Mini Project Starting Point

This document is just a starting point for you to start with your mini project. Steps included in this guideline:

1. Creating new database
2. Create Table with Constraints
3. Insert Data in Multiple Row

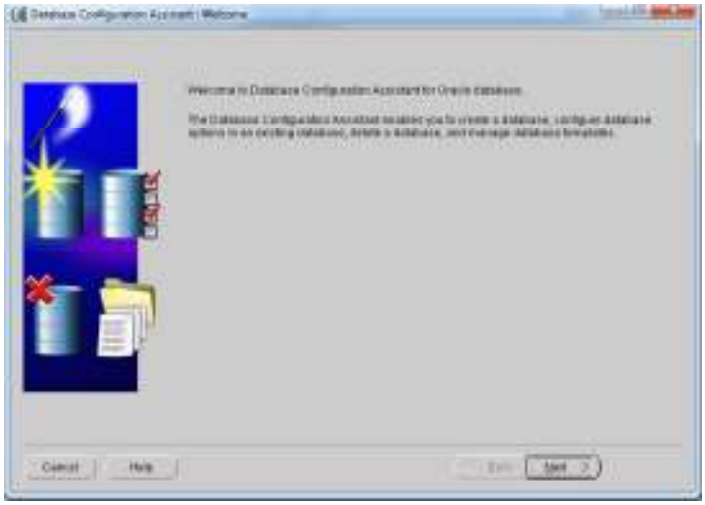
There are more than these three steps in completing your mini project. Steps included are just to give you general overview on how to go about in completing your mini project.

Google is the best source for you to learn more one SQL Query/Statement. In SQL there are few ways to create tablet, create table with constraint (null, not null, primary key, foreign key) insert multiple data, and insert single data, update table, delete table. I'll only show you few examples of inserting new data and creating new table. The rest you need to figure out on your own (self-study)

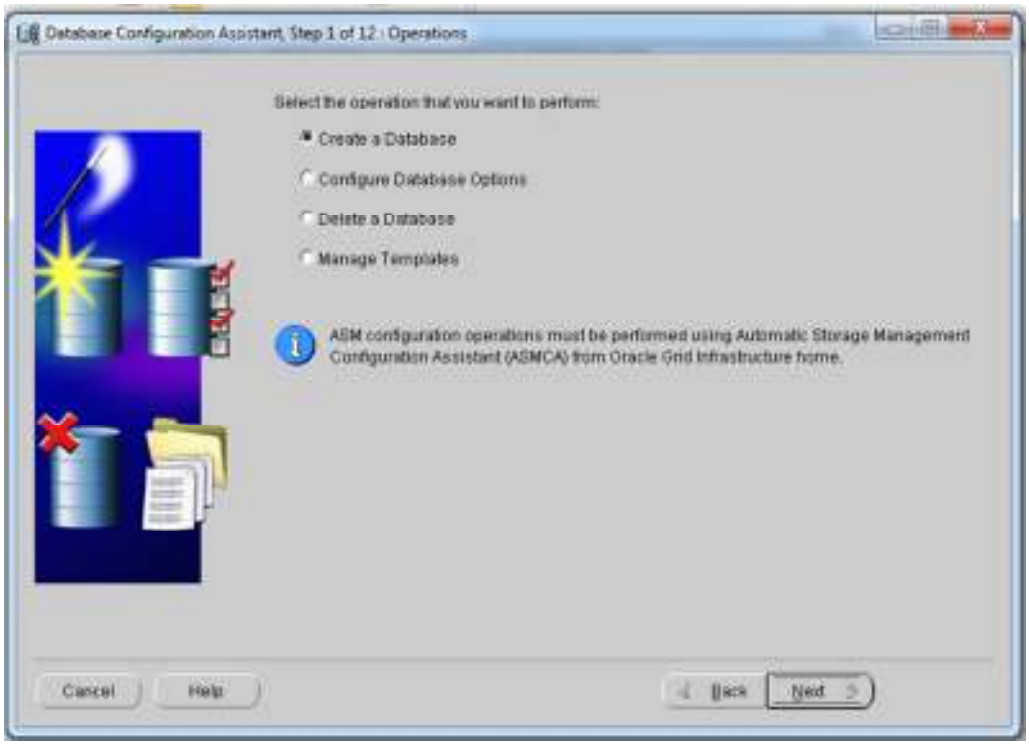
1.0 Creating Database for your Mini Project

For you to start your mini project, it is important that you used a clean and fresh version database. Therefore, here is the guide for you to create a new database in your own PC/Laptop.

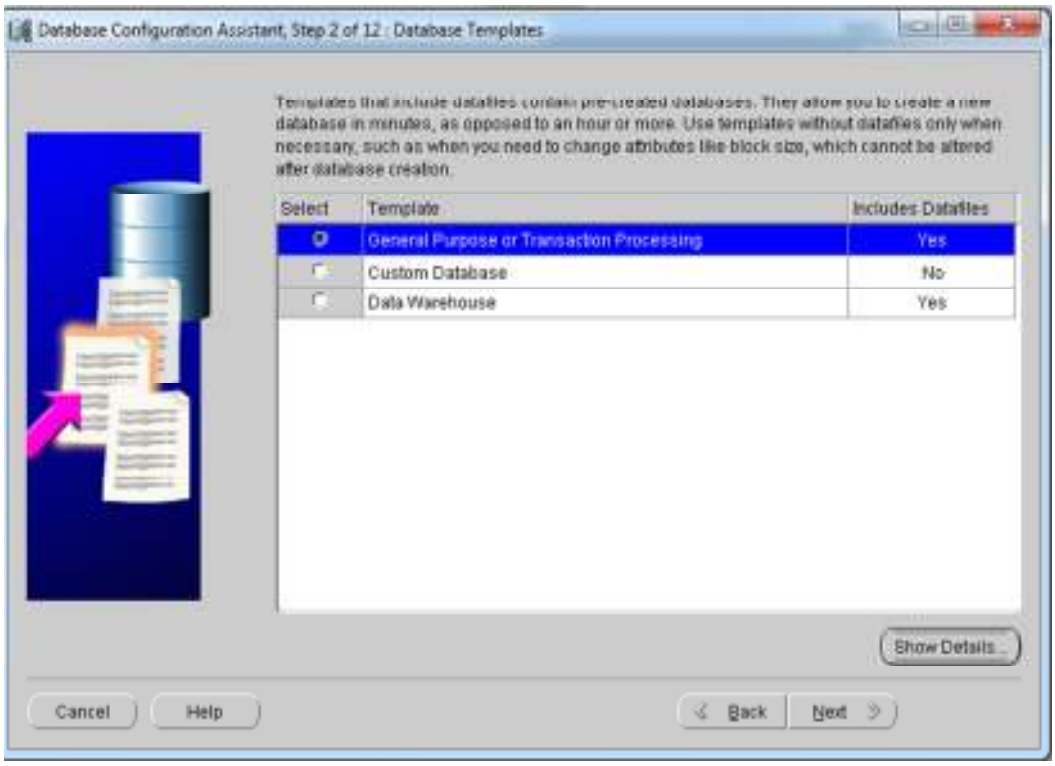
1. First you need to create a database for you mini project. To create a database go to Programs -> Oracle Home -> Configuration & Migration Tools



