CS 4347.005 - Database Systems

Final	Rep	ort	Deliv	erabl	e 1

Student Record Keeping System

Mia Sorola Yoshida, Abbas Khawaja, Vaishnavi Josyula, Anveetha Suresh, Justin Lu, Ahimsa Yukta, Abhishek Madhavan, Shubham Patel, Paribesh Upreti

0. Description:

- *Title*: Student Record Keeping System
- Github Link: https://github.com/justinlu200014/CS-4347-Group-6-project
- *Group Members:*
 - o Paribesh Upreti pxu200001@utdallas.edu
 - o Abhishek Madhavan <u>axm200159@utdallas.edu</u>
 - Anveetha Suresh axs220399@utdallas.edu
 - o Mia Sorola Yoshida mas220015@utdallas.edu
 - Vaishnavi Josyula vxj210016@utdallas.edu
 - o Abbas Khawaja aik210000@utdallas.edu
 - o Justin Lu <u>jjl200014@utdallas.edu</u>
 - o Shubham Patel shp200002@utdallas.edu
 - Ahimsa Yukta <u>axv210017@utdallas.edu</u>
- Delegation of tasks for the overall project:
 - Paribesh: Frontend
 - UI/UX design: Work on the wireframes and prototypes using Figma and create user flows for authentication and form submissions.
 - Develop landing pages, home pages, and static content pages.
 - Implement student registration and data entry forms with appropriate input fields. Add search and filter components.
 - o Justin: Frontend
 - Define the design system: typography, color palette, button styles, form elements, etc.
 - Implement global styles using CSS/Tailwind CSS to ensure UI consistency.
 - Develop header, sidebar, and footer components for reuse across multiple pages.
 - Shubham: Frontend
 - Implement client form validation for login services.
 - Collaborate with the backend team to fetch data dynamically.
 - Create a navigation menu for quick access to student records, courses, and reports.
 - o Vaishnavi: Frontend
 - Design a clean dashboard interface to display key student statistics and actions.
 - Develop client-side routing logic for pages.
 - Build the student profile page to display personal details and course enrollments.
 - Abhishek: Backend
 - Implement logic to manage student records, ensuring data validation and consistency.
 - Set up role-based access control to manage permissions for different user types.
 - Collaborate with the frontend team to ensure smooth data integration and consistent workflows.
 - Anveetha: Backend
 - Write scripts to import/export bulk student data.
 - Ensure data consistency by setting up constraints like foreign keys and unique IDs.

- Create the relational model for the record keeping system database.
- o Mia: Backend
 - Implement stored procedures and triggers to automate actions (e.g., log changes).
 - Set up backup strategies and write scripts to automate database backups.
 - Create the EER diagram for the record keeping system database.
- Abbas: Backend
 - Create SOL gueries to handle student record creation, updates, and deletions.
 - Set up database indexing to optimize search and filter operations.
 - Create views and work on DDL components of the database.
- o Ahimsa: Backend
 - Develop reports generation scripts to export data summaries (e.g., student grades).
 - Configure transaction handling to ensure atomic operations on student records.
 - Monitor query performance and optimize for better execution times.
- Delegation of tasks for this report:
 - o Paribesh: worked on section 3.3
 - Justin: worked on section 4 and the Github repository
 - Shubham: worked on section 3.1
 - Vaishnavi: worked on sections 0 and 1
 - Abhishek: worked on section 0
 - Anyeetha: worked on section 3.2
 - o Mia: worked on section 3.1
 - Abbas: worked on section 3.4
 - Ahimsa: worked on section 2
- Motivation:
 - Designing a system to help college students manage various aspects of their lives can significantly improve their efficiency and reduce stress.
 - Our design will be used at U.S. universities to simplify administrative processes, benefiting students and institutions by providing student record management solutions.
 - This project has a personal connection to us, as we are college students who deal with the same information on a regular basis. Class schedules, club meetings, tuition, housing, and meal plans are all topics that are familiar to us.
- Project timeline:
 - 1. Motivation and Planning (9/14 9/17):
 - We identified the need for a comprehensive Student Record Keeping System to help students manage various aspects of their lives (schedules, finances, housing, etc.). The initial planning phase involved discussions around the project's scope and setting clear goals for how the system would be implemented and used.
 - 2. Task Delegation (9/18 9/21):
 - The team divided responsibilities across frontend and backend tasks, ensuring a clear focus for each member:
 - Frontend design and development (UI/UX, form validation, routing).
 - Backend database design (data validation, access control, query optimization, stored procedures).

