Example 04:
Database Management System

Consider the following database with four relations.

employee(<u>employee-name</u>, street, city)	company(<u>company-name</u>, city)
works(<u>employee-name</u>, company-name, salary)	manages(<u>employee-name</u>, manager-name)

1. Insert the following data into those relations

Employee

employee-name	Street	city
Arif	51 upashahar	Rajshahi
Sumon	52 east	Moynamati
Sagor	Neemgachhi	Sirajgong
Abdul	Binodpur	Rajshahi
Himesh	Nazrul avenue	Dhaka
Amirul	Chawk bazar	Sylhet
Sajib	99 north	Chittagong

company

compny-name	city
Agrani	Rajshahi
Sonali	Sylhet
Janata	Dhaka

Works

employee-name	company-name	salary
Sumon	Agrani	12000
Abdul	Sonali	13000
Himesh	Agrani	6000
Amirul	Sonali	20000
Sagor	Sonali	8000
Arif	Janata	13000
Sajib	Janata	9000

Manages

employee-name	manager-name
Amirul	Amirul
Abdul	Amirul
Sagor	Amirul
Sumon	Sumon
Himesh	Sumon
Arif	Arif
Sajib	Arif

2. Find the names of all employee who work for "Sonali".
3. Find the names, streets and cities residence of all employees who work for "Agrani".
4.   Find the names, streets and cities residence of all employees who work for "Sonali" and earn more than 1,20,000 per annum.
5. Find all employees in the database who live in the same cities as the companies for which they work.
6. Find all employees in the database who live in the same cities and on the same streets as do their managers.
7. Find all employees in the database who do not work for "Sonali" Bank.
8. Find all employees in the database who earn more than each employee of "Janata" Bank
9. Find all employees who earn more than the average salary of all employees of their companies.
10. Find the company that has the most employees.
11. Find the company that has the smallest payroll.
12. Find those companies whose employees earn a higher salary, on average, than the average salary at "Agrani" Bank.
13. Modify the database so that "Arif" now lives in Natore.
14. Give all employees of "Agrani" Bank 1 10 percent raise.
15. Give all managers of "Agrani" Bank a 10 percent salary raise.
16. Give all managers a 10 percent salary raise unless salary becomes greater than 19,000; in such cases, give only a 3 percent salary raise.
17. Delete all tuples in the works relation for employees of "Janata" Bank.
18. Define a view consisting of manager-name and average salary of all employees who work for that manager. Now try to modify that view.