Introduction to SQL Developer v4.1.5

SQL Developer is a visual tool used to access and manage an Oracle database.

This document assumes that you have access to the UMUC AWS DaaS lab platform and that you understand basic Microsoft Windows functionality. This document also assumes that you've successfully connected to the Oracle server.

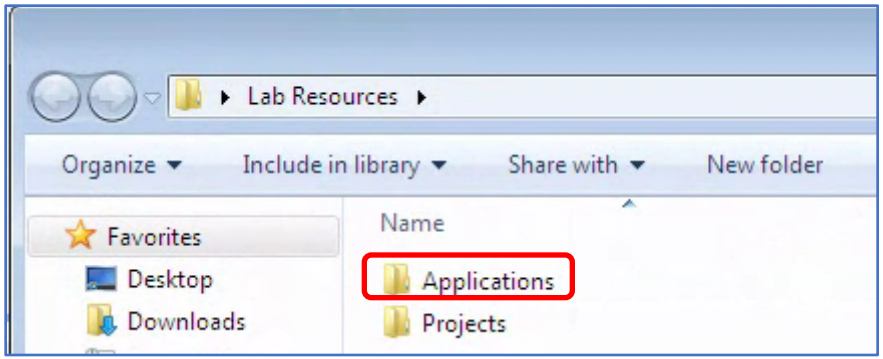
Read the documentation carefully then follow the steps shown in this tutorial to create a sample database which you will turn in to verify that you're able to access and use basic SQL Developer functionality. Use the course "Discussion" area to pose any questions you have on using SQL Developer.

Access SQL Developer

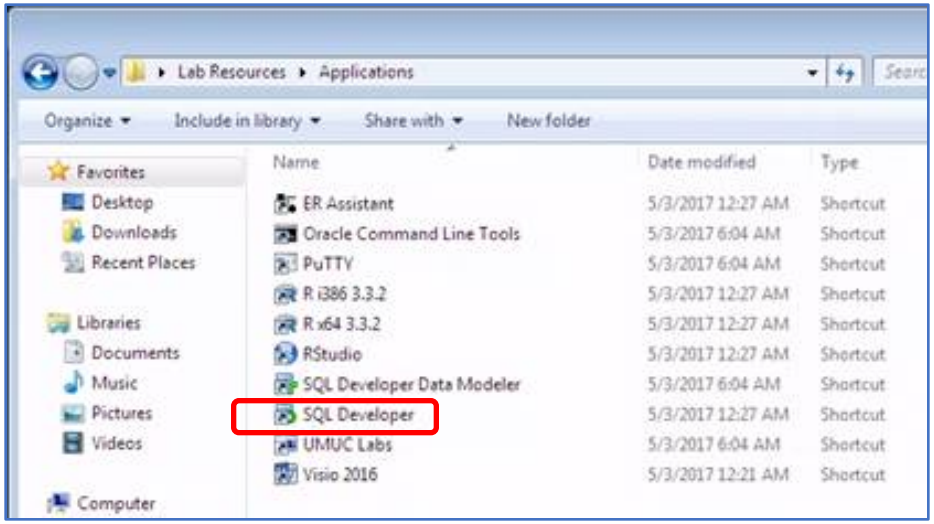
In the UMUC AWS DaaS environment, you can launch SQL Developer from the **Lab Resources** -> **Applications** folders.