- Report writing was also delegated among the team members, as each person took responsibility for specific sections.
- o 3. Design Phase (9/22 9/26):
 - The EER Conceptual Data Model Design was completed, defining entities such as Student, Course, Assignment, Housing, and Finances.
 - The relationships between entities were mapped out (e.g., a student managing finances or attending events).
- 4. Relational Data Model Design (9/27 10/4):
 - The EER model was mapped to a relational database model, utilizing techniques such as disjoint subclassing for handling different assignment types (exam, homework, quiz).
- 5. Database Creation and Population (10/5 10/11):
 - We created the database and populated it with sample data for testing purposes. This ensured proper population and performed operations like queries, insertions, deletions, and updates to validate the database structure.
- 6. Query Execution and Testing (10/12 10/15):
 - SQL queries were executed for various operations (listing, inserting, deleting, updating data) to ensure that the database functions as expected.
- Report Finalization and Submission Preparation (10/16–10/19):
 - We wrote in our sections of the final deliverable 1 and reviewed them, ensuring all sections were complete and accurate in order to submit.

1. Introduction:

The project we are developing focuses on creating a comprehensive system to help college students manage multiple aspects of their campus life, including but not limited to academic schedules, finances, dining, housing, and extracurricular activities. As college students, we personally understand the challenges of organizing these essential components of student life. With multiple systems to navigate, from academic portals to dining and housing platforms, the process can become overwhelming.

Our goal is to develop a solution that mitigates this complexity by centralizing everything into a single, user-friendly platform. While many existing systems focus primarily on academic performance and grades, our platform goes beyond that. It aims to encompass the full spectrum of student life by including features that address extracurricular involvement, campus events, club participation, meal plans, housing information, and financial responsibilities.

Additionally, by implementing this program, we expect to contribute to the field of security by ensuring that sensitive information such as academic records, financial data, and housing agreements are protected through secure access control mechanisms, encryption, and privacy-focused design. Our contribution also includes enhancing data security in systems that manage multiple types of personal data, ensuring confidentiality, integrity, and availability.

Overall, we aim to provide students with a holistic tool that not only helps them manage their coursework but also promotes a balanced college experience. Through this platform, we aim to allow students to better organize their academic and non-academic lives, helping them stay on top of deadlines, manage extracurricular commitments, track dining and housing plans, and monitor financial obligations—all from one cohesive system.

2. Background and Related Work:

Background:

The Student Record Keeping System that we are developing is unique as it seeks to integrate various aspects of campus life—academic schedules, finances, dining, and housing—into a single cohesive platform. While universities and colleges offer systems that manage each of these components, they are typically separated into different portals. For instance, academic scheduling is handled independently through platforms like university portals, while financial accounts are often managed by bursars. Dining services and housing have their own systems, adding another layer of separation. These separate systems force students to juggle multiple logins and interfaces, dividing and complicating the overall management of their campus life.

For example, at The University of Texas at Dallas (UTD), students manage their academic responsibilities through the Galaxy portal, which handles class registration, schedules, and grades, while financial responsibilities such as tuition payments and fee management are processed through bursar account, housing services are handled via another distinct account, and dining plans are overseen by UTD Services, creating multiple systems that students need to navigate. This segmentation results in inefficient and unstreamlined access to critical student services.

Our platform aims to integrate these functionalities, combining academic, financial, housing, and dining services into a unified system. While the individual components already exist in various forms across different institutions, no system has yet to fully integrate them into a single platform for students. The strength of our implementation lies in its ability to consolidate these aspects, making it easier for students to manage all facets of their college experience from one centralized system with a singular database rather than different accounts and websites that each deal with different databases, a concept that has yet to be fully realized despite the availability of these individual services.

