**Practical 12**

# Database Administration & Security

## Objectives

In this practical, you are to work with your team to implement some aspects of database security using SQL statements. In particular, you will learn:

* how to define view using the **CREATE VIEW** statement;
* how to assign access rights to a user to access database objects (such as a View);
* how to cancel or remove the access rights given to the user.

## Tasks

**Follow through Steps (a) to (f) in order, the tasks are illustrated in the diagram below :**



**(c) Create a View on the table. ..**

**(e) Login as user *dbms\_student*;   
query the View.**

**(d) Assign user *dbms\_student* with *read* access to the View.**

**(a) Login as user (eg *dbms\_dit01* or**

***dbms\_dbi* etc)**

**(b) Create a table and insert some records.**

* 1. Use the following accounts to login.

**Login Id to use**

You should work together with your Team using the login account/password assigned to you :

Username : **dbms\_dit01** – for DIT students

**dbms\_dbi** – for DBI students

**dbms\_dbt** – for DBT students

**dbms\_dfi** – for DFI students

**dbms\_dis** – for DIS students

**dbms\_dba** – for DBA students

Password : **studpass**

Hostname : **oracledb2.sit.nyp.edu.sg**

Port : **1521**

SID : **orcl2**

**To avoid clashes in naming, you will need to prefix the names of your tables/database objects with your Project Team No or admin number.**

Follow the naming convention used in Practical 11.

* 1. Create the following table (after logging in as **dbms\_dit** or **dbms\_dbi etc**) :

**Gx\_SUPPLIER**

SNo Varchar2(5) NOT NULL,

SName Varchar2(15) NULL,

Status Varchar2(5) NULL,

City Varchar2(15) NULL,

PRIMARY KEY (SNo)

You may need to insert some sample records into the table :

('S1', 'S1 in Paris', 'OK', 'Paris')

('S2', 'S2 in London', 'OK', 'London')

* 1. Create view **Gx\_Paris\_Suppliers** to list the SNo, SName of all suppliers located in the city ‘Paris’.
  2. Grant the user ‘dbms\_student’ with **SELECT** privilege to the view **Gx\_Paris\_Suppliers**, the syntax for grant statement is as follows :

**GRANT** *privileges, …*

**ON** *object\_name*

**TO** *user\_id* ;

* 1. Login as user **dbms\_student** (password is **studpass**). Query the view **Gx\_ Paris\_Suppliers** using the SELECT statement :

**SELECT** \*

**FROM** **dbms\_dit***(or dbms\_dbi)*.**Gx\_ Paris\_Suppliers** ;

What information is available to you?

* 1. Login as **dbms\_dit** or **dbms\_dbi** again. Revoke (Remove) the access to the view from the user **dbms\_student** :

**REVOKE** *privileges, …*

**ON** *object\_name*

**FROM** *user\_id* ;

(You may repeat step (e) now to verify that the access has been removed from the user.)