



Eastern Mediterranean University

Computer Engineering Department

“ CMPE 354-Database Management Systems Course”

Oracle Database Tutorial, Lab 1

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Date: September 28, 2012

Oracle Database Tutorial

This tutorial was developed using Oracle 10g and SQL Developer 1.5.5.

In This tutorial we will discuss:

- 1- **Oracle Client Installation.**
- 2- **Create a Database Connection.**
- 3- **Working in Sql developer environment.**

- **Oracle Client Installation.**

- 1- Connect to the ftp by using **start→Run (as follows)**

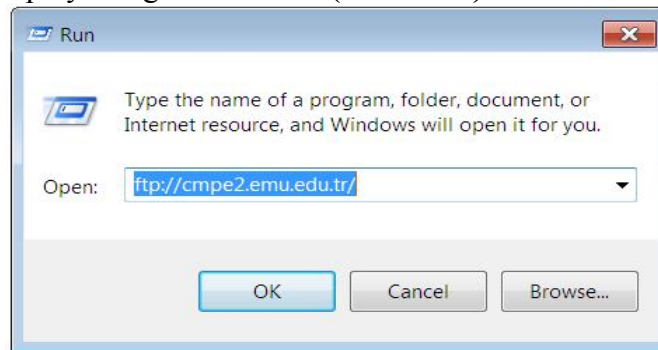


Figure 1

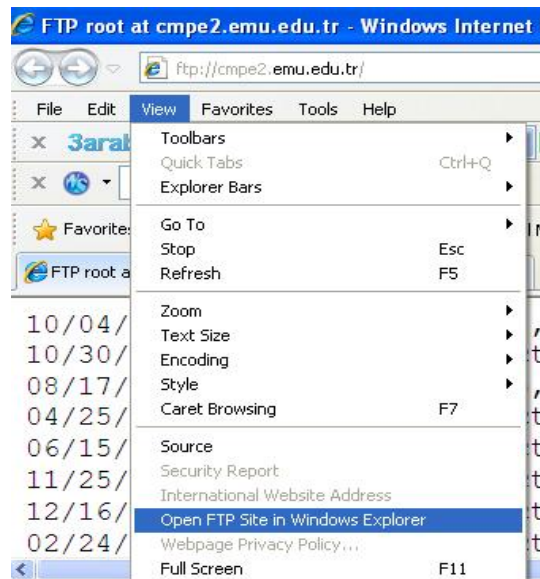


Figure 2