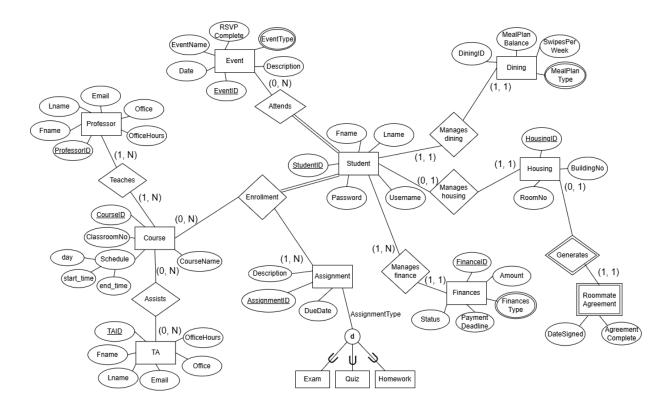
Related Work:

Our project builds on several important studies and systems in the areas of student record management. Below is a chronological list of these works, with a brief explanation of their contributions and how our work extends beyond them.

1. Eludire, A. (2011) [1] – The Design and Implementation of Student Academic Record Management System: This paper focuses on tracking student performance through grades and

class schedules, with an emphasis on data accuracy and usability. It provides a system to manage academic records efficiently but does not extend to other aspects of student life. Our project builds on this idea by integrating non-academic services like financial payments, housing, and dining to create a more comprehensive platform. This added integration ensures students can manage all aspects of their college experience in one place. As a result, our solution not only tracks academic progress but also simplifies life beyond the classroom.

- 2. Bidyarthy, A. S., & Kumar, A. (2012) [2] Student Database Management System: This paper automates the management of academic data, including grades, attendance, and course schedules. While it efficiently handles academic processes, its scope is restricted to academic records. Our project expands on this by integrating other areas of student life, such as housing assignments, dining plans, and financial payments. This holistic approach ensures students have a unified platform to manage both academic and non-academic tasks. With a broader scope, our system meets a wider range of student needs.
- 3. Tamboli, A. (2017) [3] Institute Administration Automation and Student Database Management System: This paper emphasizes the automation of institutional processes, focusing on course registration, admissions, and student records through a software platform. Although it improves institutional efficiency, the system is limited to academic and administrative tasks. Our project extends the automation to areas like housing and dining, along with financial accounts, providing students with a seamless experience. Additionally, our platform includes personalized features, such as roommate agreements and housing costs, designed to address the specific needs of college students at institutions like UTD. This personalization makes our solution more relevant to the everyday lives of students.
- 3. Design & Implementation (Phase I):
- 3.1. EER Conceptual Data Model Design:



Entities, Attributes, Data Types:

• Student

- o StudentID INT
- Fname VARCHAR(20)
- Lname VARCHAR(20)
- Username VARCHAR(20)
- Password VARCHAR(20)
- Note: The student is the one using the website to track their college life. So, we need to
 collect their login information so students can access the website based on their personal
 information. We don't need to collect their email or phone numbers because this platform
 will be meant for students.

Event

- EventID INT
- Date DATETIME
- EventName VARCHAR(45)
- o RSVPComplete BIT
- EventType VARCHAR(20)
 - Note: multivalued attribute (club, volunteering, etc)
- Description VARCHAR(45)

Course

- o CourseID INT
- CourseName VARCHAR(45)
- o ClassroomNo VARCHAR(10)
- Schedule: {day, start time, end time} DATETIME