1. Double click on **Lab Resources**

2. Double click on **Applications**

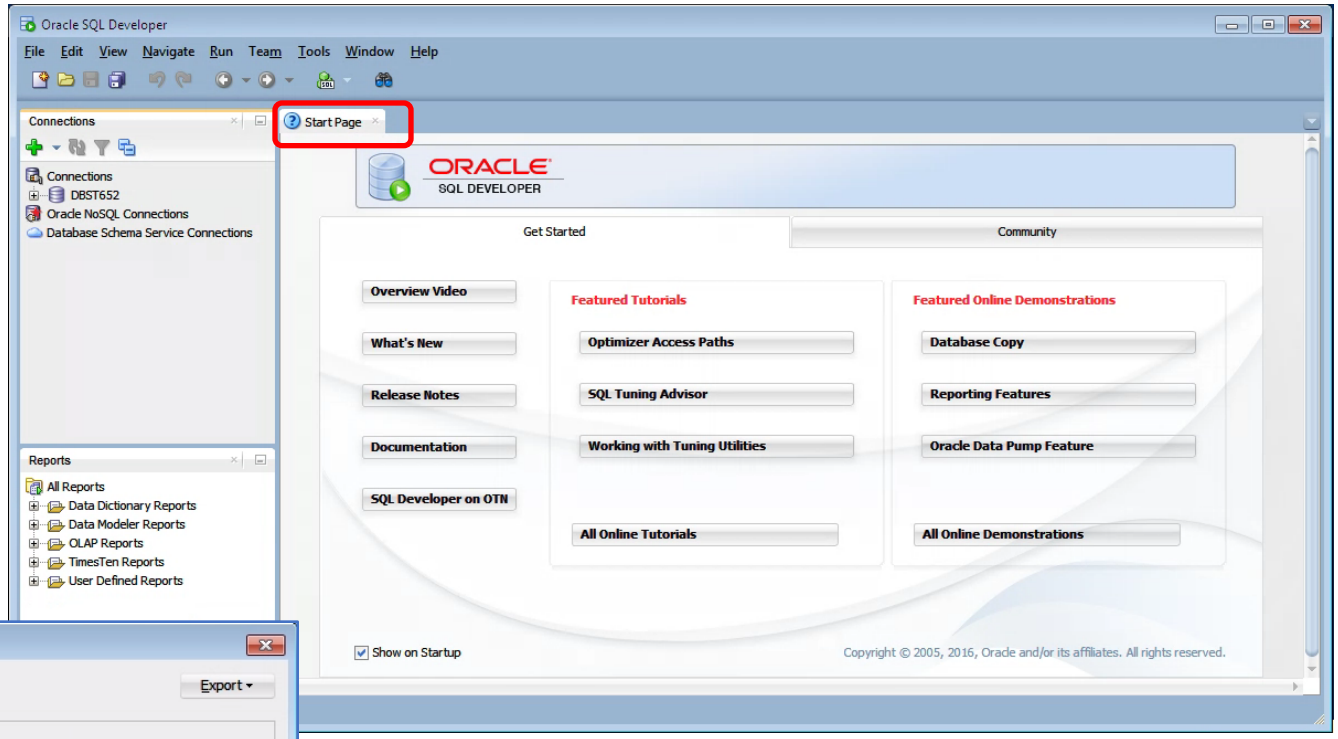


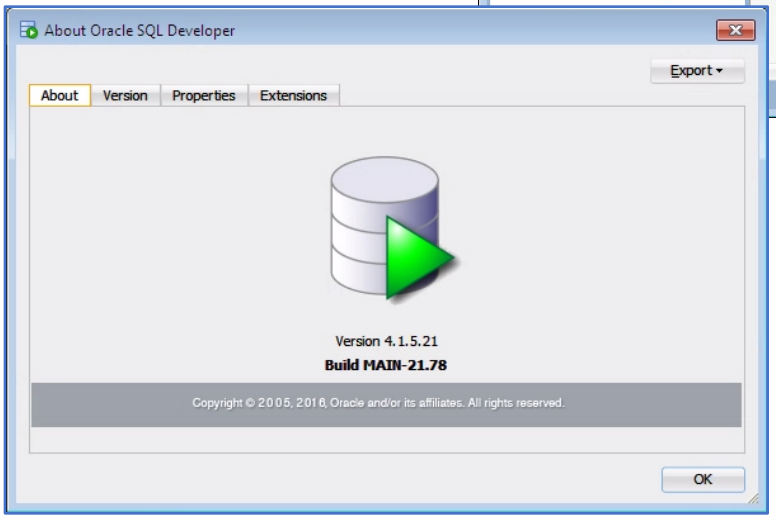
3. Double click on **SQL Developer**



Access SQL Developer - Continued

The **SQL Developer – Start Page** will be displayed. The **Start Page** contains reference links to documentation provided by Oracle.