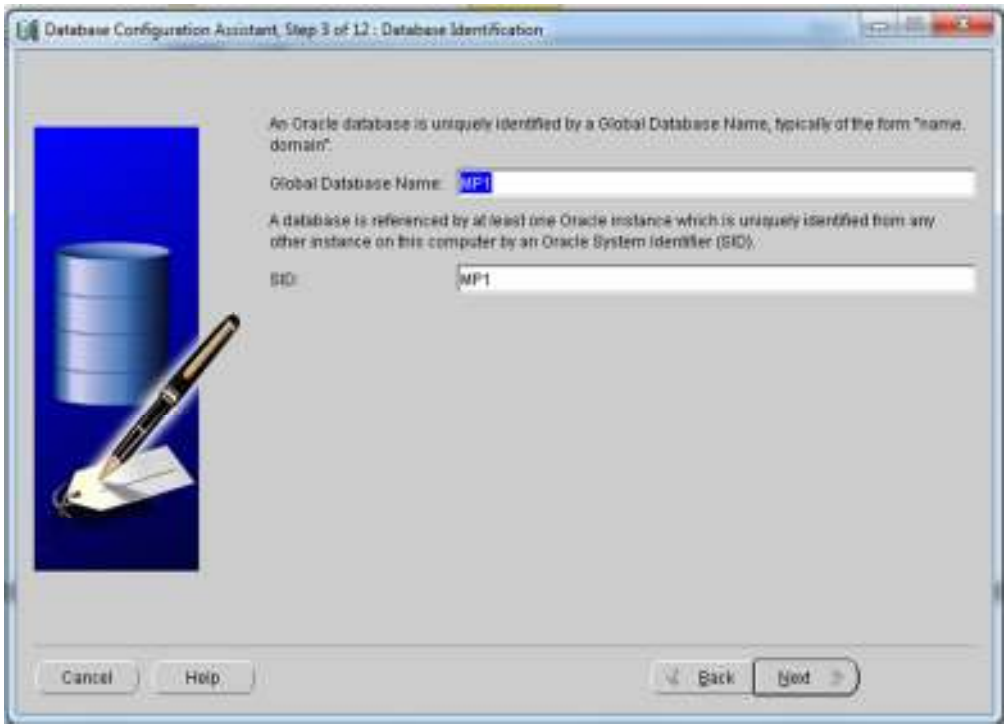
2. A welcome page appear, and click ‘Next’



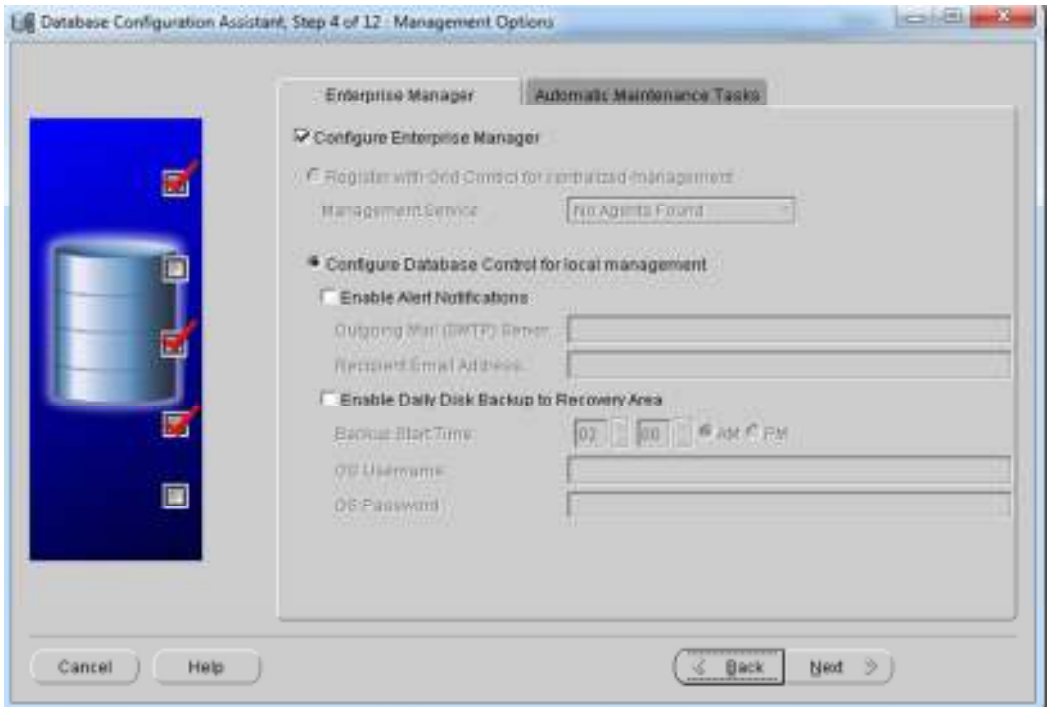
3. Select ‘Create a Database’ and click Next



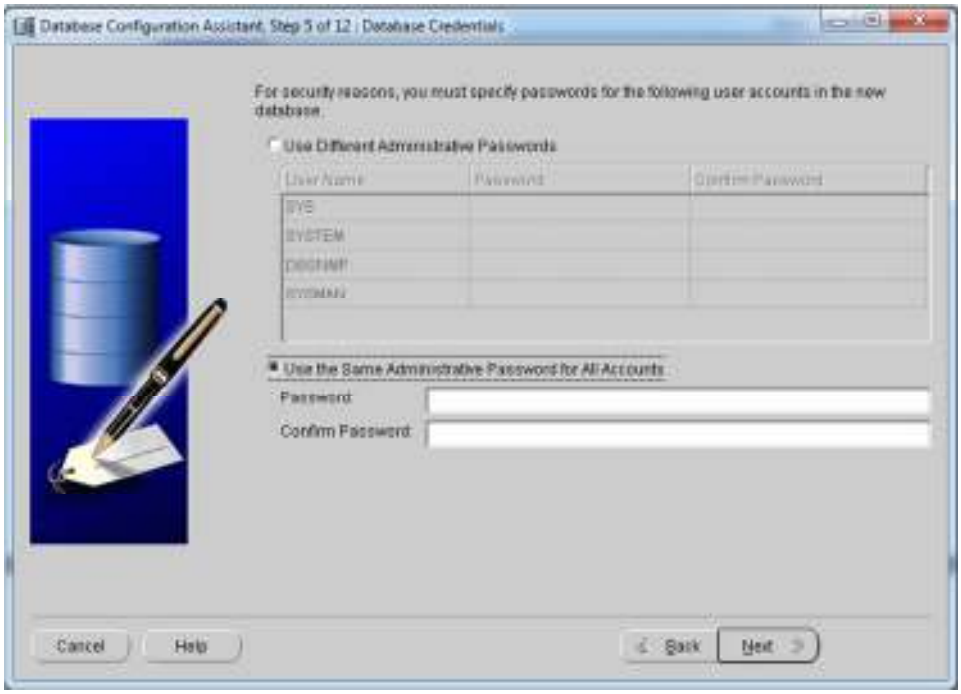
4. Select ‘General Purpose or Transaction Processing’ and click ‘Next’