- Note: composite attribute
- Professor
 - o ProfessorID INT
 - Fname VARCHAR(20)
 - Lname VARCHAR(20)
 - Email VARCHAR(45)
 - Office VARCHAR(45)
 - o OfficeHours DATETIME
- TA
- o TAID INT
- Fname VARCHAR(20)
- Lname VARCHAR(20)
- Email VARCHAR(45)
- Office VARCHAR(45)
- o OfficeHours DATETIME
- Assignment (Supertype)
 - AssignmentID INT
 - DueDate DATETIME
 - o Description VARCHAR(45)
 - AssignmentType (disjoint subclasses)
 - Exam
 - Homework
 - Quiz
- Finances
 - o FinancesID
 - Amount DECIMAL
 - FinancesType VARCHAR(45)
 - (tuition, books, room and board, dining, etc)
 - Multivalued
 - PaymentDeadline DATETIME
 - Status BIT
 - (1- paid, 0 unpaid)
- Dining
 - o DiningID INT
 - o MealPlanBalance DECIMAL
 - o SwipesPerWeek INT
 - MealPlanType VARCHAR(45)
 - multivalued
- Housing
 - HousingID INT
 - BuildingNo VARCHAR(45)
 - o RoomNo VARCHAR(45)
- RoommateAgreement (Weak entity of Housing)
 - DateSigned DATE

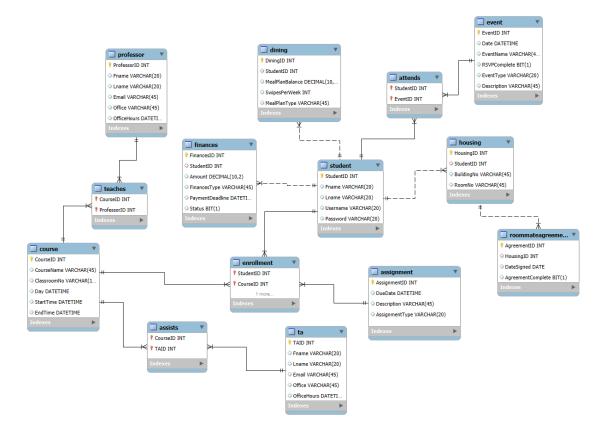
- AgreementComplete BIT
 - (0 No, 1 Yes)

Relationships:

- 1. Attends: Student (Many) Event (Many)
- 2. Teaches: Course (Many) Professor (One)
- 3. Assists: Course (One) TA (Many)
- 4. Enrollment: Student (Many), Course (Many), Assignment (Many)
- 5. Manages finance: Student (One) Finances (Many)
- 6. Manages dining: Student (One) Dining (One)
- 7. Manages housing: Student (One) Housing (One)
- 8. Generates: Housing (One) RoommateAgreement (One)
- 9. Super/Subclass relationship (disjoint) Assignment superclass with exam, quiz, homework subclasses

3.2. Relational Data Model Design:

Note: To map an EER Model to a Relational Model, we chose Option 8C: Single relation with one type attribute which is defined by R. Elmasri and S. Navathe [4]. The superclass "Assignment" has an "AssignmentType" attribute to specify its subclasses: Exam, Homework, and Quiz.



3.3. Create your Database and Populate:

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SQLQuery1.sql - D...H1SG5H\Parib (55))* 🗘 🗶
SQLQuery1.sql - D...H1SG5H\Parib (55))* ≠ ×
                                                                 USE StudentRecordSystem;
     -- Create the database
     CREATE DATABASE StudentRecordSystem;
                                                                   -- Create Student table
                                                                 CREATE TABLE Student (
                                                                       StudentID INT PRIMARY KEY,
                                                                       Fname VARCHAR(20),
                                                                       Lname VARCHAR(20),
                                                                       Username VARCHAR(20),
                                                                       Password VARCHAR(20)
                                                             110 % -
110 % - 4

■ Messages

    Messages

                                                                Commands completed successfully.
   Commands completed successfully.
                                                                Completion time: 2024-10-17T17:03:27.7433292-05:00
   Completion time: 2024-10-17T16:59:20.0843077-05:00
```

```
SQLQuery1.sql - D...H1SG5H\Parib (55))* + X
     -- Create Event table
   □CREATE TABLE Event (
         EventID INT PRIMARY KEY,
         Date DATETIME,
         EventName VARCHAR(45),
         RSVPComplete BIT,
         EventType VARCHAR(20),
         Description VARCHAR(45)
     );
     -- Create Course table
   CREATE TABLE Course (
         CourseID INT PRIMARY KEY,
         CourseName VARCHAR(45),
         ClassroomNo VARCHAR(10),
         Day VARCHAR(10),
         StartTime TIME,
         EndTime TIME
110 % 🔻 🖣
Commands completed successfully.
   Completion time: 2024-10-17T17:05:38.8053011-05:00
110 % -
Query executed successfully.
```

