

PROJECT 02

Employee (ssn , name, address, salary, sex, e-type)
Employee_Works_For_Department (e_ssn , d-id)
Employee_Manages_Department (e_id , d_id , start_date)
Department (id , name, location)
Department_Controls_Project (d_id , p_id)
Project (id , name, location)
Employee_Works_On_Project (e_id , p_id , hours)
Employee_Dependents_Of (e_id , dt_id)
Dependent (id , name, birth_date, relationship)
Employee_Has (e_id , s_id)
Supervisor (id , name, title)

1. Given the relational schema of the database, find the SQL nested queries of the following :

- a . Find the name of the employee who is the manager of a department that controls a project which is held on Seoul.
- b. Find the departments which have employees who are supervised by 'Choi Ji Woo '.
- c. Find the full-time employees who are either works on Project X or has a cousin named as 'Hyun Bin'.
- d . Find the dependents who were born before January 1970 and are the dependents of an employee that either works on Finance Department or is a manager of Marketing department.
- e. Find the supervisors who supervises an employee that works on a project more than 2 hours or works on a project that is held on Taejeon.
- f . Find the nephews of the employees which is on the Finance or Marketing department (either working or managing)
- g. Find the employees who is supervised by 'Jang Hyuk ' that is work on Project Y more than 3 hours. (either working or managing)
- h . Find the mothers of the half-time employees that is on Finance department but does not works on project Y.
- i. Find the title of the supervisors that supervises an employee that works on Project Z who has no cousin.
- j. Find the employees whose salary more than 1000 euro and works on Project X and does not have a relationship with 'Ji Sung'

2. Construct a trigger in which everytime a user insert a Dependent entry into the database, if the user leaves out the relationship null, it is updated to “cousin”.
3. Create a trigger which calculates the total salary of the employees in the database.

Remark:

Employees can be two types in this database, either half-time or full-time which is specified as e-type in the Employee table. And half-time employees might not belong to a specific department. So, Employee-Works-On_Project relationship has to be in this database without constructing any redundancy.