5. Give a 'Global Database Name' to your database. Please make sure the name is meaningful and easy to remember. This 'Global Database Name' and 'SID' will be use when you want to make a connection to your database through SQL Developer. On the above figure, the Global Database Name/ SID is 'MP1' (stands for mini project 1)

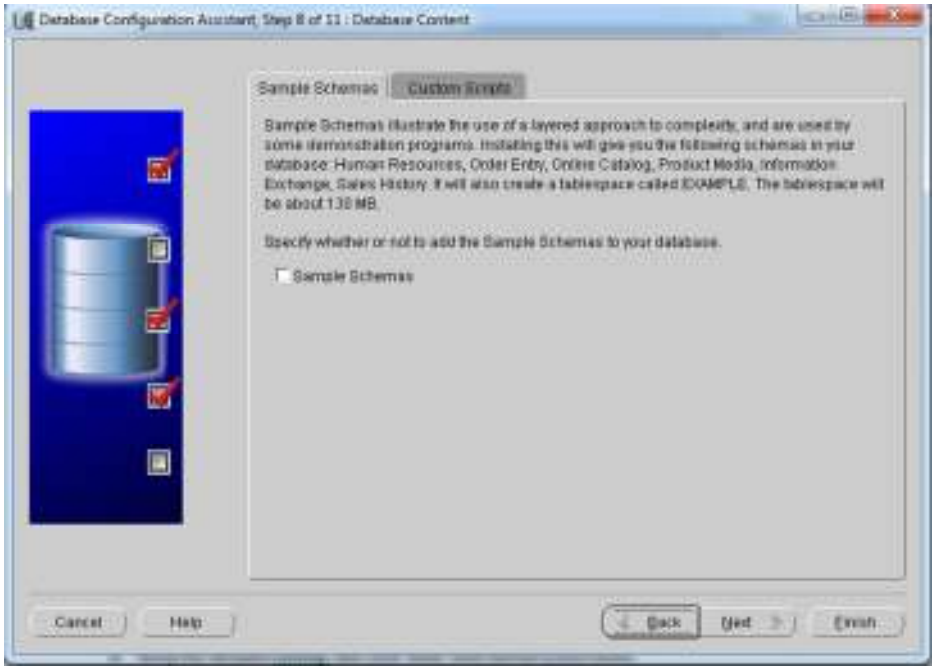


6. Keep the default setting and just click 'Next'

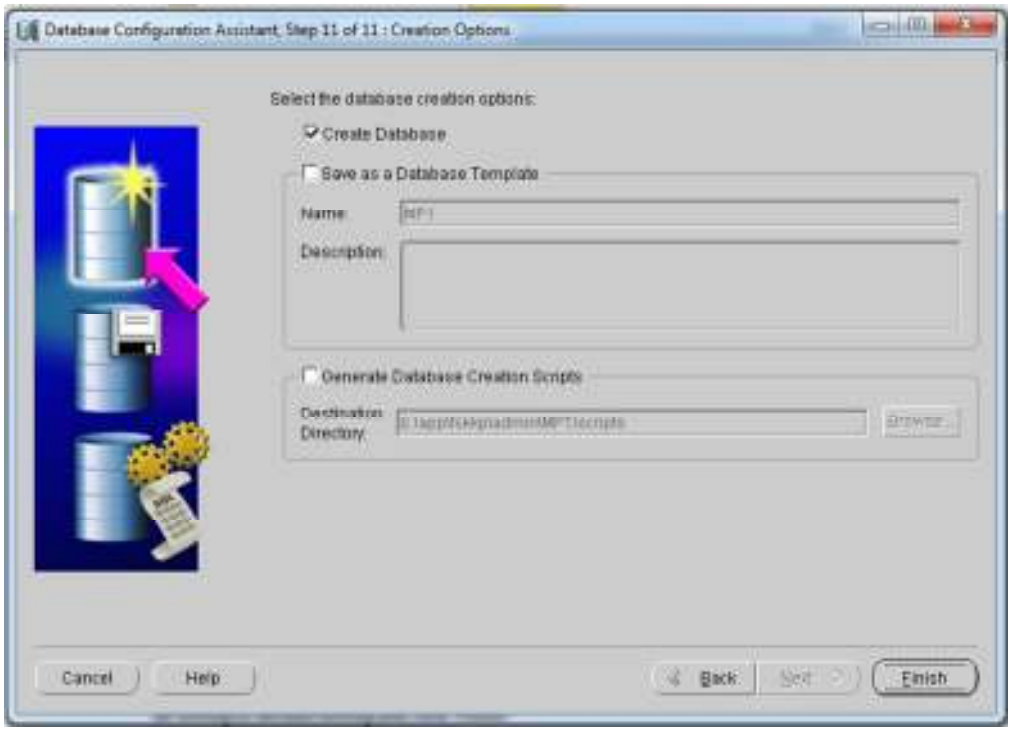


7. It is advisable to use the same administrative passwords for all account. Give any password that is easy to remember.

8. Keep the defaults setting. Just click ‘Next’ until below screen shots.

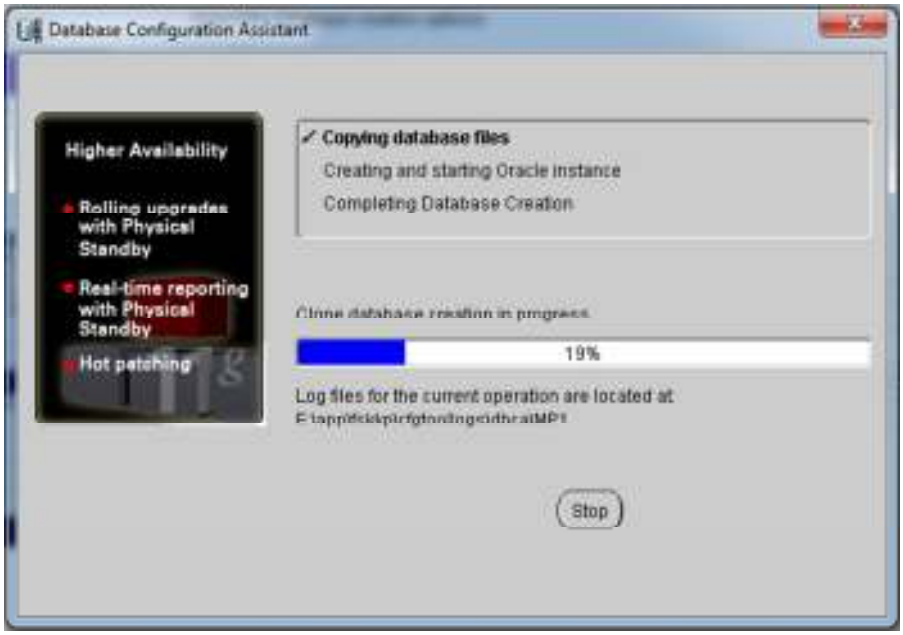


