DataBase개론 Team Project3 (Team No:)

(Email 제출 DeadLine 4월 13일 목요일 정오)

1번 5점	List four significant differences between a file-processing system and a DBMS.

2번 5점

What are five main functions of a database administrator?

3번 10점

Explain the distinctions among the terms primary key, candidate key, and superkey

4번 10점

person (*driver_id*, *name*, *address*)
car (*license*, *model*, *year*)
accident (*report_number*, *date*, *location*)
owns (*driver_id*, *license*)
participated (*driver_id*, *license*, *report_number*, *damage_amount*)

Figure 3.11. Insurance database.

Consider the insurance database of Figure 3.11, where the primary keys are underlined. Construct the following SQL queries for this relational database.

a. Find the number of accidents in which the cars belonging to "John Smith" were involved.
b. Update the damage amount for the car with license number "AABB2000" in the accident with report number "AR2197" to $3000.

5번 10점

employee (employee_name, street, city)
works (employee_name, company_name, salary)
company (company_name, city)
manages (employee_name, manager_name)

Figure 3.12. Employee database.

Consider the relational database of Figure 3.12. Give an expression in SQL for each of the following queries.

a. Give all employees of First Bank Corporation a 10 percent raise.
b. Give all managers of First Bank Corporation a 10 percent raise.
c. Delete all tuples in the *works* relation for employees of Small Bank Corporation

6번 10점

employee (<u>employee_name</u>, street, city)
works (<u>employee_name</u>, company_name, salary)
company (<u>company_name</u>, city)
manages (<u>employee_name</u>, manager_name)

Figure 3.12. Employee database.

Give an SQL schema definition for the employee database of Figure 3.12. Choose an appropriate domain for each attribute and an appropriate primary key for each relation schema