

## EXPERIMENT NO: -

**AIM:** - Establishing an environment for relational database management and data retrieval in Relational Algebra.

### Problem Definition:

For the conceptual schemata of the database, establish an environment for the execution of simple and advanced queries in Relational Algebra. The global schemata is as below

**Employee** (person-name, street, city)

**Works** (person-name, company-name, salary)

**Company** (company-name, city)

**Manages** (person-name, manager-name)

Use proper data types for the columns indicated in the tables. Also, use proper PRIMARY KEY and FOREIGN KEY for the various tables.

### Installation of Relational: Educational Tool for Relational Algebra:

Relational can be installed on Windows / Linux / Mac OS.

### To install on Ubuntu:

```
# sudo apt-get update
```

```
# sudo apt-get install relational
```

### Queries:

1. Find the names of all employees who work for First Bank Corporation.
2. Find the names and cities of residence of all employees who work for First Bank Corporation.
3. Find the names, street address, and cities of residence of all employees who work for First Bank Corporation and earn more than \$10,000 per annum.
4. Find the names of all employees in this database who live in the same city as the company for which they work.
5. Find the names of all employees who live in the same city and on the same street as do their managers.
6. Find the names of all employees in this database who do not work for First Bank Corporation.
7. Find the names of all employees who earn more than every employee of Small Bank Corporation.
8. Assume the companies may be located in several cities. Find all companies located in every city in which Small Bank Corporation is located.