9. Since you will use your own schema and data for the mini project. So it is okay to unchecked the sample schema. And just click ‘Next’ for the next page without changing any setting. Keep all setting to default setting and click ‘Finish’



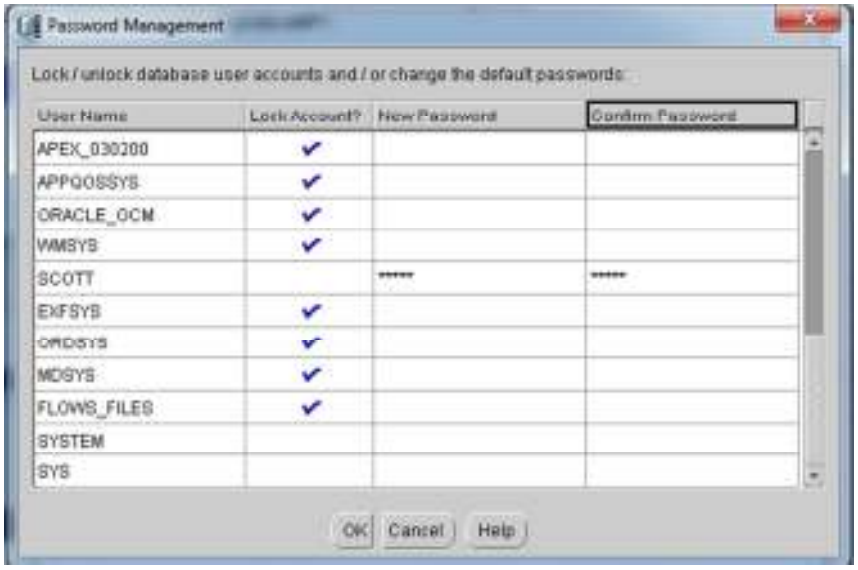
10. Click ‘Finish’ and a confirmation page will come out. Just click ‘OK’ and the creation of your database will start.

11. Click ‘OK’ and installer will start creating a database for you.

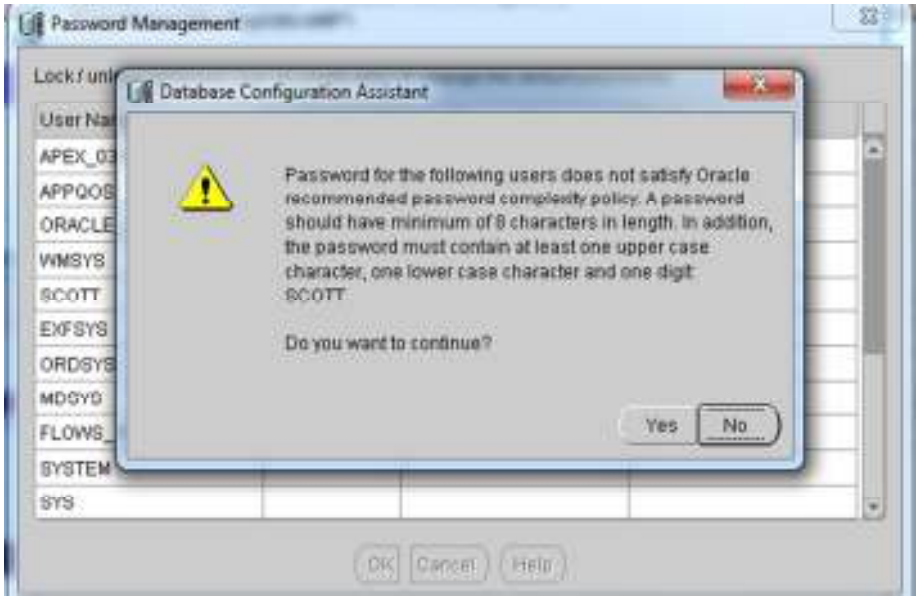


12. Wait until database creation complete.

13. Click on ‘Password Management’ button and look for the username ‘Scott’. Unlock ‘Scott’ account and set a password for ‘Scott’. Please remember the password that u have specified because this password will be use during the connection to your database

