Case Study:
Please use the files from lab2 to load the database.

SafePrint Solutions is a small printing company that works for book publishers (tracked in the **publishers** table). SafePrint Solutions' jobs consist of printing books or parts of books. These jobs are recorded in the **bookjobs** table. A printing job requires the use of materials, such as paper and ink, which are assigned to a job via purchase orders (PO) kept in the **pos** table. Each printing job may have several POs assigned to it. Likewise, each PO may contain several PO items which are recorded in a separate **po_items** table. The one-to-many relationship between **pos** and **po_items** is implemented by the composite foreign key (*job_id, po_id*) in the **po_items** table. The materials which appear in **po_items** are tracked in the **items** table, which records the material description, the quantity on-hand in the warehouse, and the price.

The many-to-many (*:*) relationship between **pos** and **items** is decomposed into two one-to-many (1:*) relationships by means of the intersection relation **po_items**. [will be taught in week 4]

SafePrint Solutions Relation Structures

publishers (cust_id, name, city, phone, creditcode)
bookjobs (job_id, cust_id, job_date, descr, jobtype)
pos (job_id, po_id, po_date, vendor_id)
items (item_id, descr, on_hand, price)
po_items (job_id, po_id, item_id, quantity)

Write SQL queries for:

1. Display credit code, and the number of publishers for each creditcode (in a column called "Number of Publishers"), and group them according to creditcode, displayed in descending order.
   Hint (count the customer ID).

2. Display Job ID, Po date for situations where po_date is before 1st March 1990. Apply grouping according to job ID.

3. Display credit code, and the count of publishers in a column called Number of publishers. Then group according to the creditcode for all the cases where either the count is greater than 2 or the city or phone is not empty. Then apply ascending order.

4. Find job type and count the number of book jobs, then group by jobtype that have a count greater than or equal to 3.

5. For this question, display the vendor ID, the count of purchase orders, with the following conditions: job Id should NOT be equal to 006 and po_date should be after 01 January 1990. Then group by vendor ID, where the count is greater than 1.