1. Copy the folder ORACLE CLIENT to you computer (Fig. 3)



Figure 3

2. Extract the .rar file

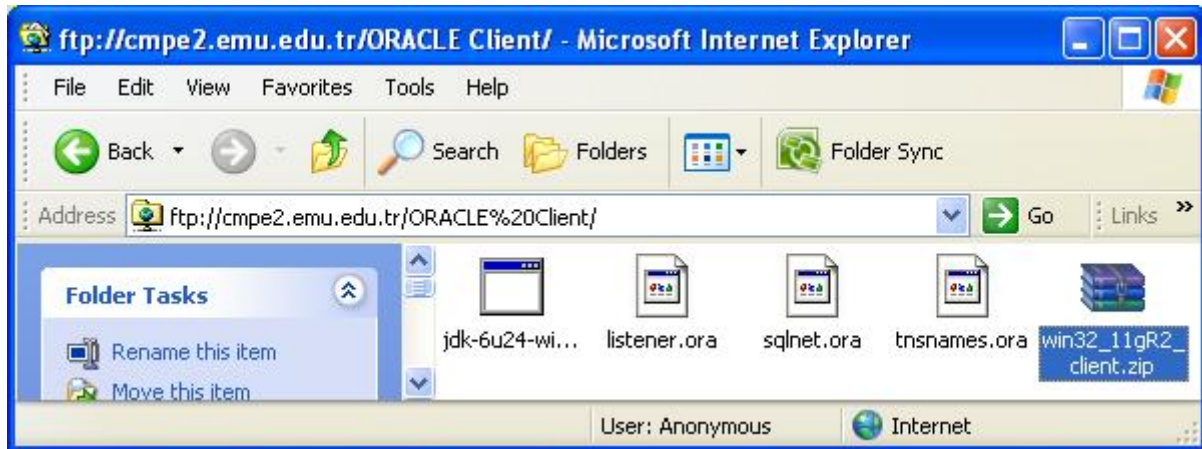


Figure 4

3. Run the setup file (Fig. 5)

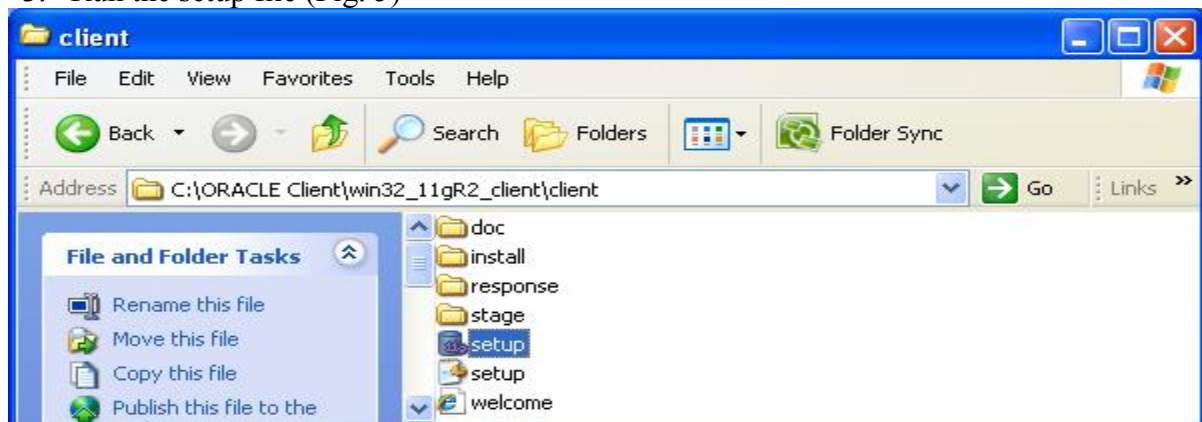


Figure 5

4. Update your Java by using the “jdk-6u24-windows-i586” Fig. 6

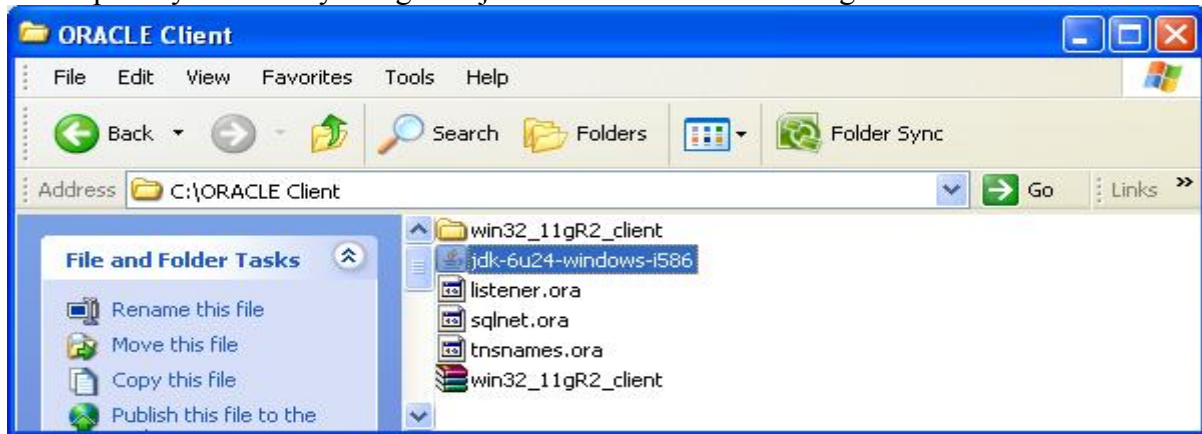


Figure 6

5. Select and copy the three files as shown in (Fig.7)

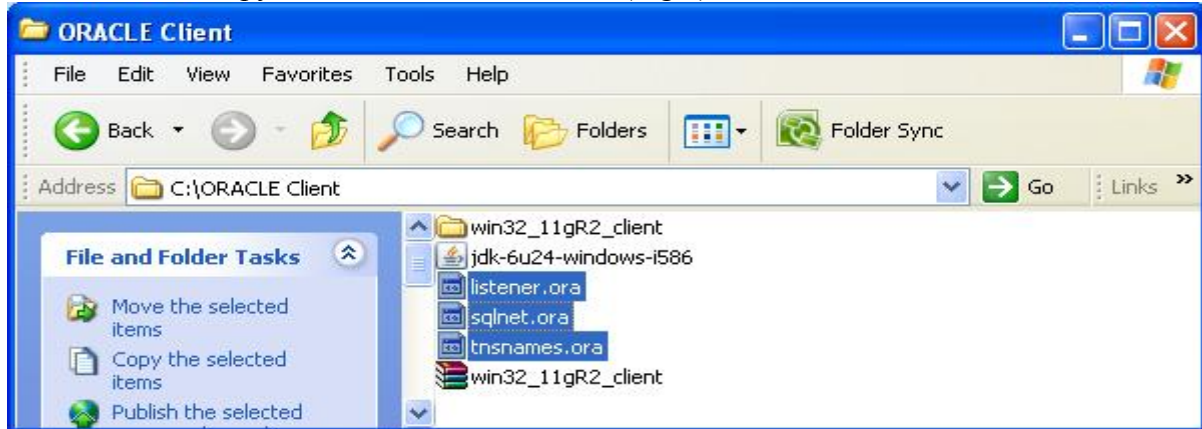


Figure 7

6. Paste the files into the following admin directory in the location
“D:\app\Dima\product\11.2.0\client_1\network\admin”
This path might be different from computer to computer.

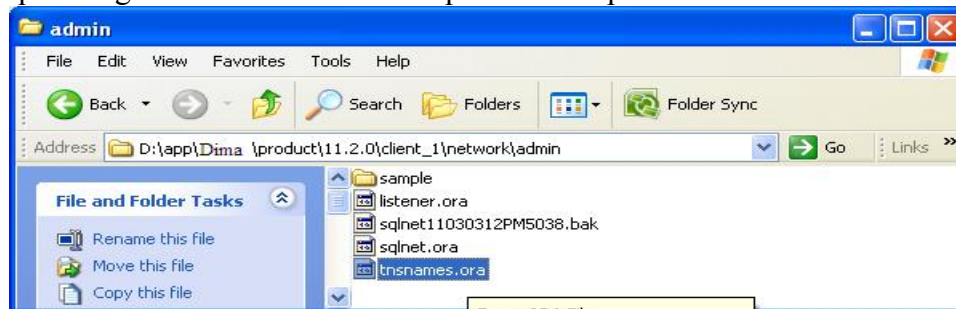
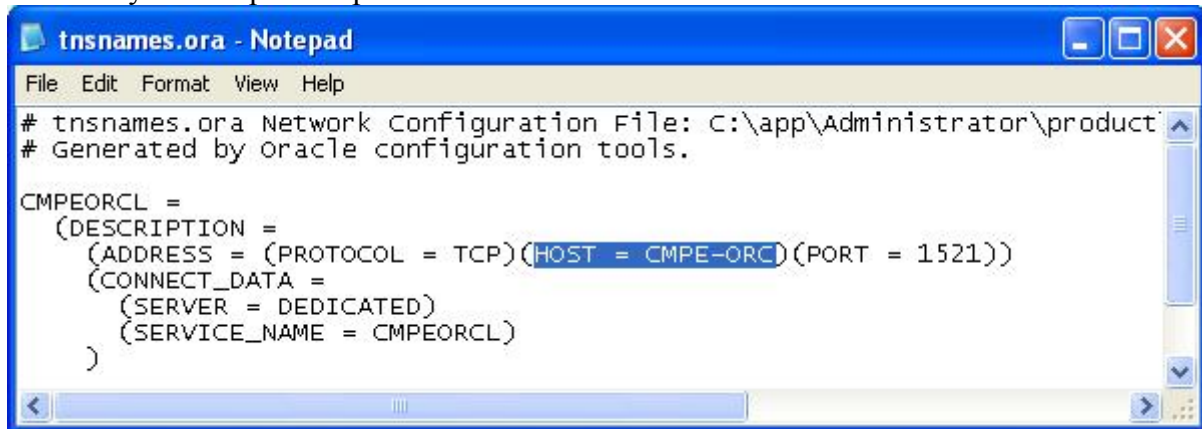