```
SQLQuery1.sql - D...H1SG5H\Parib (55))* 😕 🗶
     -- Create Professor table
   □CREATE TABLE Professor (
         ProfessorID INT PRIMARY KEY,
         Fname VARCHAR(20),
        Lname VARCHAR(20),
         Email VARCHAR(45),
         Office VARCHAR(45),
         OfficeHours DATETIME
    );
     -- Create TA table
   CREATE TABLE TA (
         TAID INT PRIMARY KEY.
         Fname VARCHAR(20),
         Lname VARCHAR(20),
         Email VARCHAR(45),
         Office VARCHAR(45),
         OfficeHours DATETIME
    );
110 % -

    Messages

  Commands completed successfully.
  Completion time: 2024-10-17T17:07:32.4606207-05:00
110 % -
Query executed successfully.
```

```
-- Create Assignment Table
CREATE TABLE Assignment (
     AssignmentID INT PRIMARY KEY,
     DueDate DATETIME,
     Description VARCHAR(45),
     AssignmentType VARCHAR(20) -- 'Exam', 'Homework', 'Quiz'
 -- Create Exam Table (Subclass)
CREATE TABLE Exam
     ExamID INT PRIMARY KEY,
     AssignmentID INT NOT NULL FOREIGN KEY REFERENCES dbo.Assignment(AssignmentID) ON UPDATE CASCADE ON DELETE CASCADE
 );
 -- Create Grade Table (Subclass)
CREATE TABLE Quiz
     QuizID INT PRIMARY KEY,
     AssignmentID INT NOT NULL FOREIGN KEY REFERENCES dbo.Assignment(AssignmentID) ON UPDATE CASCADE ON DELETE CASCADE
 -- Create Homework Table (Subclass)
CREATE TABLE Homework
     HomeworkID INT PRIMARY KEY,
     AssignmentID INT NOT NULL FOREIGN KEY REFERENCES dbo.Assignment(AssignmentID) ON UPDATE CASCADE ON DELETE CASCADE
```

```
-- Create Finances Table
CREATE TABLE Finances (
      FinancesID INT PRIMARY KEY.
      StudentID INT,
      Amount DECIMAL(10, 2),
      FinancesType VARCHAR(45),
       PaymentDeadline DATETIME,
       Status BIT,
      FOREIGN KEY (StudentID) REFERENCES Student(StudentID) ON UPDATE CASCADE ON DELETE CASCADE
  );
  -- Create Dining Table
CREATE TABLE Dining (
      DiningID INT PRIMARY KEY,
      StudentID INT,
      MealPlanBalance DECIMAL(10, 2),
      SwipesPerWeek INT.
      MealPlanType VARCHAR(45),
      FOREIGN KEY (StudentID) REFERENCES Student(StudentID) ON UPDATE CASCADE ON DELETE CASCADE
  -- Create Housing Table
□CREATE TABLE Housing (
      HousingID INT PRIMARY KEY,
      StudentID INT,
      BuildingNo VARCHAR(45),
      RoomNo VARCHAR(45),
      FOREIGN KEY (StudentID) REFERENCES Student(StudentID) ON UPDATE CASCADE ON DELETE CASCADE
 );
  -- Create RoommateAgreement Table (Weak entity of Housing)
□ CREATE TABLE RoommateAgreement (
      HousingID INT,
      DateSigned DATE,
      AgreementComplete BIT,
      PRIMARY KEY (HousingID),
      FOREIGN KEY (HousingID) REFERENCES Housing(HousingID) ON UPDATE CASCADE ON DELETE CASCADE
 );
□ INSERT INTO Event (EventID, Date, EventName, RSVPComplete, EventType, Description) VALUES
 (1, '2024-09-01 18:00:00', 'Welcome Party', 1, 'Social', 'Welcome to campus!'),
(2, '2024-09-05 12:00:00', 'Orientation', 1, 'Informational', 'New student orientation'),
(3, '2024-10-01 14:00:00', 'Midterm Study Session', 0, 'Academic', 'Group study for midterms'),
(4, '2024-11-10 17:00:00', 'Career Fair', 1, 'Career', 'Meet potential employers'),
(5, '2024-12-15 18:00:00', 'Holiday Party', 0, 'Social', 'Celebrate the holidays'),
  (6, '2024-08-25 15:00:00', 'Welcome Back BBQ', 1, 'Social', 'BBQ to welcome students'),
 (7, '2024-09-10 16:00:00', 'Health Workshop', 0, 'Health', 'Mental health awareness'),
  (8, '2024-10-20 13:00:00', 'Tech Workshop', 0, 'Academic', 'Learn new tech skills'),
  (9, '2024-11-25 10:00:00', 'Finals Prep', 1, 'Academic', 'Get ready for finals'),
  (10, '2024-12-01 19:00:00', 'Alumni Networking', 0, 'Career', 'Meet alumni in your field');
```