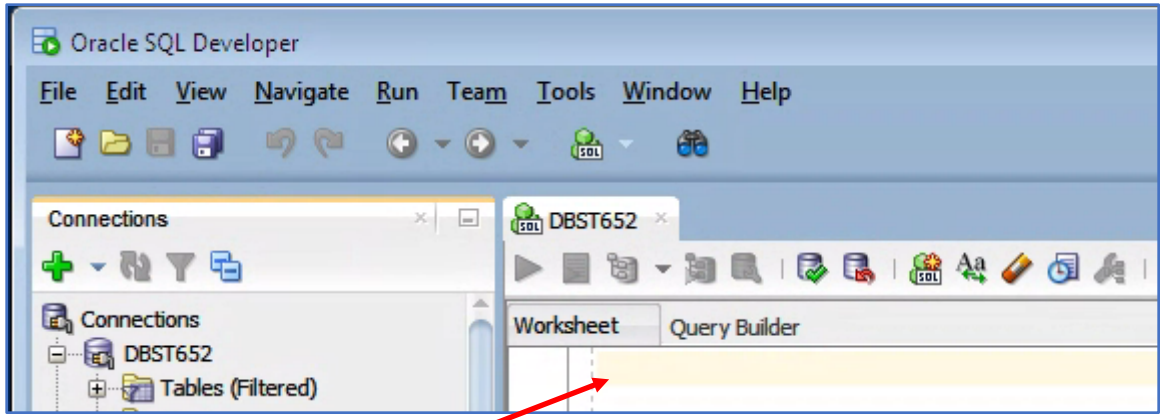




4. Click on **Help -> About** to see the version of SQL Developer you're working with. You should see "Version 4.1.5"

SQL Developer GUI Tool

5. Connect to UMUC Oracle using the connection you created for your class. You should see a corresponding workspace tab open up. (DBST652 shown in this example)



6. The **Worksheet** pane or sub-tab is where you can type SQL commands directly into or copy/paste them from another script file you have on your AWS workstation.

NOTE that you cannot copy/paste between your personal device and AWS

Create Table Using Manual Entry of SQL Commands

7. Copy/paste or type the following script into the **Worksheet**

```
set echo on;

drop table testme;
create table testme (
MyNumber number (2,1) primary key
, MyDate date
, MyChar char(3)
, MyVarChar2 varchar2(5));

insert into testme
  values (2.1, to_date('1/Feb/2013','dd/mon/yyyy'), 'ABC', 'uvxyz');
insert into testme
  values (3.5, to_date('31/Aug/2004','dd/mon/yyyy'), 'XYZ', 'abcd');

describe testme;

select table_name from tabs;

select object_name, object_type, created, status
  from user_objects
  where object_name='TESTME';

select constraint_name, table_name, constraint_type
     from user_constraints
     where table_name='TESTME';

select COUNT(*) from testme;
```

Turns on a command "echoing " function so you capture the command along with the output

Deletes the table "testme", if it exists.

Creates the table "testme"