Figure 8

7. Use your notepad to open the file "tnsnames.ora"

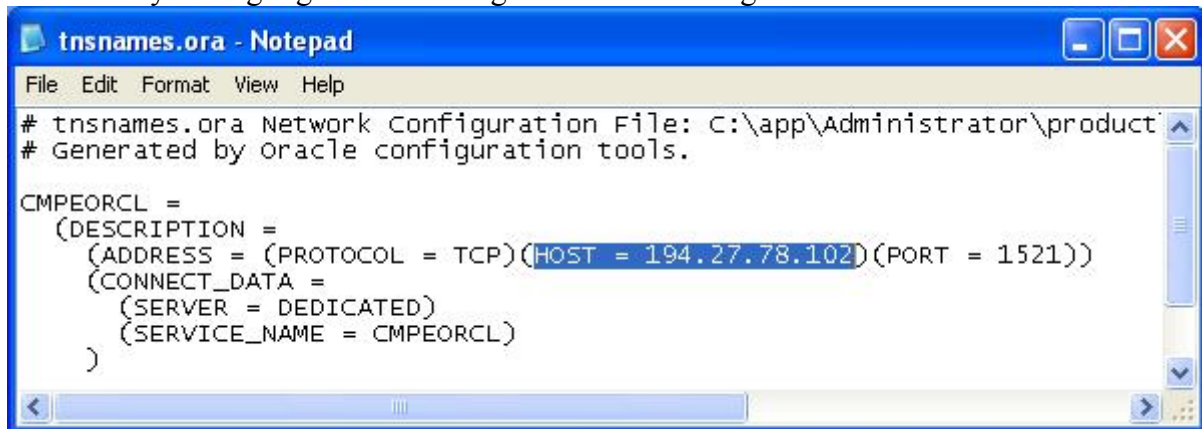


```
tnsnames.ora - Notepad
File Edit Format View Help
# tnsnames.ora Network Configuration File: C:\app\Administrator\product
# Generated by oracle configuration tools.

CMPEORCL =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP)(HOST = CMPE-ORC)(PORT = 1521))
    (CONNECT_DATA =
      (SERVER = DEDICATED)
      (SERVICE_NAME = CMPEORCL)
    )
  )
```

Figure 9

8. Modify the highlighted line in Fig. 9 to the one in Fig. 10 and save it.



```
tnsnames.ora - Notepad
File Edit Format View Help
# tnsnames.ora Network Configuration File: C:\app\Administrator\product
# Generated by oracle configuration tools.

CMPEORCL =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP)(HOST = 194.27.78.102)(PORT = 1521))
    (CONNECT_DATA =
      (SERVER = DEDICATED)
      (SERVICE_NAME = CMPEORCL)
    )
  )
```

Figure 10

Now you are ready to use your oracle client.

