

# Exercise on Relational algebra

Consider the following Relational Schema

*employee* (*person-name*, *street*, *city*)

*works* (*person-name*, *company-name*, *salary*)

*company* (*company-name*, *city*)

*manages* (*person-name*, *manager-name*)

# Write Relational algebra expressions

- 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 address, and cities of residence of all employees who work for First Bank Corporation and earn more than \$10,000 per annum.
- d. Find the names of all employees in this database who live in the same city as the company for which they work.
- e. Find the names of all employees who live in the same city and on the same street as do their managers.
- f. Find the names of all employees in this database who do not work for First Bank Corporation.
- g. Find the names of all employees who earn more than every employee of Small Bank Corporation.
- h. Assume the companies may be located in several cities. Find all companies located in every city in which Small Bank Corporation is located.