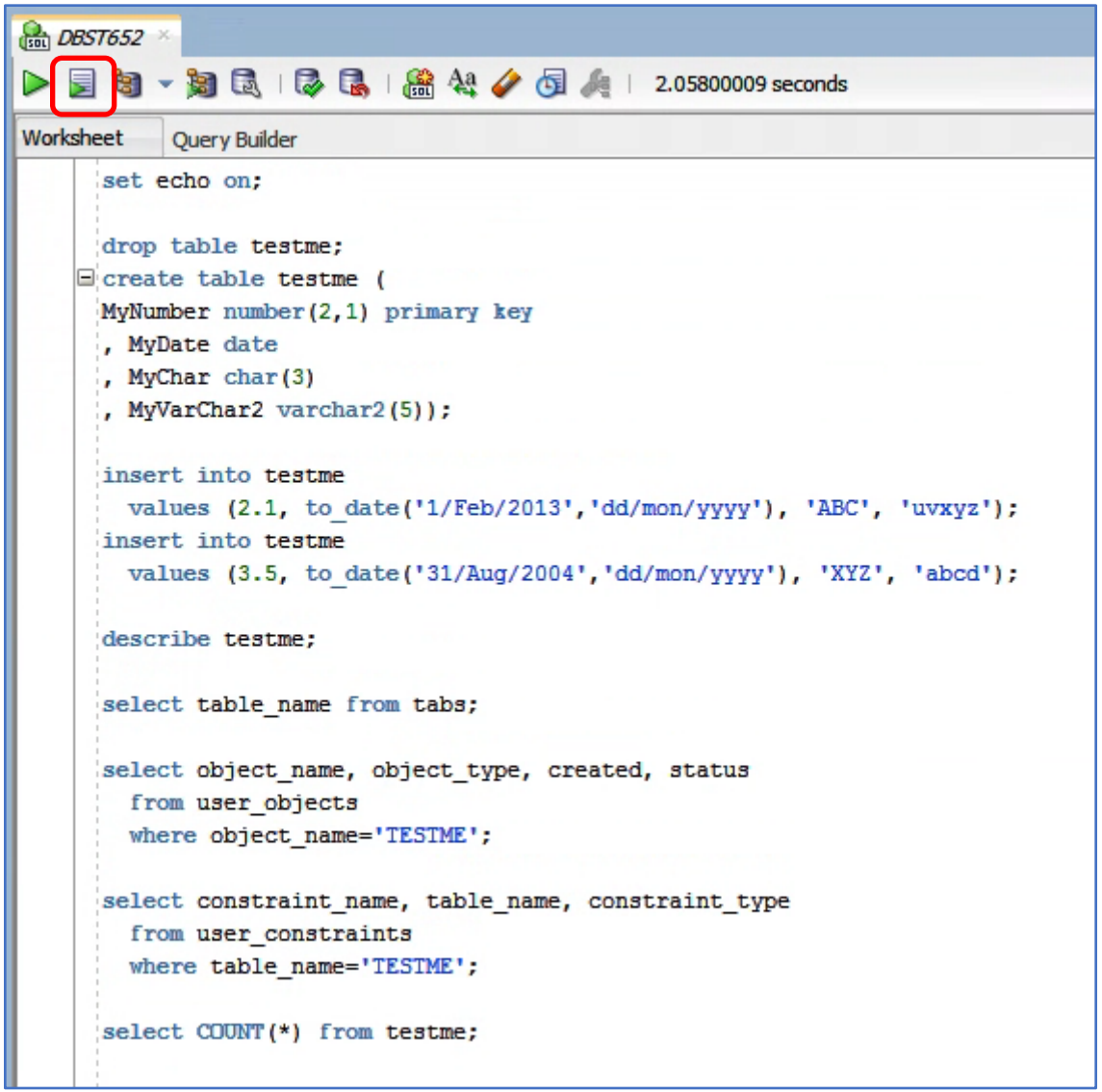
Puts data into the table

Displays information about the table

Create Table Using Manual Entry of SQL Commands - Continued

8. Click the **Run Script** icon (2nd from the left)

Note that the first button on the left is a "run command" button if you just want to run a single command instead of an entire script in the **Worksheet** pane



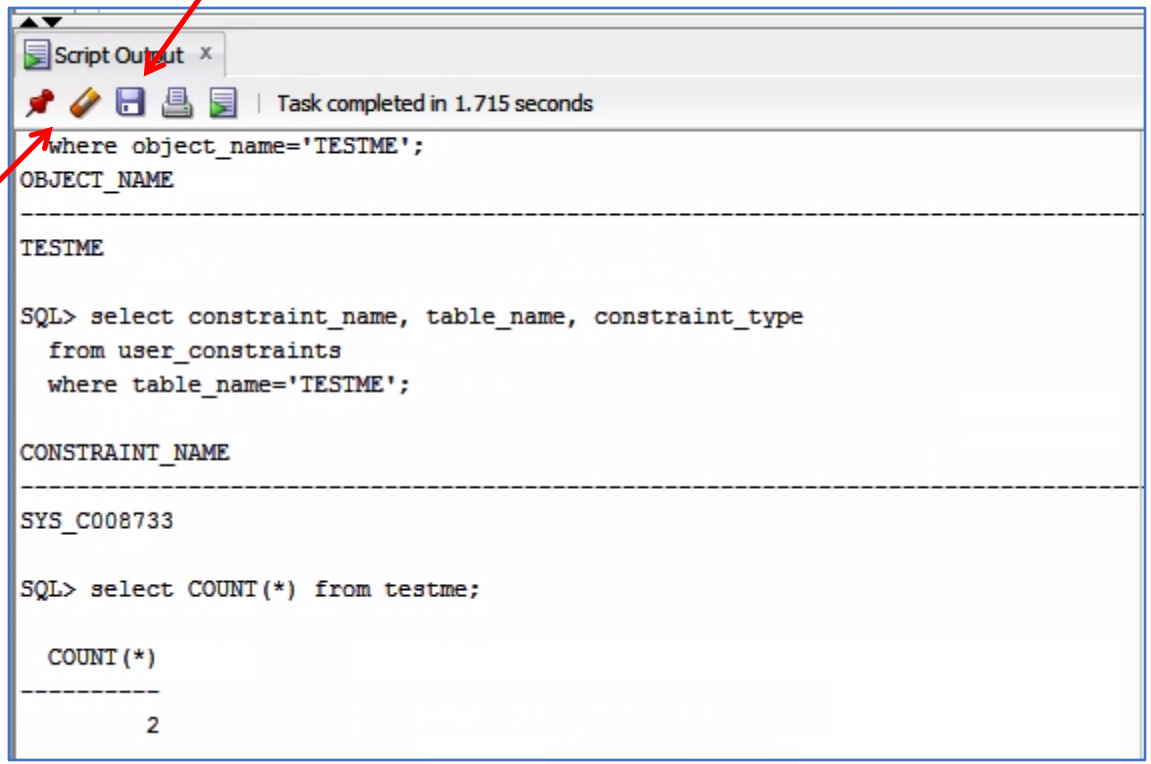
Create Table Using Manual Entry of SQL Commands - Continued