- **Create a Database Connection in sql Developer.**

1- From start→programs→Oracle-OraClient1→Application Development→SQL Developer



Figure 11

Your screen must be as follows

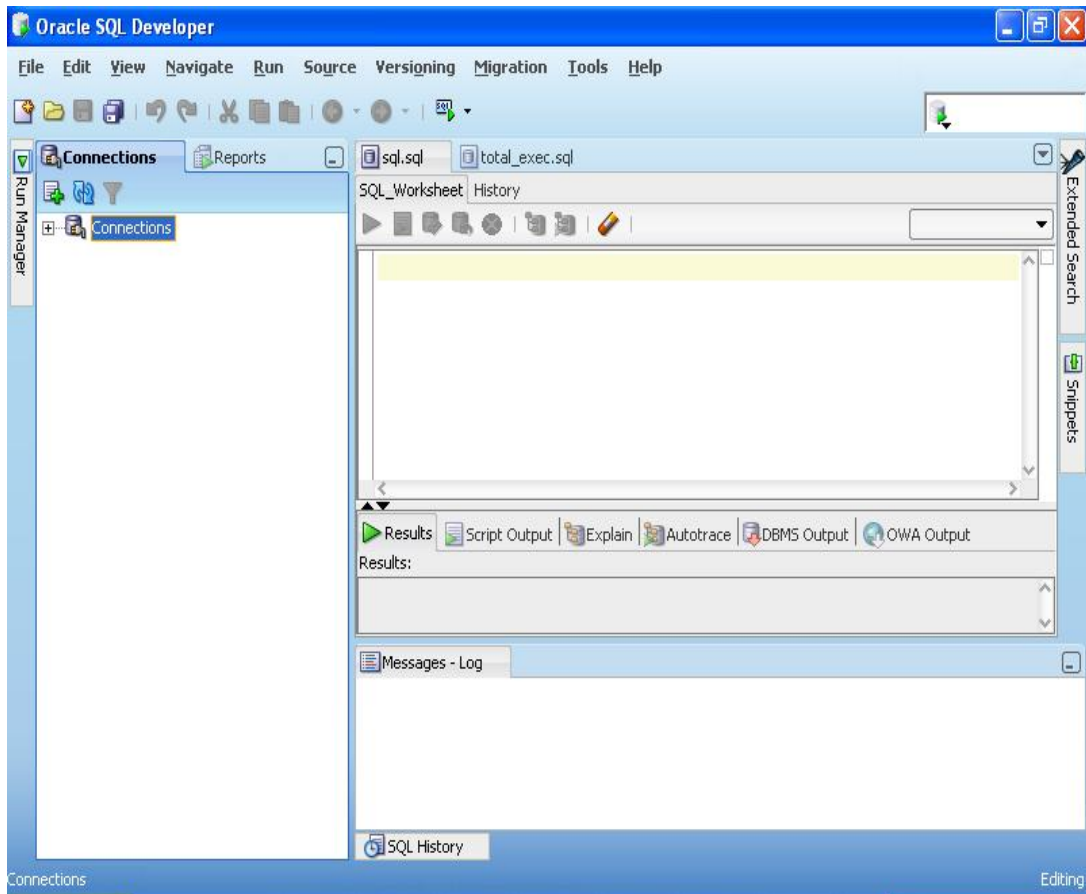


Figure 1

2- Click on the connection, new connection

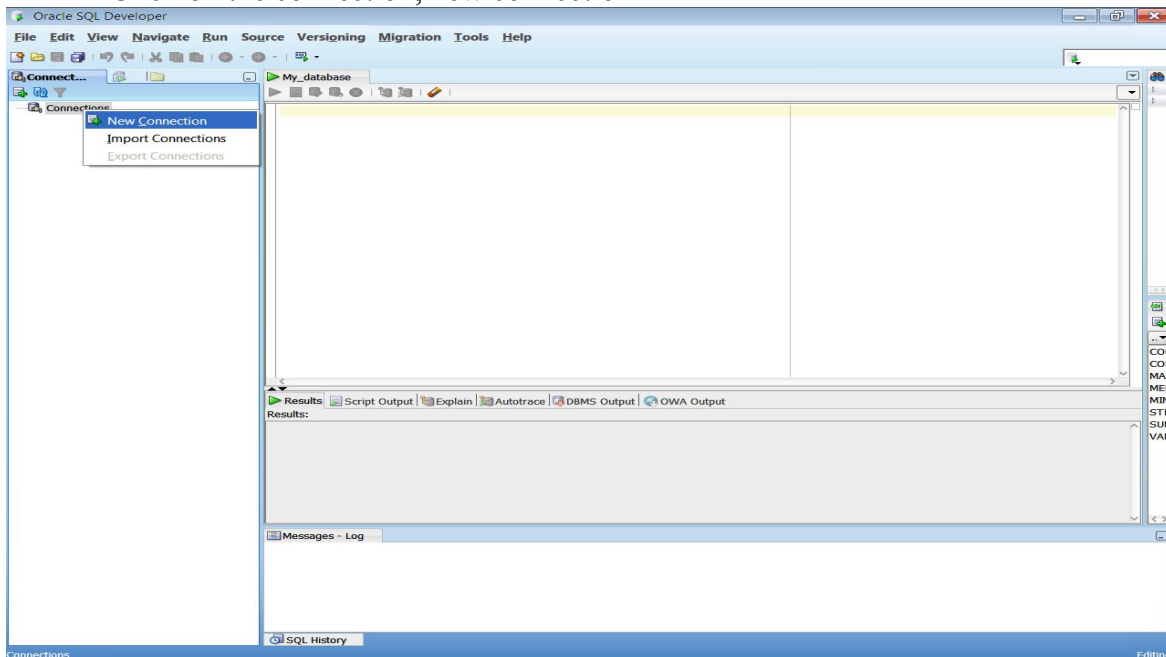


Figure 2

3- After selecting New, you will obtain the following window (Fig. 14)

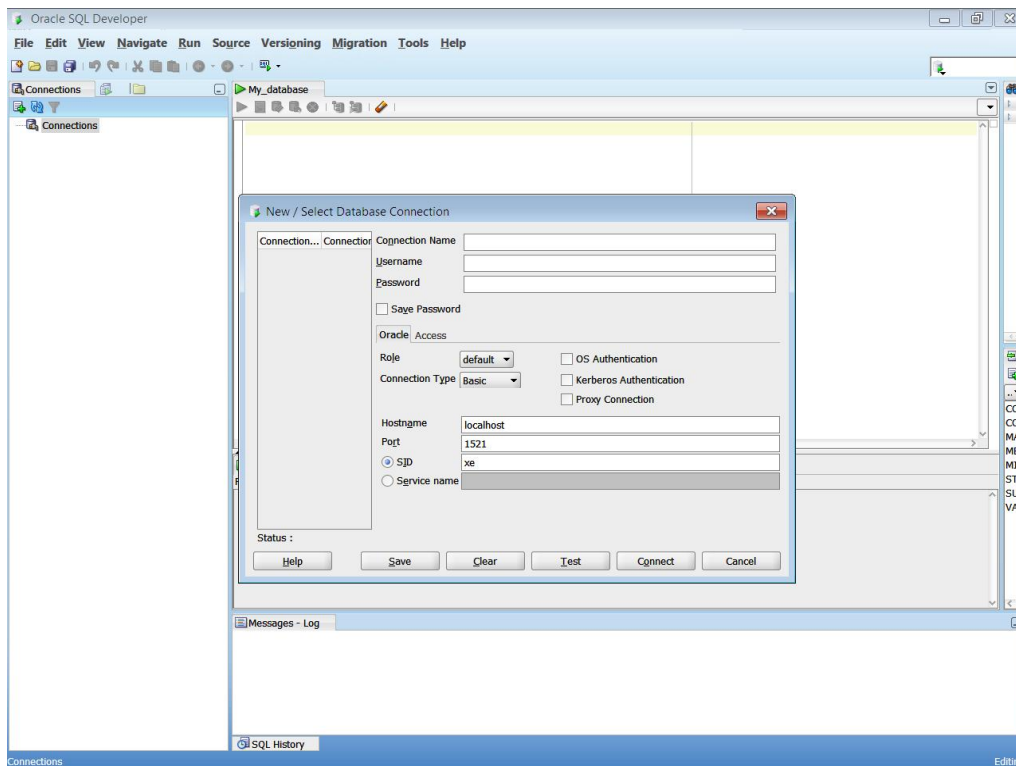


Figure 3

To connect to the Oracle server, you can do this using one of two options:

First Option

Remote access (if you are away from the CMPE laboratories)

