Lab 4 – More on T-SQL

Consider the *employee* database of the following figure, where the primary keys are underlined.

employee (*employee-name*, *street*, *city*)
works (*employee-name*, *company-name*, *salary*)
company (*company-name*, *city*)
manages (*employee-name*, *manager-name*)

1. Write scripts to create the Employee database. Be aware of foreign keys of tables.
2. Write scripts to insert data to the Employee database, at least 5 rows for each table.
Remind: for each foreign key, the sourced data has to be inserted before its reference is inserted. For example, *employee-name* (in table *employee*) and *company-name* (in table *company*) have to be inserted before they are used in table *works*.
3. Write scripts for each of the following queries. Check your output results.
    a. Find the names of all employees who work for First Bank Corporation.
    b. Find the names and cities of residence of all employees who work for First Bank Corporation.
    c. Find the names, street addresses, and cities of residence of all employees who work for First Bank Corporation and earn more than $10,000.
    d. Find all employees in the database who live in the same cities as the companies for which they work.
    e. Find all employees in the database who live in the same cities and on the same streets as do their managers.
    f. Find all employees in the database who do not work for First Bank Corporation.
    g. Find all employees in the database who earn more than each employee of Small Bank Corporation.
    h. Assume that the companies may be located in several cities. Find all companies located in every city in which Small Bank Corporation is located.
    i. Find all employees who earn more than the average salary of all employees of their company.
    j. Find the company that has the most employees.
    k. Find the company that has the smallest payroll.
    l. Find those companies whose employees earn a higher salary, on average, than the average salary at First Bank Corporation.

End of Lab 4