The script output appears in the **Script Output** pane at the bottom. You can scroll up to view the output.

The "Save" icon will allow you to save the current contents of the **Script Output** pane to a text file

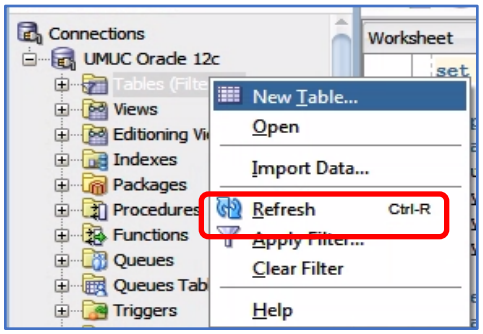
NOTE that if you choose to save the output to a text file, it will be on your AWS workstation drive and not on your personal device drive. Email yourself the file if you need a copy on your personal device.

The "Eraser" icon clears the screen in the **Script Output** pane.



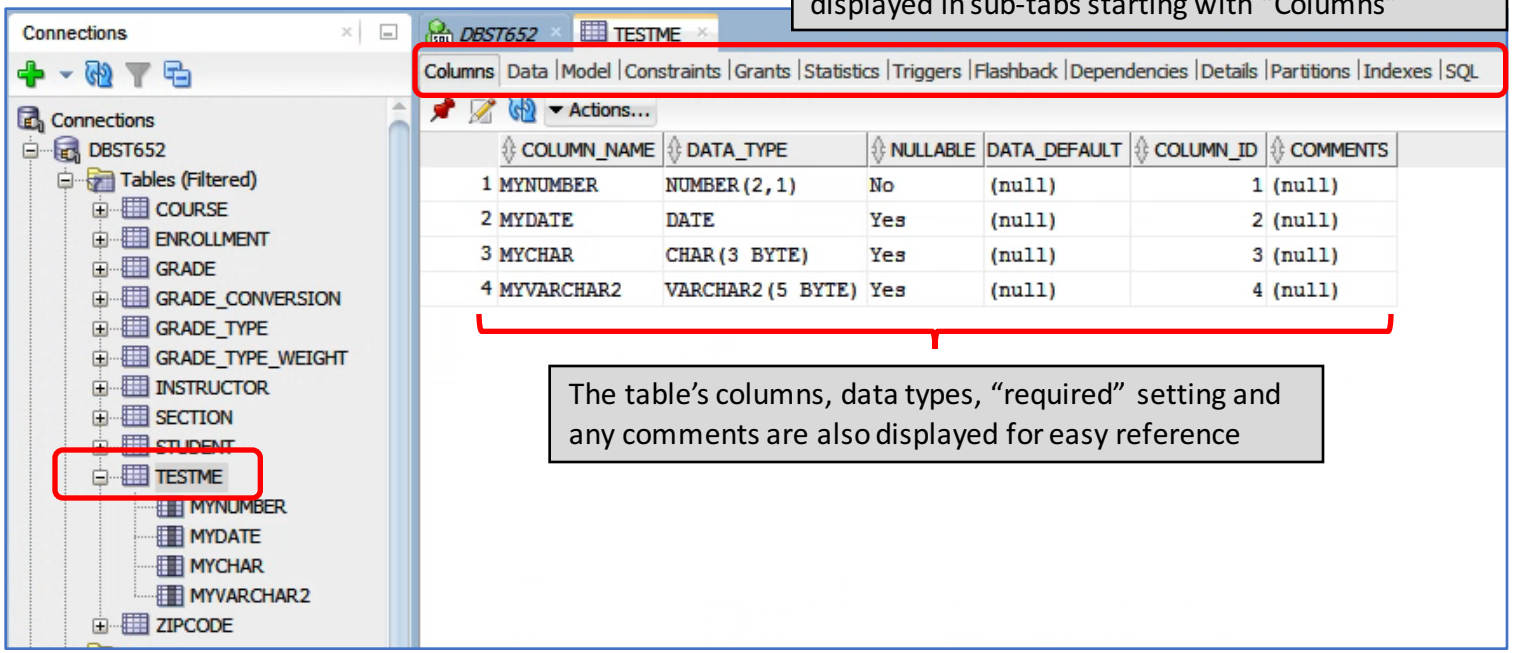
Review the Table Information in SQL Developer