You need to connect as it is shown in Fig. 15

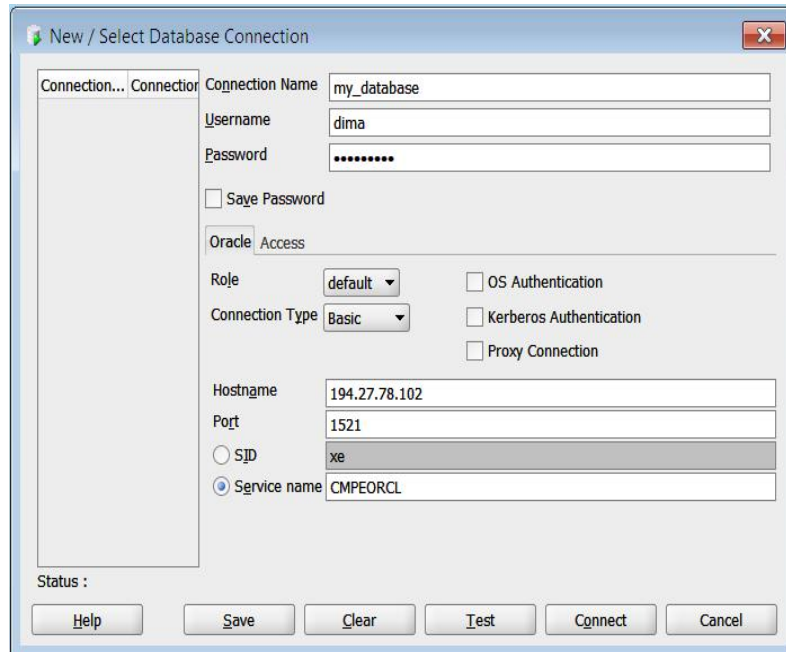


Figure 15

Second Option

Connect from the CMPE laboratories

You need to connect as it is shown in Fig. 16

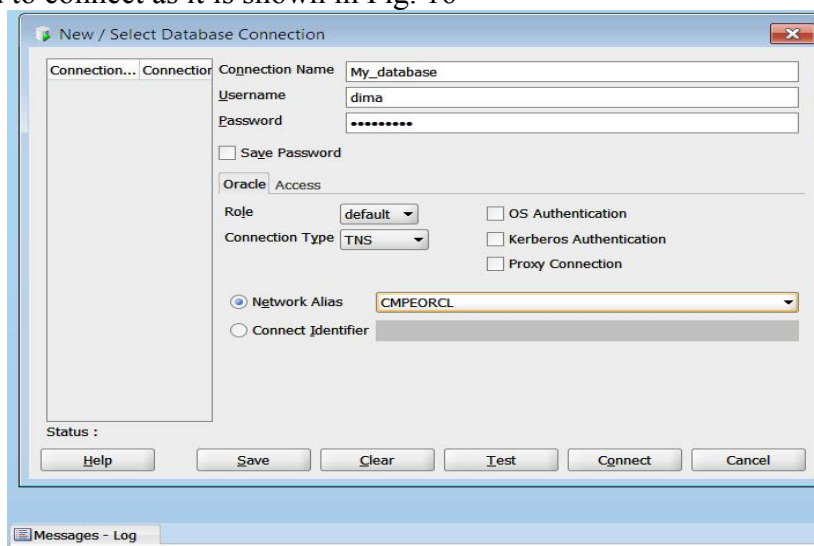


Figure 16

After you connect, the result of option 1 or option 2, you will have the following window Fig. 17

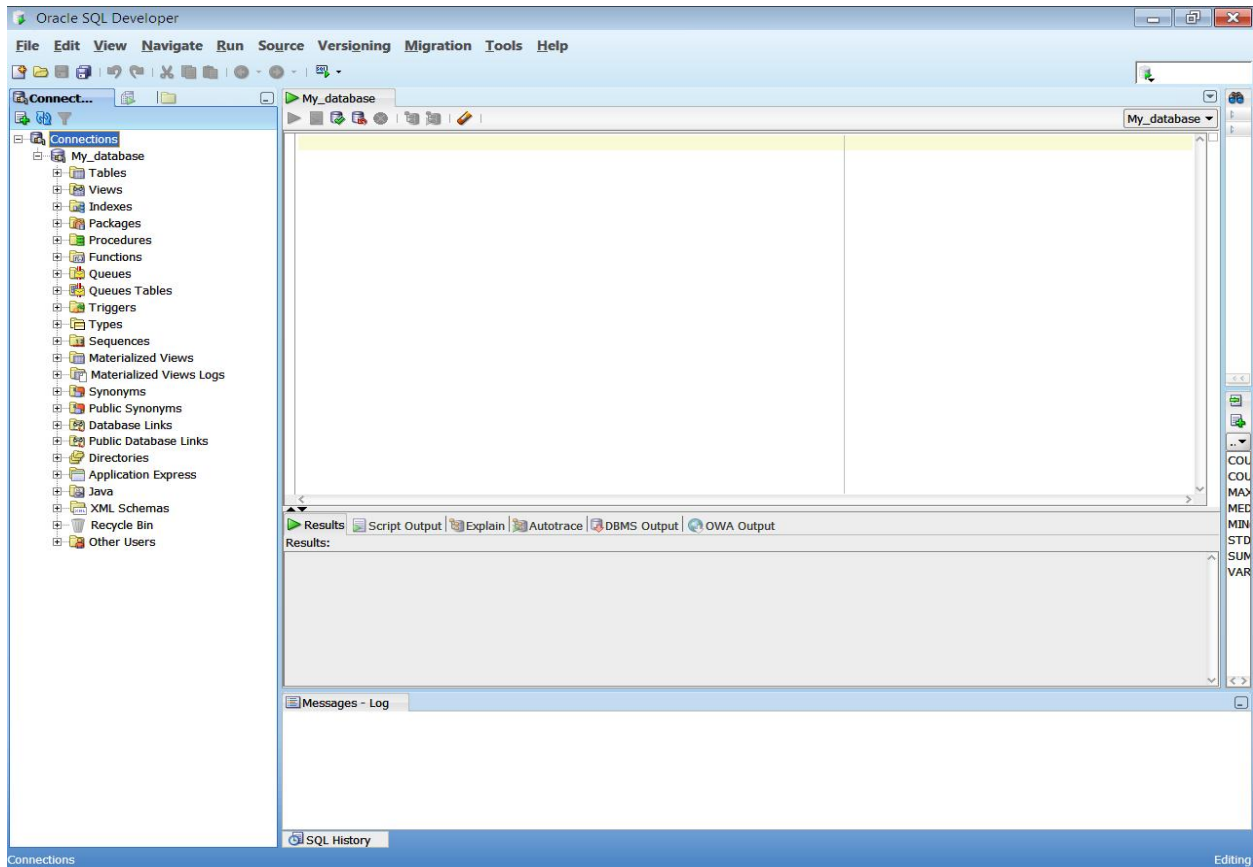


Figure 17

Our connection is now ready for using. 😊

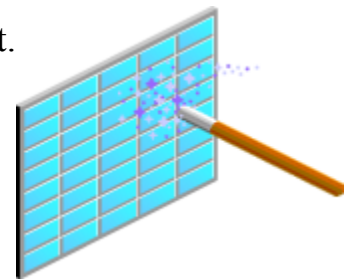
Working with Database Objects

An Oracle Database stores and organizes information. Oracle SQL Developer is a tool for accessing and maintaining the data in the database. Tables are the basic storage structure for holding data. In this tutorial, we learn how to use sql statements and work with them.

As example we will discuss how to create tables:

We create tables with the SQL **CREATE TABLE** statement.

With Oracle SQL Developer, we have two options for creating tables.