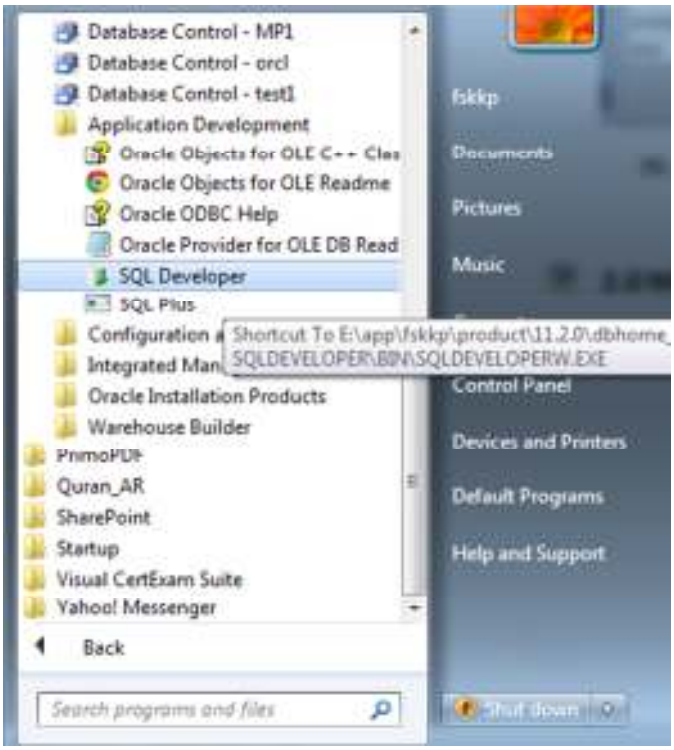


14. Click ‘OK’

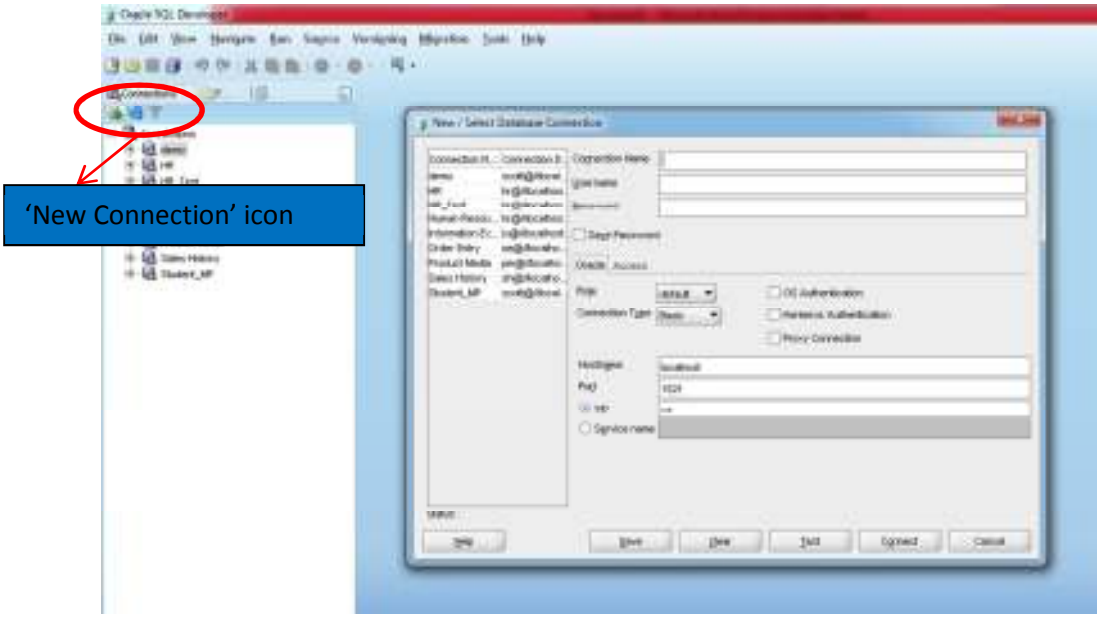


15. Just click ‘Yes’ and the ‘Exit’.

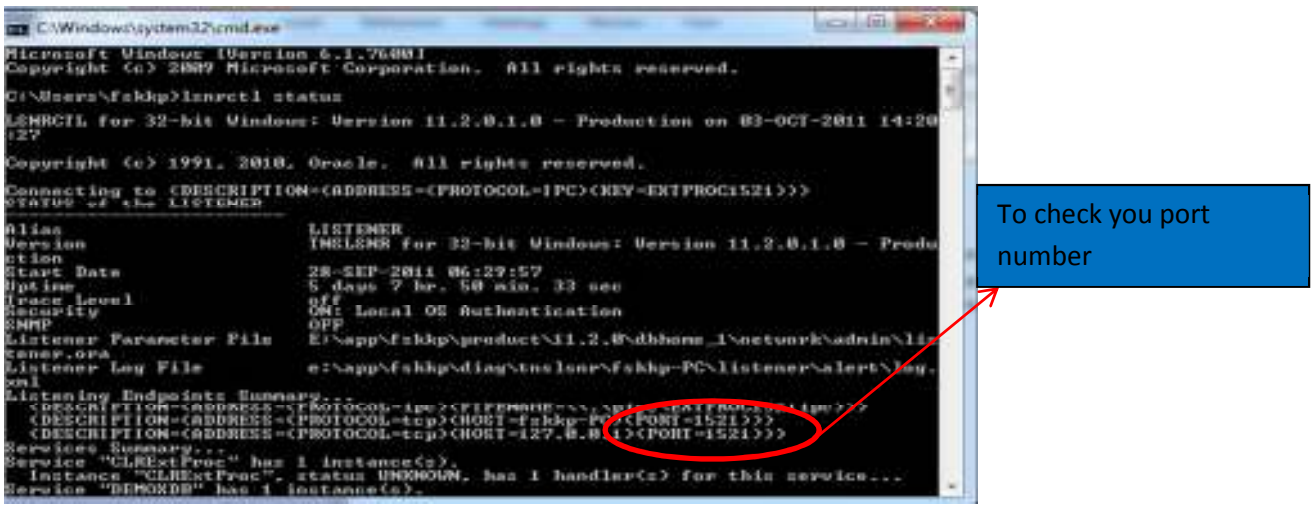
2.0 Make a Connection to You Newly Created Database

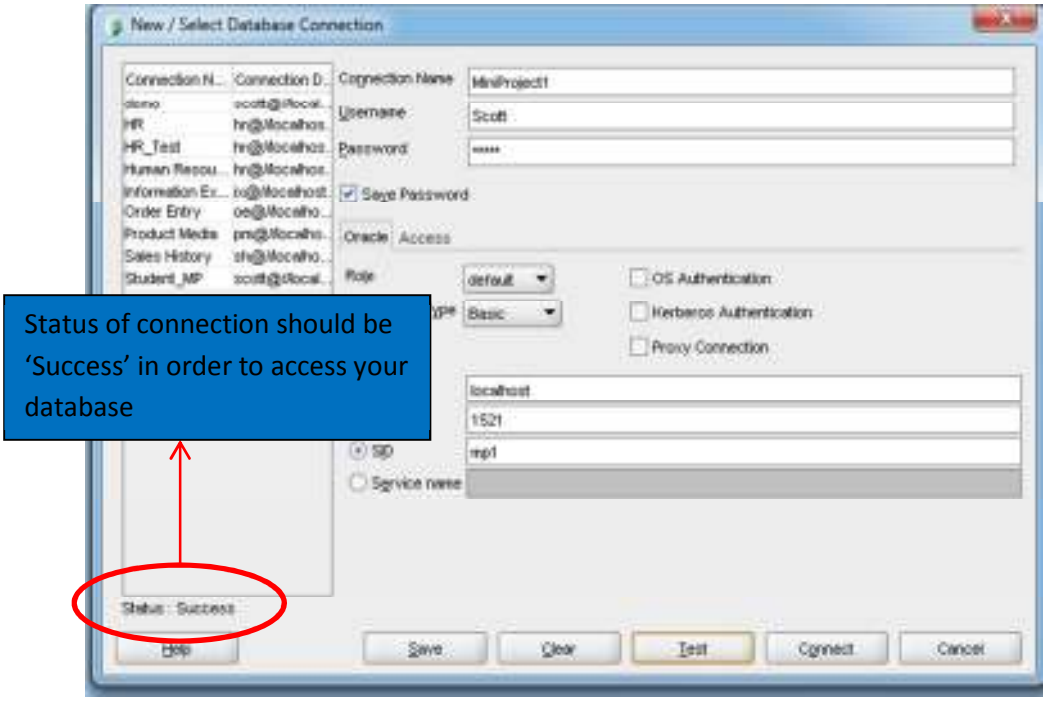


1. Open SQL Developer to connect to your newly created database. Go to Programs -> Oracle Home -> Application Development -> SQL Developer