9. Right click on **Tables** then click on **Refresh**



10. Scroll down the **Tables** list until you get to "TESTME". Double click it to show the table data

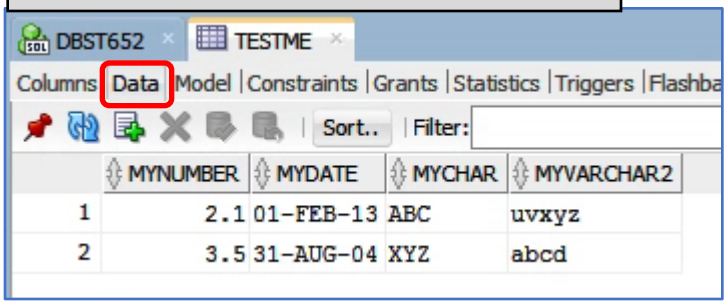
Various information about the "TESTME" table are displayed in sub-tabs starting with "Columns"



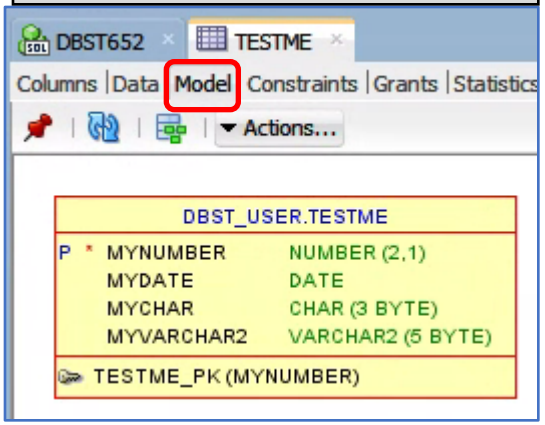
The table's columns, data types, "required" setting and any comments are also displayed for easy reference

Review the Table Information in SQL Developer - Continued

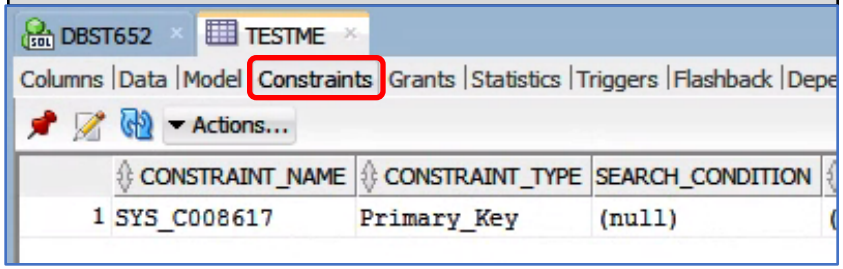
Data: displays any data that you've entered