- Use the graphical interface that generates the SQL statement
- Enter the CREATE TABLE statement in the SQL Worksheet

When creating tables, we must provide:

- Table name
- Column name(s)
- Data type for each column
- Optionality of the column

1- Creating tables using graphical interface.

From our connection we choose tables > new table

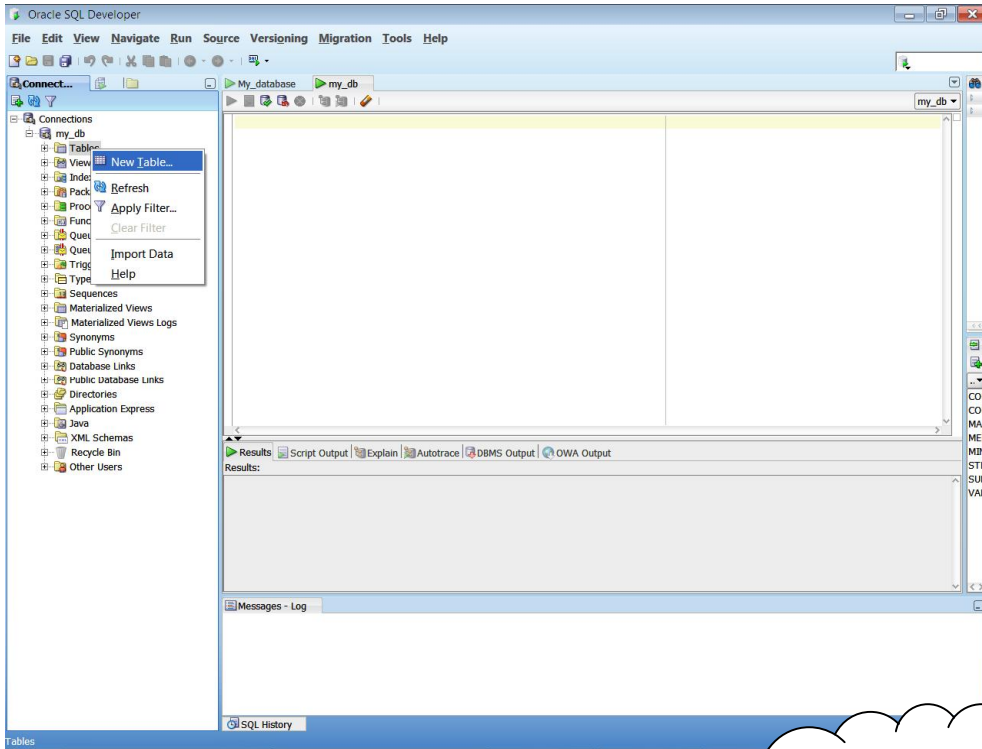


Figure 1

You want to be able to see additional details about each column, click Advanced.

