**SIR SYED UNIVERSITY OF ENGINEERING & TECHNOLOGY**

**COMPUTER SCIENCE AND INFORMATION TECHNOLOGY DEPARTMENT**

**SPRING 2021**

**DATABASE SYSTEM (CS-329)**

**Assignment 3**

Semester: 5TH Batch: 2019

Due Date: 3-June-2021 Max Marks: 5

**Name: Munib ul hassan**

**Roll No: CS19-037**

**Section: “A”**

* lives(person-name,street,city)
* works(person-name, company-name,salary)
* located-in(company-name,city)
* manages(person-name,manager-name)

**Consider the above schema and solve given queries using Relational Algebra**

1. Find all tuples in works of all persons who work for the City Bank company (which is a specific company in the database).

**Answer:**

II person-name (σcompany-name = “City Bank Company” (works))

1. Find the name of persons working at City Bank who earn more than $50,000

**Answer:**

IIperson-name (σ(company-name = “City Bank Company” ∧ salary > 50000) works ∞ lives)

1. Find names of all persons who live in the same city and on the same street as their manager

**Answer:**

IIperson-name((lives∞manages)∞(manager-name = lives2.person-name.street= lives2street ∧ lives.city= lives2.city)(ρlives2 (lives)))

1. Find names of all persons who do not work for City Bank

**Answer:**

IIperson-name (σcompany-name = “city bank company” (works))

1. Rename lives table as Person

**Answer:**

Rename table lives TO person