```
INSERT INTO Course (CourseID, CourseName, ClassroomNo, Day, StartTime, EndTime) VALUES
 (1, 'Intro to Computer Science', 'B101', 'Monday', '09:00:00', '10:30:00'),
 (2, 'Data Structures', 'C202', 'Wednesday', '10:00:00', '11:30:00'),
 (3, 'Calculus I', 'A303', 'Monday', '11:00:00', '12:30:00'),
 (4, 'Physics I', 'B202', 'Thursday', '12:00:00', '13:30:00'),
 (5, 'History of Art', 'C101', 'Friday', '09:00:00', '10:30:00'),
 (6, 'Operating Systems', 'A105', 'Tuesday', '14:00:00', '15:30:00'),
 (7, 'Algorithms', 'B201', 'Thursday', '15:00:00', '16:30:00'),
 (8, 'Discrete Mathematics', 'C303', 'Monday', '13:00:00', '14:30:00'),
 (9, 'Linear Algebra', 'A204', 'Wednesday', '14:00:00', '15:30:00'), (10, 'Database Systems', 'B102', 'Friday', '10:00:00', '11:30:00');
INSERT INTO Student (StudentID, Fname, Lname, Username, Password) VALUES
 (1, 'John', 'Doe', 'johndoe', 'password123'),
(2, 'Jane', 'Smith', 'janesmith', 'password456'), (3, 'Alex', 'Johnson', 'alexj', 'mypassword'),
 (4, 'Emma', 'Brown', 'emmab', 'emma123'),
 (5, 'Michael', 'White', 'mwhite', 'mikepass'),
(6, 'Emily', 'Taylor', 'emilyt', 'tay123'), (7, 'David', 'Clark', 'dclark', 'david123'),
 (8, 'Sophia', 'Anderson', 'sophiaa', 'sophpass'),
 (9, 'Chris', 'Lee', 'clee', 'lee123'),
 (10, 'Sarah', 'King', 'sarahk', 'king456');
SINSERT INTO Professor (ProfessorID, Fname, Lname, Email, Office, OfficeHours) VALUES
 (1, 'William', 'Jones', 'wjones@university.edu', 'Room 301', '2024-09-01 10:00:00'),
 (2, 'Lisa', 'Miller', 'lmiller@university.edu', 'Room 302', '2024-09-01 11:00:00'),
 (3, 'James', 'Garcia', 'jgarcia@university.edu', 'Room 303', '2024-09-01 09:00:00'),
 (4, 'Mary', 'Wilson', 'mwilson@university.edu', 'Room 304', '2024-09-01 12:00:00'),
 (5, 'Robert', 'Martinez', 'rmartinez@university.edu', 'Room 305', '2024-09-01 14:00:00'),
 (6, 'Patricia', 'Anderson', 'panderson@university.edu', 'Room 306', '2024-09-01 13:00:00'), (7, 'Charles', 'Thomas', 'cthomas@university.edu', 'Room 307', '2024-09-01 08:00:00'), (8, 'Linda', 'Taylor', 'ltaylor@university.edu', 'Room 308', '2024-09-01 10:30:00'),
 (9, 'Michael', 'Hernandez', 'mhernandez@university.edu', 'Room 309', '2024-09-01 09:30:00'),
 (10, 'Elizabeth', 'Moore', 'emoore@university.edu', 'Room 310', '2024-09-01 11:30:00');
□ INSERT INTO Finances (FinancesID, StudentID, Amount, FinancesType, PaymentDeadline, Status) VALUES
 (1, 1, 1500.00, 'Tuition', '2024-09-30 23:59:00', 0),
 (2, 2, 2000.00, 'Tuition', '2024-09-30 23:59:00', 1),
 (3, 3, 100.00, 'Library Fine', '2024-10-15 23:59:00', 1),
 (4, 4, 250.00, 'Dorm Damage', '2024-11-01 23:59:00', 0),
 (5, 5, 500.00, 'Meal Plan', '2024-09-30 23:59:00', 1),
 (6, 6, 600.00, 'Tuition', '2024-09-30 23:59:00', 0), (7, 7, 75.00, 'Lab Fee', '2024-10-10 23:59:00', 1),
 (8, 8, 900.00, 'Tuition', '2024-09-30 23:59:00', 0), (9, 9, 50.00, 'Gym Fee', '2024-11-05 23:59:00', 1),
 (10, 10, 300.00, 'Parking Fine', '2024-11-20 23:59:00', 0);
```