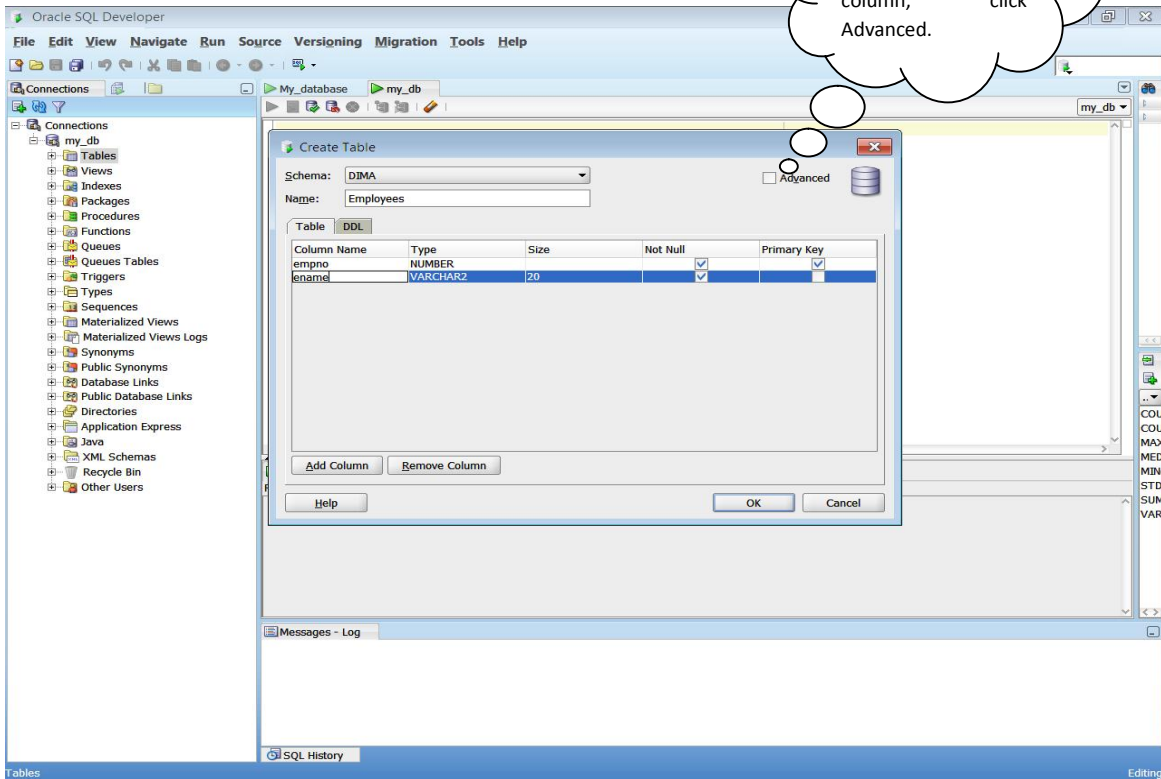


Figure 2

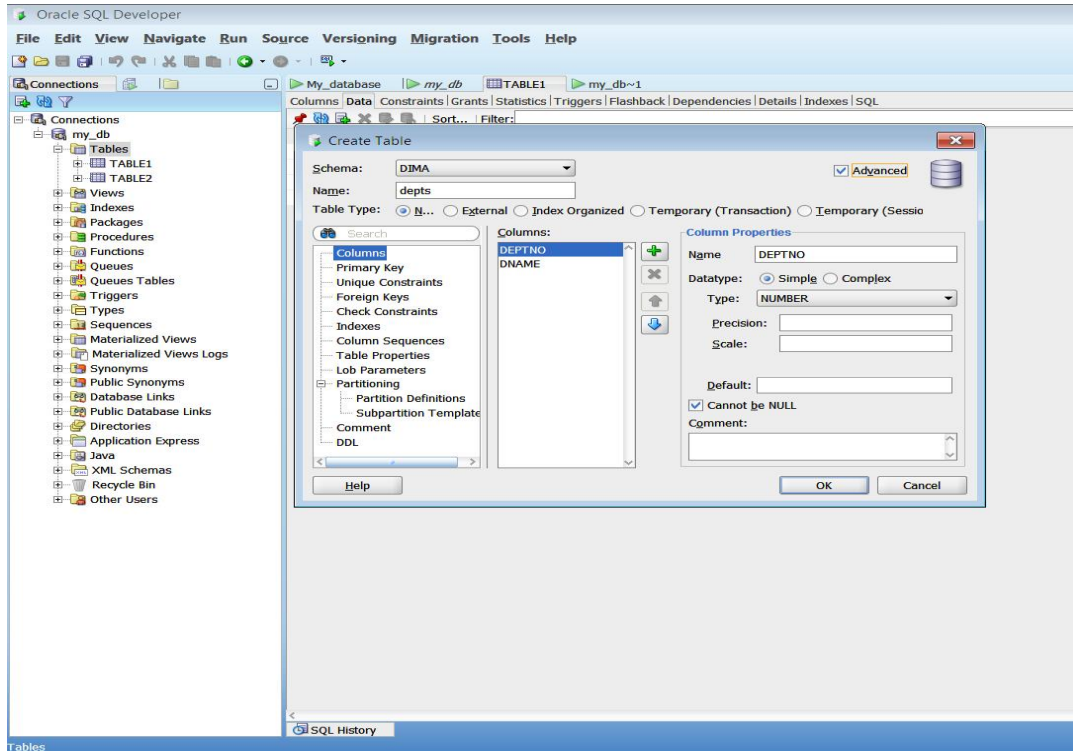


Figure 3

2- Or you can define your table by writing sql statement

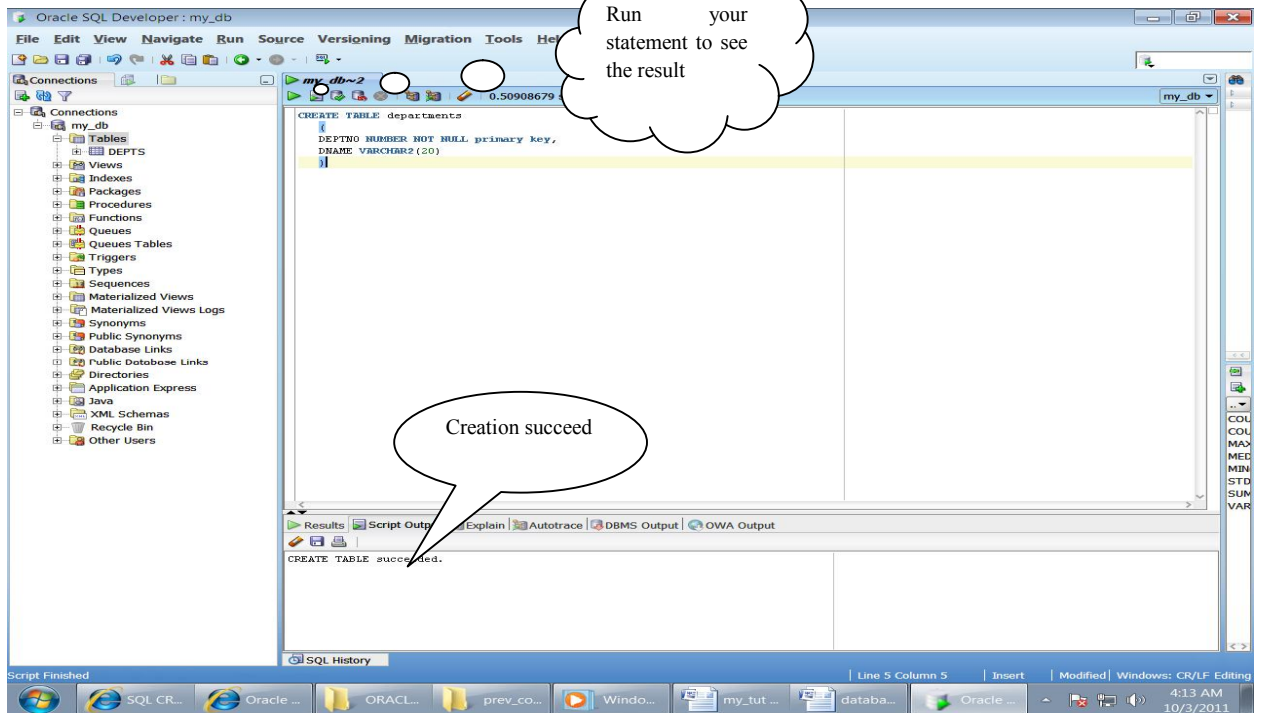


Figure 4

Now to fill Data in your tables you have to select the table, then to choose data menu, and start adding your columns.

