

Consider following Relation

Employee(emp_id,employee_name,street,city)
Works(employee_name,company_name,salary)
Company(company_name,city)
Manages(employee_name,manager_name)

Create above tables with appropriate constraints like primary key, foreign key, not null etc.

1. Find the names of all employees who work for "TCS".
2. Find the names and company names of all employees sorted in ascending order of company name
and descending order of employee names of that company.
3. Change the city of employee working with InfoSys to "Bangalore"
4. Find the names, street address, and cities of residence for all employees who work for
'TechM' and earn more than \$10,000.
5. Add Column Asset to Company table.

-- Create tables with constraints

```
CREATE TABLE Employee (  
    emp_id INT PRIMARY KEY,  
    employee_name VARCHAR(255) NOT NULL,  
    street VARCHAR(255),  
    city VARCHAR(255)  
);
```

```
CREATE INDEX idx_employee_name ON Employee (employee_name);
```

```
CREATE TABLE Works (  
    employee_name VARCHAR(255),  
    company_name VARCHAR(255),  
    salary DECIMAL(10, 2),  
    PRIMARY KEY (employee_name, company_name),  
    FOREIGN KEY (employee_name) REFERENCES Employee(employee_name)  
);
```

```
CREATE TABLE Company (  
    company_name VARCHAR(255) PRIMARY KEY,  
    city VARCHAR(255)  
);
```

```
CREATE TABLE Manages (  
    employee_name VARCHAR(255),  
    manager_name VARCHAR(255),  
    PRIMARY KEY (employee_name),  
    FOREIGN KEY (employee_name) REFERENCES Employee(employee_name)  
);
```

-- Insert data into tables

```
INSERT INTO Employee VALUES (1, 'John Doe', '123 Main St', 'New York');  
INSERT INTO Employee VALUES (2, 'Alice Smith', '456 Oak St', 'San Francisco');  
-- Add more employee records as needed
```

```
INSERT INTO Works VALUES ('John Doe', 'TCS', 12000.00);
```

```

INSERT INTO Works VALUES ('Alice Smith', 'TechM', 15000.00);
-- Add more Works records as needed

INSERT INTO Company VALUES ('TCS', 'Mumbai');
INSERT INTO Company VALUES ('TechM', 'Bangalore');
-- Add more Company records as needed

-- Queries
-- 1. Find the names of all employees who work for 'TCS'.
SELECT E.employee_name
FROM Employee E
JOIN Works W ON E.employee_name = W.employee_name
WHERE W.company_name = 'TCS';

-- 2. Find the names and company names of all employees sorted in
-- ascending order of company name and descending order of employee names of
that company.
SELECT E.employee_name, W.company_name
FROM Employee E
JOIN Works W ON E.employee_name = W.employee_name
ORDER BY W.company_name ASC, E.employee_name DESC;

-- 3. Change the city of employees working with InfoSys to 'Bangalore'.
UPDATE Employee
SET city = 'Bangalore'
WHERE employee_name IN (SELECT employee_name FROM Works WHERE company_name =
'InfoSys');

-- 4. Find the names, street address, and cities of residence for
-- all employees who work for 'TechM' and earn more than $10,000.
SELECT E.employee_name, E.street, E.city
FROM Employee E
JOIN Works W ON E.employee_name = W.employee_name
WHERE W.company_name = 'TechM' AND W.salary > 10000.00;

-- 5. Add Column Asset to Company table.
ALTER TABLE Company
ADD COLUMN Asset DECIMAL(15, 2);

```