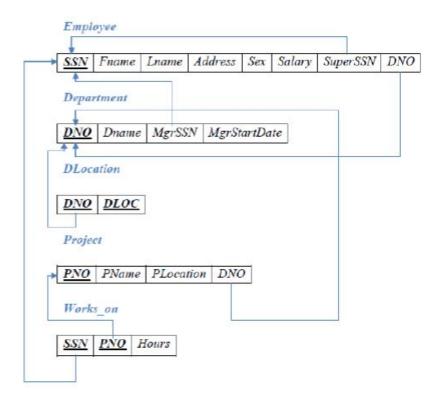
Lab Assignment – 5

- 1. Use the BANKING Schema of lab assignment 4.
- a. Display all account numbers, branch name and corresponding branch city.
- b. Find the customer names and their loan numbers for all customers having a loan at some branch.
- c. Find the name, loan number and loan amount of all customers; rename the column name *loan number* as *loan id*.
- d. Find the names of all branches that have greater assets than some branch located in 'Kochi'.
- e. Display all customers having a loan in 'Kollam' branch in the ascending order of their names.
- f. Find all the customers who have at least two accounts at the Main branch.
- g. Find the balances of all accounts held by the customer with name 'Mekha'.
- h. For every customer, find the number of loans he/she owns.
- i. Find all customers who have either an account or a loan (but not both) at the bank.
- j. Find the number of depositors for each branch.
- k. Find the Cartesian product borrower x loan.

2. COMPANY database:

EMPLOYEE (<u>SSN</u>, Fname, Lname, Address, Sex, Salary, SuperSSN, DNo)
DEPARTMENT (<u>DNo</u>, DName, MgrSSN, MgrStartDate)
DLOCATION (<u>DNo,DLoc</u>)
PROJECT (<u>PNo</u>, PName, PLocation, DNo)
WORKS ON (<u>SSN</u>, PNo, Hours)

Schema Diagram



- a. Create the above tables by properly specifying the primary keys and the foreign keys
- b. Enter at least three tuples for each relation.
- c. Retrieve the name and address of all employees who work for the 'Research' department.
- d. For every project located in 'Stafford', list the project number, the controlling department number, and the department manager's last name, address, and birth date.
- e. Retrieve the names of all employees who do not have supervisors.
- f. Find the maximum salary, the minimum salary, and the average salary among employees who work for the 'Research' department.
- g. For each department, retrieve the department number, the number of employees in the department, and their average salary.
- h. For each project, retrieve the project number, project name, and the number of employees who work on that project.
- i. For each project on which more than two employees work, retrieve the project number, project name, and the number of employees who work on that project.
- j. Retrieve the name of each dept and number of employees working in each department which has at least 2 employees