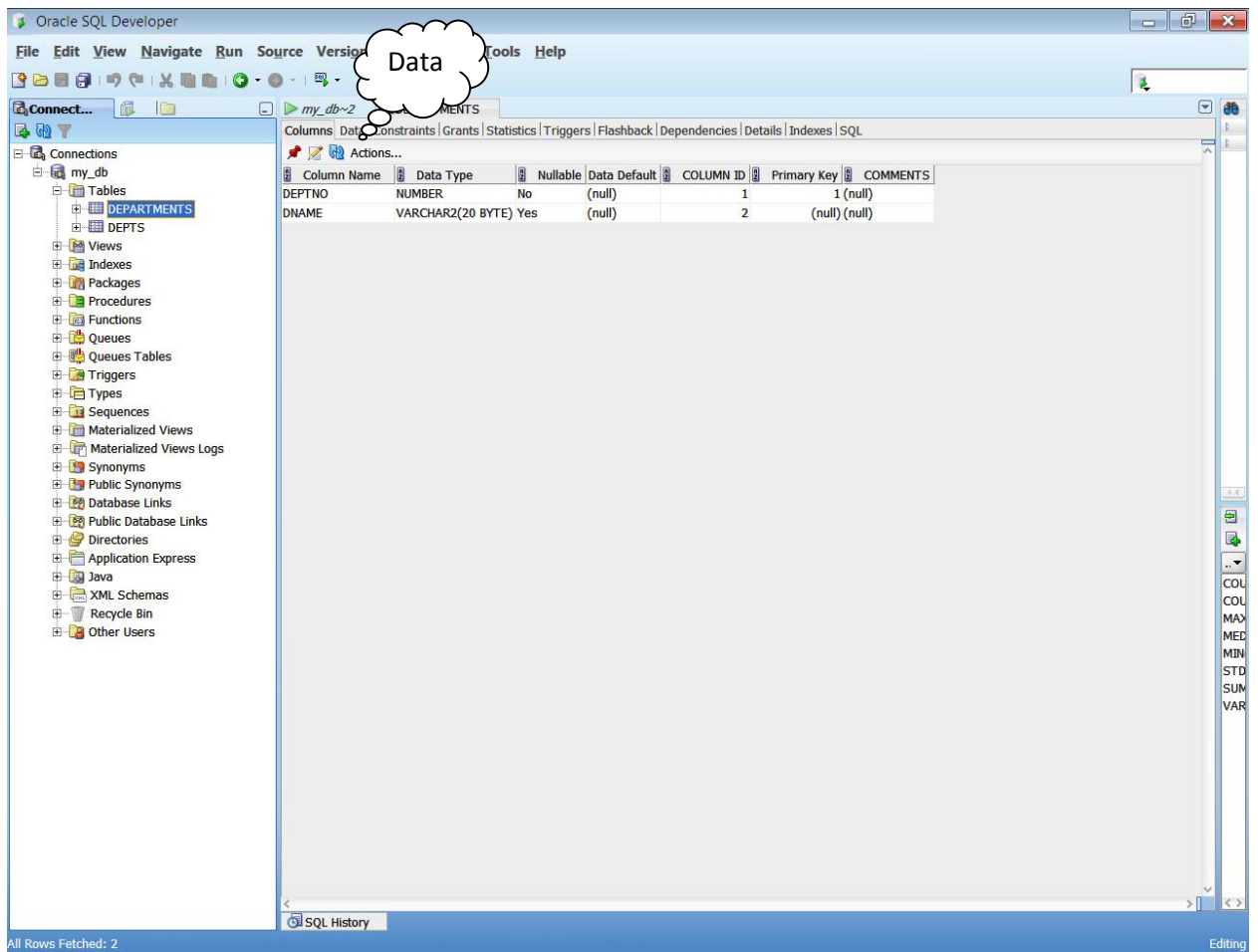


Figure 5

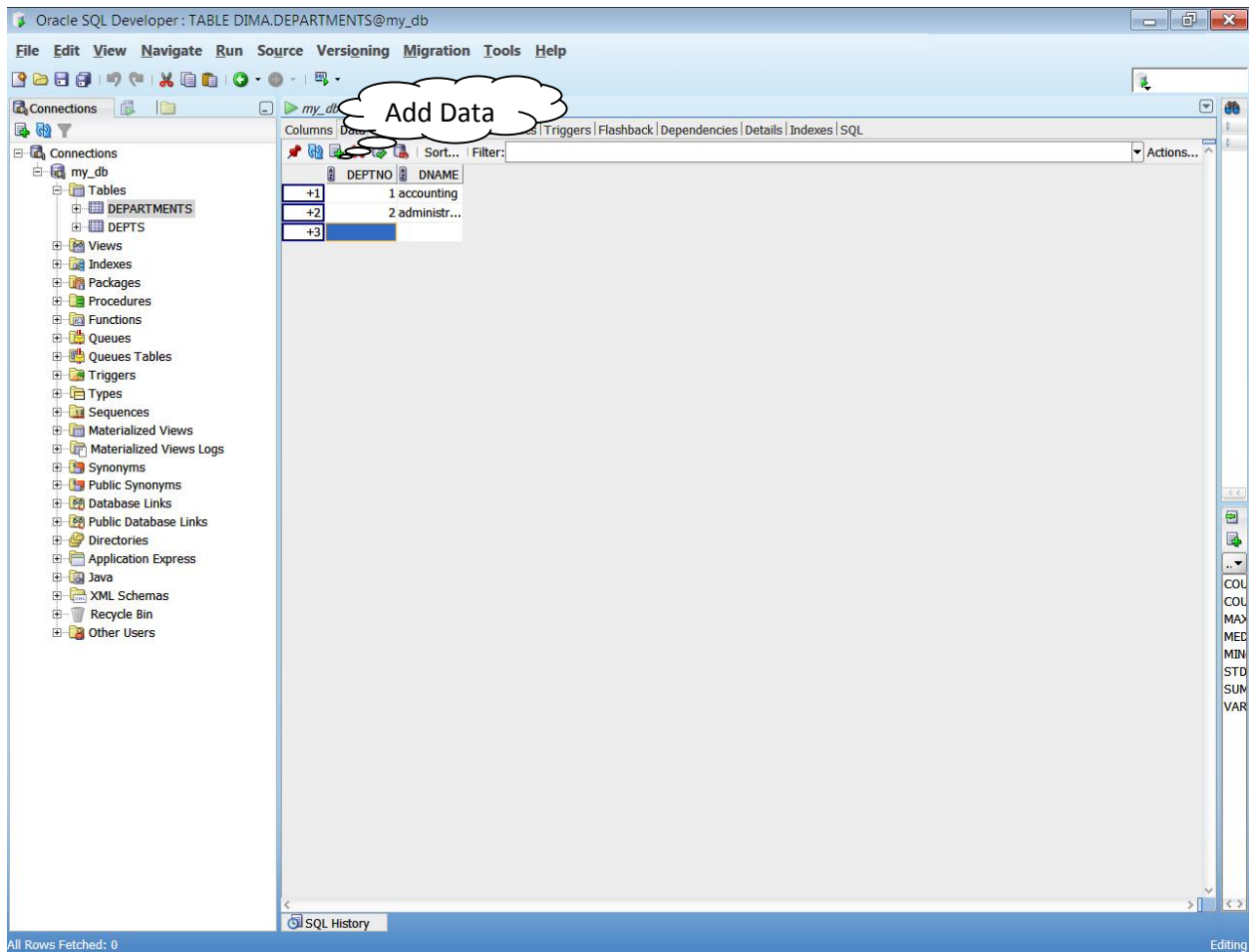


Figure 6