```
∃INSERT INTO Housing (HousingID, StudentID, BuildingNo, RoomNo) VALUES
 (1, 1, 'Building A', '101'),
 (2, 2, 'Building B', '102'),
 (3, 3, 'Building C', '103'),
 (4, 4, 'Building D', '104'),
 (5, 5, 'Building E', '105'),
 (6, 6, 'Building F', '106'),
 (7, 7, 'Building G', '107'),
 (8, 8, 'Building H', '108'),
 (9, 9, 'Building I', '109'),
 (10, 10, 'Building J', '110');
INSERT INTO RoommateAgreement (HousingID, DateSigned, AgreementComplete) VALUES
 (1, '2024-09-01', 1),
 (2, '2024-09-02', 1),
 (3, '2024-09-03', 1),
 (4, '2024-09-04', 0),
 (5, '2024-09-05', 1),
 (6, '2024-09-06', 1),
 (7, '2024-09-07', 0),
 (8, '2024-09-08', 1),
 (9, '2024-09-09', 1),
(10, '2024-09-10', 0);
■ INSERT INTO TA (TAID, Fname, Lname, Email, Office, OfficeHours) VALUES
 (1, 'Tom', 'Parker', 'tparker@university.edu', 'Lab A', '2024-09-02 09:00:00'),
 (2, 'Eve', 'Cooper', 'ecooper@university.edu', 'Lab B', '2024-09-02 10:00:00'),
 (3, 'Lucas', 'Morgan', 'lmorgan@university.edu', 'Lab C', '2024-09-02 11:00:00'),
 (4, 'Grace', 'Wright', 'gwright@university.edu', 'Lab D', '2024-09-02 12:00:00'),
 (5, 'Anna', 'Lopez', 'alopez@university.edu', 'Lab E', '2024-09-02 13:00:00'), (6, 'Daniel', 'Hill', 'dhill@university.edu', 'Lab F', '2024-09-02 14:00:00'),
 (7, 'Mia', 'Scott', 'mscott@university.edu', 'Lab G', '2024-09-02 15:00:00'),
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(8, 'Oliver', 'Torres', 'otorres@university.edu', 'Lab H', '2024-09-02 16:00:00'),
(9, 'Ava', 'Rivera', 'arivera@university.edu', 'Lab I', '2024-09-02 17:00:00'),
(10, 'Henry', 'Nguyen', 'hnguyen@university.edu', 'Lab J', '2024-09-02 18:00:00');