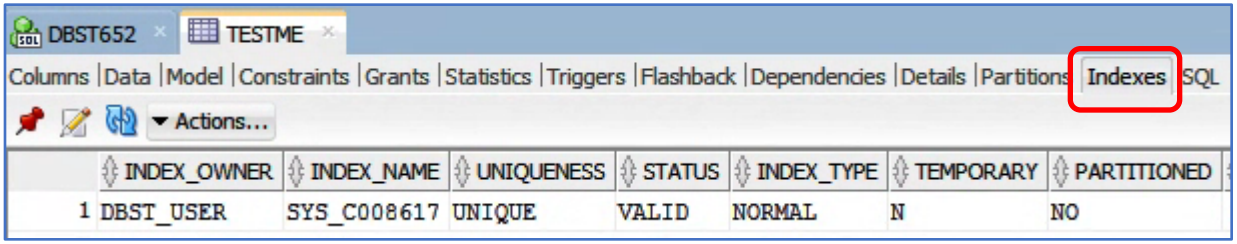
Model: shows the table information in ERD format



Constraints: shows any constraints that are part of this table (example has a "primary key" for field "MYNUMBER")



Indexes: shows if there are any indexes on this table (example has an index by default for the "primary key" we created in the TESTME table)

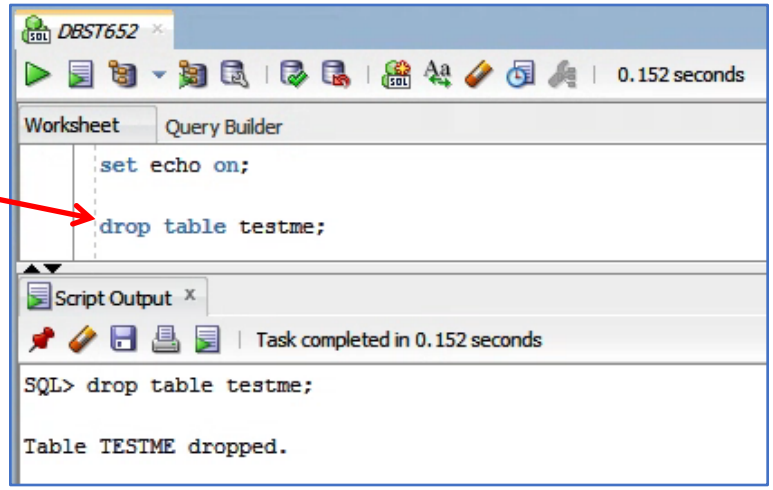


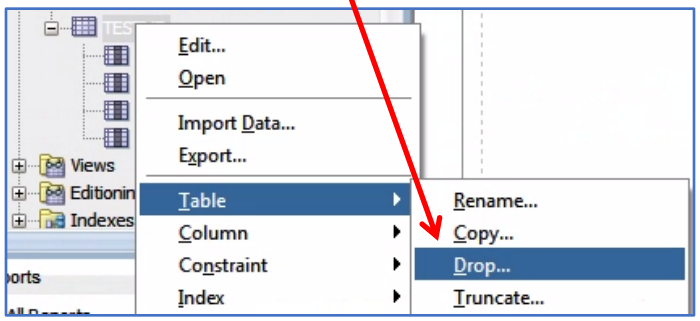
Drop or Remove a Table

There are two ways to "drop" or remove a table from your database.

1. You can run a "drop table" command.

2. You can right click on the table name, click on **Table** and click on **Drop**

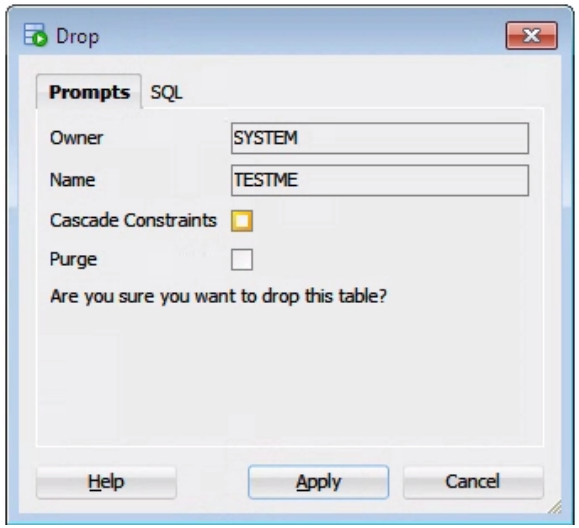




The table details will come up. Decide whether you need to click "Cascade Constraints" or not.

Click **Apply** when done

Go back to your **Tables** list and refresh the list. Your table should now be gone



Click **OK** in the "Confirmation" box