DBMS Assignment on SQL Queries:

I. Create tables in the database using the following schema. Use appropriate data types for every column and define primary keys.

Database schema

Table 1: employee

employee_name	city	street

Table 2: works

employee_name	company_name	salary

Table 3: company

company_name	City

Table 4: manages

employee_name	manager_name

II. Insert some sample data into each of the tables. Few examples shown below:

employee_name	City	Street
Neena	Bangalore	10
Shanta	Hyderabad	6
Raman	Delhi	12
David	Bangalore	4
Julia	Delhi	7
Hermann	Bangalore	12
Sarah	Mumbai	10
Kevin	Hyderabad	6
Nandita	Delhi	7
Robin	Bangalore	12

employee_name	company_name	Salary
Neena	ABC Networks	35000
Shanta	ABC Networks	40000
Raman	First Bank Corp	60000
David	XYZ Systems	35000
Julia	First Bank Corp	60000
Hermann	XYZ Systems	35000
Sarah	XYZ Systems	45000
Kevin	ABC Networks	60000
Nandita	First Bank Corp	80000
Robin	XYZ Systems	70000

company_name	City
ABC Networks	Hyderabad
First Bank Corp	Delhi
XYZ Systems	Bangalore
ABC Networks	Bangalore
XYZ Systems	Mumbai
Small Bank Corp	Delhi
BEQ Systems	Mumbai

employee_name	manager_name
Neena	Kevin
Shanta	Kevin
Raman	Nandita
David	Robin
Julia	Nandita
Hermann	Robin
Sarah	Robin

III. Write queries to get the following:

1. Find the names, street address, and cities for all employees who work for 'First Bank Corp'.
2. Find the names, street address, and cities for all employees who earn more than 40,000.
3. Find the names of all employees who live in the same cities as the companies for which they work.
4. Find the names of all employees who live in the same cities and on the same streets as do their managers.
5. Find the names of all employees in the database who do not work for 'First Bank Corp'. Assume that all people work for exactly one company.
6. Find the average salary of employees working for ‘XYZ Systems’.
7. Find the names of all employees who earn more than the average salary of all employees of their company. Assume that all people work for at most one company
8. Find the names of all employees who do not work for ‘ABC Networks’.
9. Get all employee details from the employee table order by first name, descending.
10. Get the name and salary of employees working in ascending order of salary.
11. Get the number of employees working for ‘XYZ Systems’.
12. Get the employee name, salary, annual salary of all the employees from employee table. Assume that the salary given is monthly salary.
13. Get the maximum and minimum salary from employees table.
14. Assume that the companies may be located in several cities. Find all companies located in every city in which 'XYZ Systems' is located.
15. Display the name of company and the count of employees working for every company.
16. Display the names of companies located in every city, grouping by city names.
17. Display the number of employees under every manager.
18. Get the name of all employees who live either in ‘Bangalore’ or ‘Hyderabad’.
19. Get the name of all employees whose names start with ‘R’.
20. Find the names of all cities where companies are located. The list should not have repetition.
21. Get the names of employees and managers in alphabetical order of employee_name.
22. Neena’s salary increased by 5000. Modify the ‘works’ table to reflect this change.
23. ‘Small Bank Corp’ opened a new branch in Mumbai. Add information to the company table to reflect this change.
24. Add a new field ‘department’ to the ‘manages’ table.
25. Drop all tables from the database.

Prepare a document for all the queries with screenshots showing the command and the output for each of these.