**Lab 06**

Consider the following two relations:

**Employee 1:**

|  |  |  |  |
| --- | --- | --- | --- |
| **EmpName** | **Designation** | **Age** | **Salary** |
| Khalid Khan | Director | 38 | 65000 |
| Tariq Khan | Supervisor | 27 | 16000 |
| Sadiq Amin | Account Officer | 28 | 28000 |
| Shabir Hussain | Manager | 35 | 40000 |
| Tanveer Ahmad | Admin Officer | 30 | 30000 |
| Farooq | Clerk | 25 | 12000 |

**Employee 2:**

|  |  |  |  |
| --- | --- | --- | --- |
| **EmpName** | **Designation** | **Age** | **Salary** |
| Farukh | Lecturer | 27 | 25000 |
| Waqar Shah | Assistant Professor | 35 | 45000 |
| Jibran Akhtar | Network Admin | 28 | 27000 |
| Yasir Zaib | HR Manager | 35 | 42000 |

You are required to perform the following relational algebra operations.

1. **σ** Salary >20000 (Employee 1)
2. **σ** Salary <40000 (Employee 2)
3. **Π** EmpName, Salary (Employee 2)
4. Employee 1 **U** Employee 2

**Solution:**

**1**

|  |  |  |  |
| --- | --- | --- | --- |
| **EmpName** | **Designation** | **Age** | **Salary** |
| Khalid Khan | Director | 38 | 65000 |
| Sadiq Amin | Account Officer | 28 | 28000 |
| Shabir Hussain | Manager | 35 | 40000 |
| Tanveer Ahmad | Admin Officer | 30 | 30000 |

**2**

|  |  |  |  |
| --- | --- | --- | --- |
| **EmpName** | **Designation** | **Age** | **Salary** |
| Farukh | Lecturer | 27 | 25000 |
| Jibran Akhtar | Network Adin | 28 | 27000 |

**3**

|  |  |
| --- | --- |
| **EmpName** | **Salary** |
| Farukh | 25000 |
| Waqar Shah | 45000 |
| Jibran Akhtar | 27000 |
| Yasir Zaib | 42000 |

**4**

|  |  |  |  |
| --- | --- | --- | --- |
| **EmpName** | **Designation** | **Age** | **Salary** |
| Khalid Khan | Director | 38 | 65000 |
| Tariq Khan | Supervisor | 27 | 16000 |
| Sadiq Amin | Account Officer | 28 | 28000 |
| Shabir Hussain | Manager | 35 | 40000 |
| Tanveer Ahmad | Admin Officer | 30 | 30000 |
| Farooq | Clerk | 25 | 12000 |
| Farukh | Lecturer | 27 | 25000 |
| Waqar Shah | Assistant Professor | 35 | 45000 |
| Jibran Akhtar | Network Adin | 28 | 27000 |
| Yasir Zaib | HR Manager | 35 | 42000 |

**Mechanism to Conduct Lab:**

Lab will be conducted via Adobe Connect.