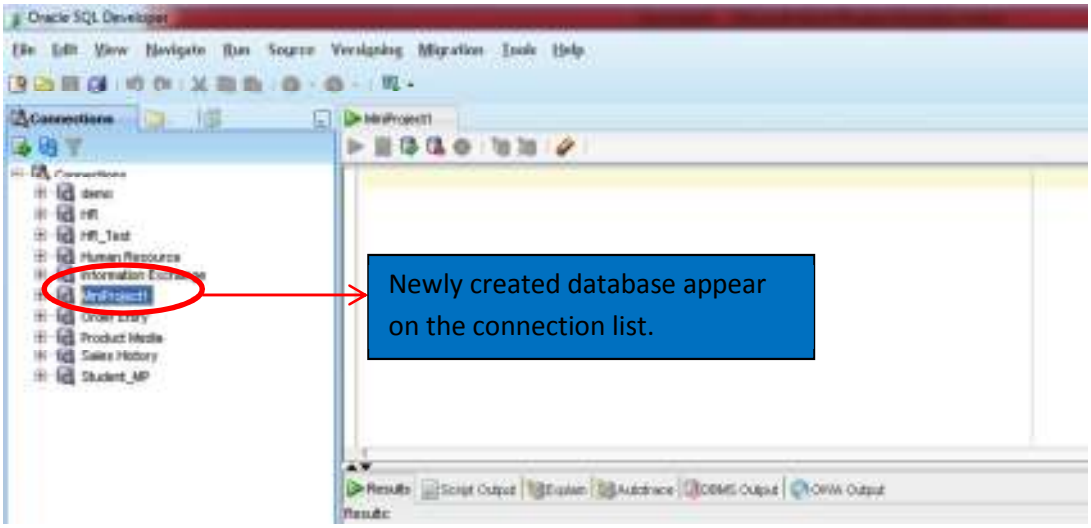


2. Click on the 'New Connection' icon and fill in the information needed to make a connection to your database. Fill in the form as below:
   a. Connection Name : MiniProject (you can give any name to the connection name)
   b. Username : Scott
   c. Password : ***** (this is the password u specified during creation of your database–refer number 13)
   d. Checked the 'Save Password' box
   e. Hostname : Localhost
   f. Port :1521 (some PC might have different port, run command prompt and type **lcnrctl status** in order to confirm you port)
   g. SID : MP1 (this is the Global Database Name u specified during the creation of your database – refer number 5)

