Expand the Age_Ratings table and notice that the window on the right hand side (RHS) changes:



Select the *Columns*, *Data*, *Constraints* tabs and see the information presented.

## The Worksheet

Execute queries or scripts and see the results and messages instantaneously.
Enter some simple queries and execute to see the results.