Week3 Assignments

Consider the relation schema where the primary keys are underlined.

Employee(person\_name,street,city)

Works(person\_name,company\_name,salary)

Company(company\_name,city)

Manages(person\_name,manager\_name)

Give an expression in relational in the relational algebra to express each of the following

1. Find the name of all employees who works foe TCS.
2. Find the names and cities of residence of all employee who works for TCS.
3. Find the names ,street address and cities of residence of all employees who work for TCS and earn more than Rs. 500000 per annum.
4. Find the names of all employees in the database who lives in the same city as the company for which they work.
5. Find the name of all employee who live in the same city and the same street as do their managers.
6. Find the names of employee who earn more than every employee of Infosys.
7. Assume that the companies are located in several cities . Find all companies located in every city in which TCS is located.
8. Modify the database so that Ravi now lives in Mumbai.
9. Give all employees a 10% salary raise.
10. Delete all topples in the works relation for employees of Infosys.
11. Find the sum of the salaries.
12. Give all managers in the database a 10% salaries raise.
13. Give all managers in the database a 10% salary raise ,unless the salary would be greater than 10000 otherwise give 3% raise.