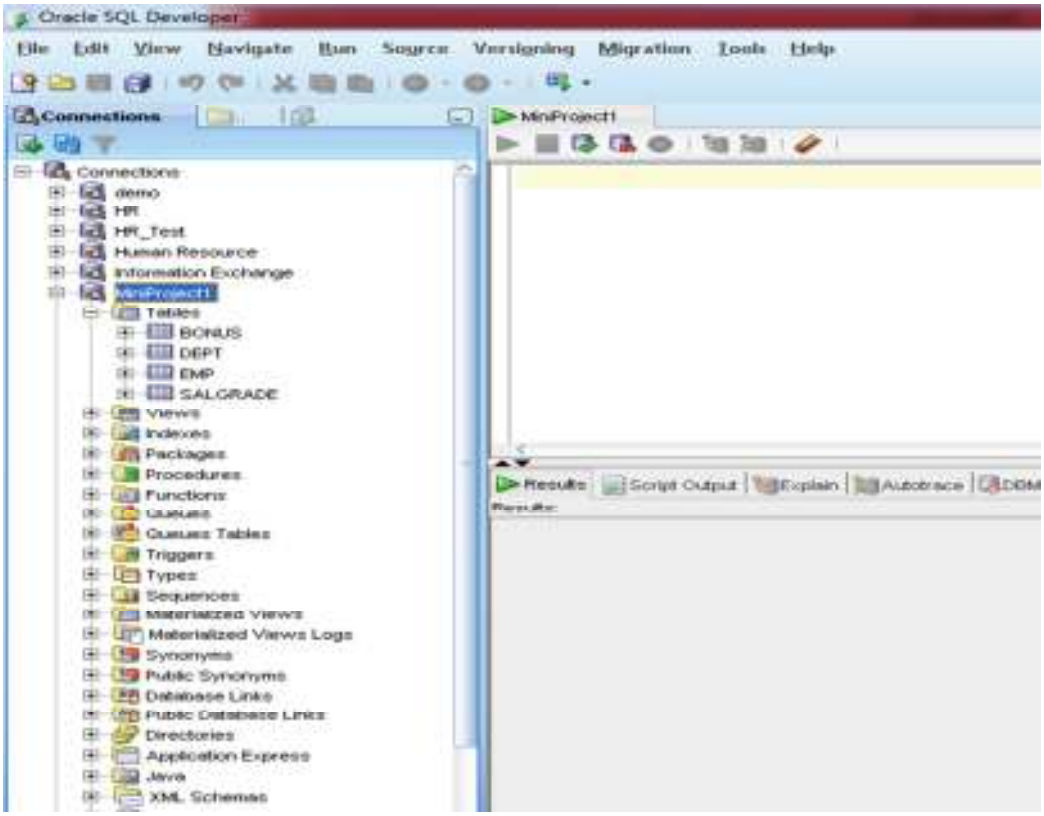




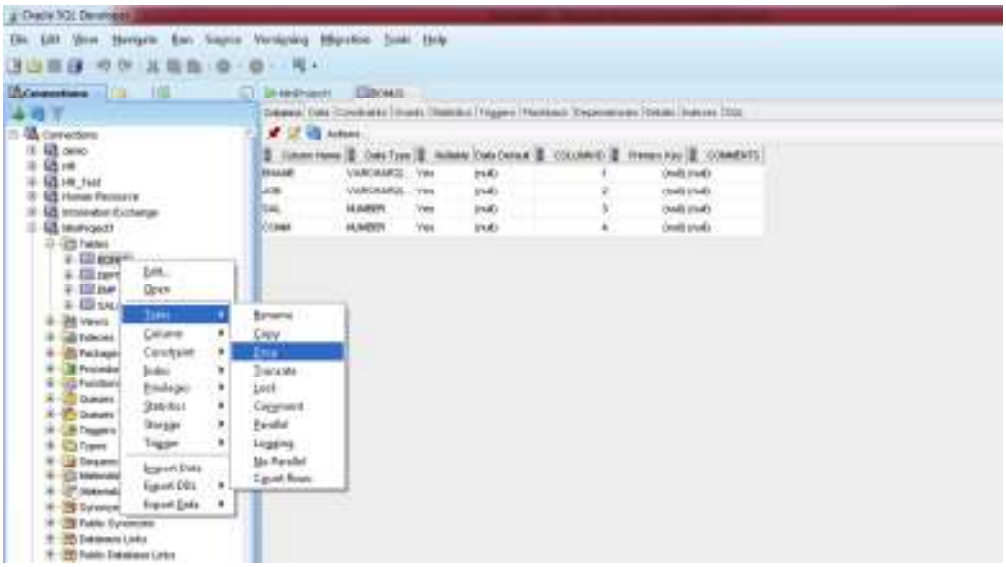
3. Click on 'Test' connection button and a status of the connection will be showed at the bottom of the page. The status should be 'Success' in order to confirm that the connection of your database is successful. If 'Success' click 'Connect'



4. You will see a new connection of your newly created database, appear on the connection list.



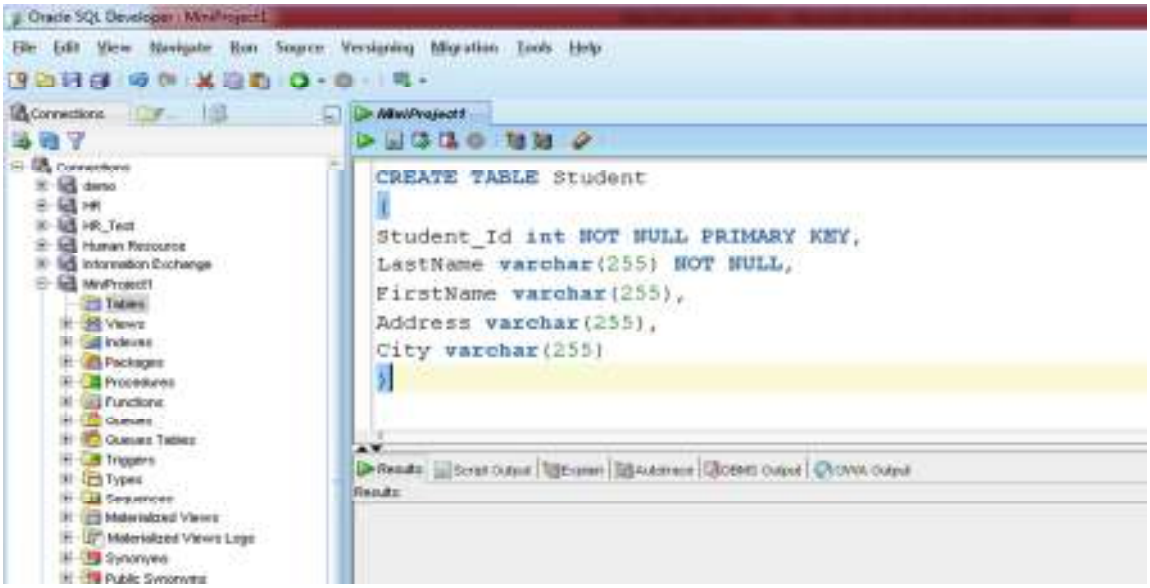
5. When you open the MiniProject1 database, you will see there a four existing table. This table exists due to the fact that we login using the username ‘Scott’. This table can be remove by just right-click on the particular table and select Table->Drop



6. If all four tables available are not related to your Mini Project title, you can drop all four table and left the database empty. After the database is empty you can now start to create your own table with your own data.

3.0 Table and Data Creation

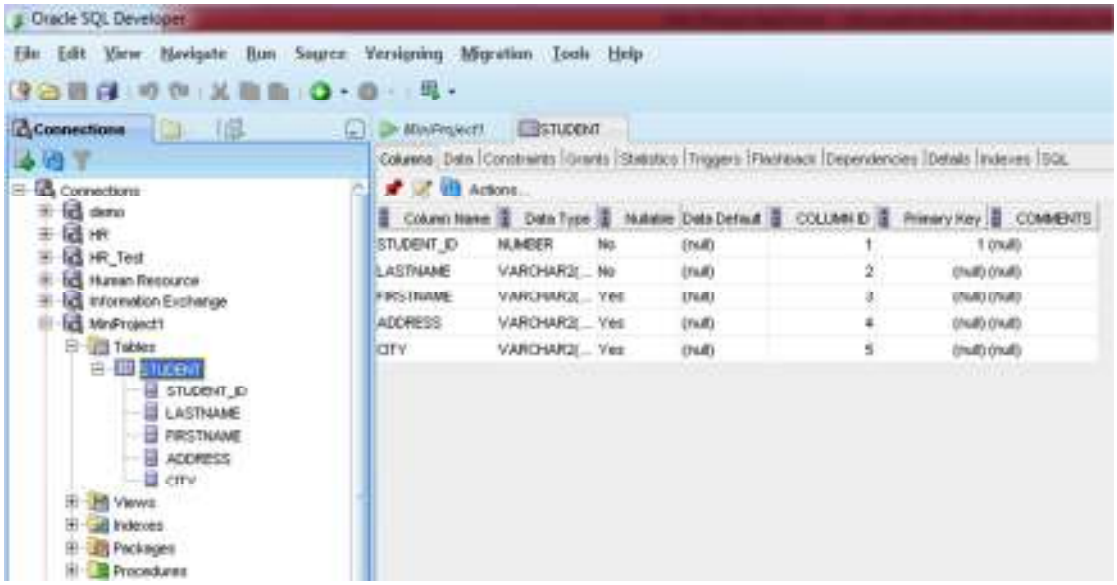
1. Let say, you need to create 4 types of table named Student, Enroll, Class and Course Before you create a table, you need to identify the attributes and constraints such as (Primary Key, Foreign Key, Not Null, and Null). Below are some of examples to create a table. Run your SQL statement in SQL Worksheet



