CS4416 – Lab 2

SQL Queries

Preparation

1. Open a browser and load http://infolab.stanford.edu/~ullman/fcdb/oracle.html. This is an Oracle guide you can use in the lab.

2. SSH richmond.csis.ul.ie and login with your Linux username and password.

3. Start SQL*Plus with the command `sqlplus`. Login with your Oracle username and password.

Tasks

1. Download and unpack the materials for **lab 2** from the module website (look in the folder for **week 4**). These are four **.txt** files with the data from the tables we used in **tutorial 1**.

2. Create the four tables **Product**, **PC**, **Laptop** and **Printer** and then use the Oracle bulk loader to insert the data from the **.txt** files into the tables.

3. Write and execute the 11 queries described in exercise 2.4.1. That is, write them in **SQL** (not relation algebra expressions).

> **Hint:** Use virtual views to store the results of intermediate steps in the more complex queries. A *view* is a relation defined in terms of stored tables (called *base tables*) and other views. There can be two kinds of views:
> 1. *Virtual* = not stored in the database.
> 2. *Materialized* = actually constructed and stored.
>
> To create a view execute the command:
>
> **CREATE [MATERIALIZED] VIEW <name> AS <query>;**
>
> The default is virtual. Once created, you can query a view as if it were a base table.