COMP 3311: Database Management Systems

Tutorial 3
Relational Algebra (RA) and Structured Query Language (SQL)

Employee(empId, employeeName, street, city)   Works(empId, companyName, salary)

Company(companyName, city)   Manages(employeeEmpId, managerEmpId)

Exercise 1: Find the names of employees who earn more than $10,000 and live in Hong Kong.

RA:

SQL:

Exercise 2: Find the names of the employees who are <u>not</u> managers.

RA:

SQL:

Exercise 3: Find the names of all persons who work for First Bank Corporation and live in the city where the company is located.

RA:

SQL:

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Tutorial 3
Structured Query Language (SQL)

NOTE: Use only SQL constructs discussed in the lectures to answer these queries.

Employee(empId, employeeName, street, city)   Works(empId, companyName, salary)

Company(companyName, city)   Manages(employeeEmpId, managerEmpId)

Exercise 4: Construct an SQL query to find all cities where employees live or where companies are located.

Exercise 5: Construct an SQL query to find the names of all employees who work (in at least one company) and the city of the company in ascending order of employee names.

Exercise 6: Construct an SQL query to find the names and cities of employees who work for exactly one company.