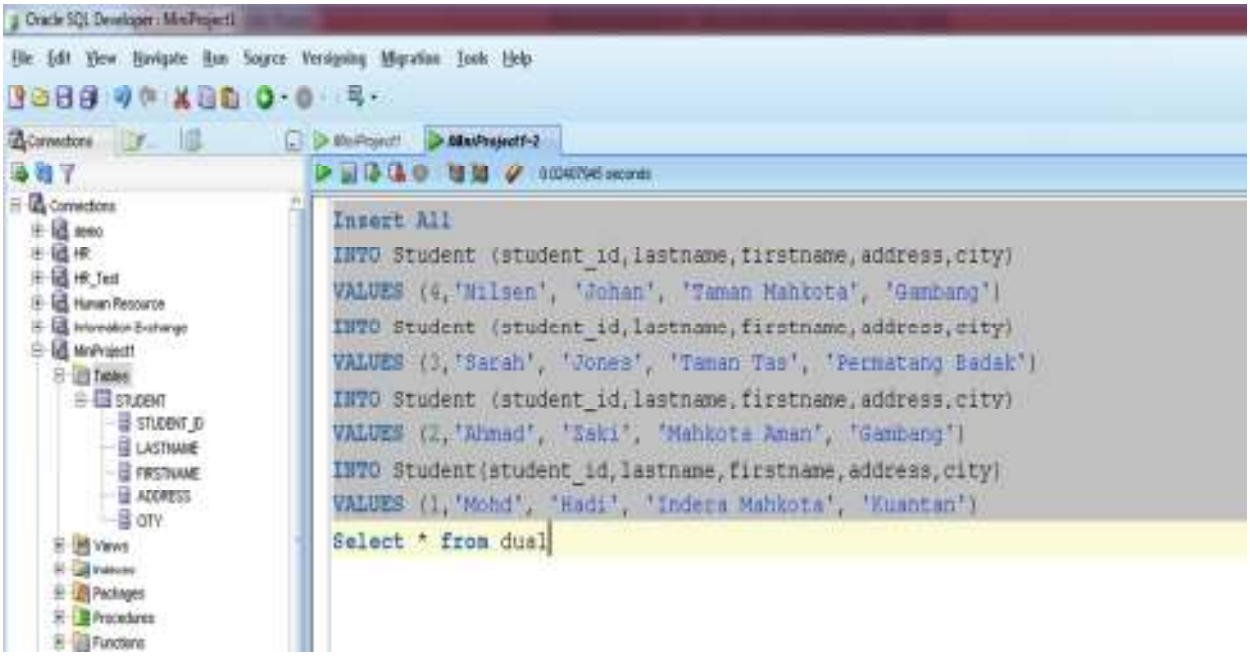
2. From the SQL statement above, a table named 'Student' will be created once you run the code. A 'Student' table can then be seen on the table list of your database

```
CREATE TABLE Student
{
Student_id int NOT NULL PRIMARY KEY,
LastName varchar(255) NOT NULL,
FirstName  varchar(255),
Address varchar(255),
City varchar(255)
}
```

Example of CREATE table with Constraint (primary key,not null)

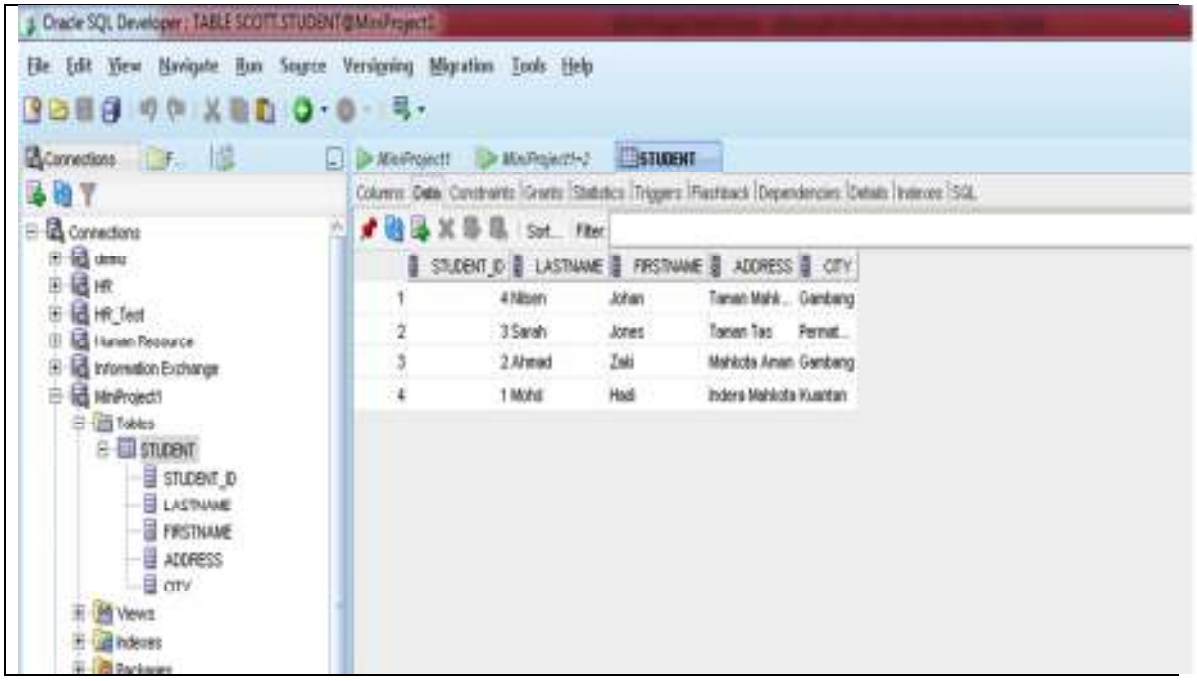


3. Student table is now available on the tables list of your database. You can repeat the same process for other tables that you wish to have.
4. After creating a table, it is important for you to insert data to your empty table. Below is some example of inserting data to table



```
Insert All

INTO Student (student_id,lastname,firstname,address,city)
VALUES (4,'Nilsen', 'Johan', 'Taman Mahkota', 'Gambang')

INTO Student (student_id,lastname,firstname,address,city)
VALUES (3,'Sarah', 'Jones', 'Taman Tas', 'Permatang Badak')

INTO Student (student_id,lastname,firstname,address,city)
VALUES (2,'Ahmad', 'Zaki', 'Mahkota Aman', 'Gambang')

INTO Student(student_id,lastname,firstname,address,city)
VALUES (1,'Mohd', 'Hadi', 'Indera Mahkota', 'Kuantan')

Select * from dual
```

Example of INSERT INTO for multiple rows in one time



View of data that have been inserted into table through INSERT INTO statement

-END-