#### **UNION:** Exercises

- Create an address list for all employees, customer contacts, and supplier contacts, sorted by name. For this exercise, use employee's last name only.
- Change the previous query to use the employee's last name and first name. (More than one way to do this.)
- Change one of the previous queries to include an additional column (call it Role) where each person is designated as Employee, Customer, or Supplier.

### Example 1:

Just as with Relational Algebra, SQL can implement the operations of Union, Intersection and Difference. These operations can only be performed on tables that have the same attributes. (You can also use projection to create tables that have the same attributes listed).

The tables below list students enrolled C++ and in Program Design.

## C++

Name	Group
Bloggs, Joe	IT-b
Andrews, Jane	IT-a
Green, Mary	IT-a

## **Program Design**

Name	Group
Andrews, Jane	IT-a
Black, Grant	IT-b

## Union

Consider the following request:

List the students who are enrolled in either C++ or Program Design.

# In (Intersection)

The question

Who is enrolled in both C++ and Program Design?

SQL does not have an Intersection operator. Instead, the **in** operator can be used. The **In** operator as in Programming Tests for sets membership.