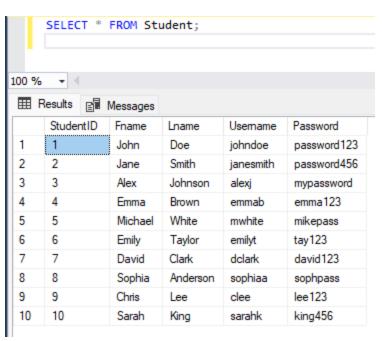
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□INSERT INTO Assignment (AssignmentID, DueDate, Description, AssignmentType) VALUES
  (1, '2024-09-15 23:59:00', 'Homework 1 on Intro to CS', 'Homework'),
  (2, '2024-09-20 23:59:00', 'Quiz on Data Structures', 'Quiz'),
  (3, '2024-10-10 09:00:00', 'Midterm Exam 1', 'Exam'),
  (4, '2024-10-30 23:59:00', 'Project Submission', 'Homework'),
  (5, '2024-11-15 14:00:00', 'Final Quiz', 'Quiz'),
  (6, '2024-11-20 09:00:00', 'Final Exam', 'Exam'),
  (7, '2024-12-01 23:59:00', 'Homework 2 on Calculus', 'Homework'),
(8, '2024-12-10 23:59:00', 'Homework 3 on Linear Algebra', 'Homework'),
  (9, '2024-12-15 09:00:00', 'Final Exam in Physics', 'Exam'),
  (10, '2024-12-20 23:59:00', 'End of Semester Project', 'Homework');
☐INSERT INTO Exam (ExamID, AssignmentID) VALUES
  (1, 3),
  (2, 6),
  (3, 9);
☐ INSERT INTO Quiz (QuizID, AssignmentID) VALUES
  (1, 2),
  (2, 5);
□ INSERT INTO Homework (HomeworkID, AssignmentID) VALUES
  (2, 4),
  (3, 7),
  (4, 8),
  (5, 10);
☐ INSERT INTO Dining (DiningID, StudentID, MealPlanBalance, SwipesPerWeek, MealPlanType) VALUES
 (1, 1, 300.00, 14, 'Gold'),
 (2, 2, 200.00, 10, 'Silver'),
 (3, 3, 150.00, 8, 'Bronze'),
 (4, 4, 250.00, 12, 'Gold'),
 (5, 5, 350.00, 16, 'Platinum'),
 (6, 6, 100.00, 6, 'Bronze'),
 (7, 7, 180.00, 10, 'Silver'),
 (8, 8, 270.00, 14, 'Gold'),
 (9, 9, 50.00, 4, 'Bronze'),
 (10, 10, 300.00, 14, 'Gold');
```

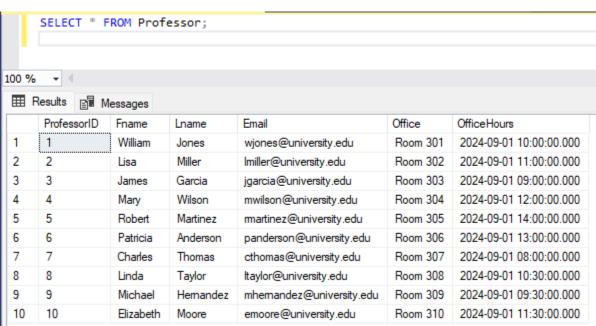
SELECT * FROM Event;

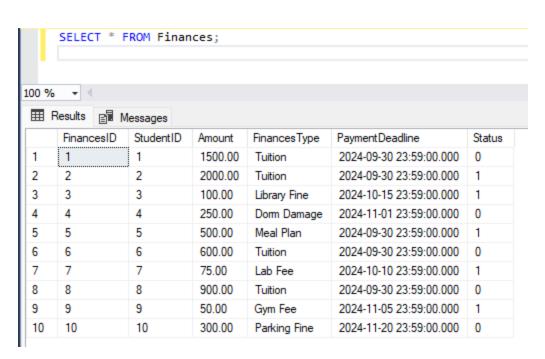
.00 %	. + 4					
⊞	Results 🗐	Messages				
	EventID	Date	EventName	RSVPComplete	Event Type	Description
1	1	2024-09-01 18:00:00.000	Welcome Party	1	Social	Welcome to campus!
2	2	2024-09-05 12:00:00.000	Orientation	1	Informational	New student orientation
3	3	2024-10-01 14:00:00.000	Midterm Study Session	0	Academic	Group study for midterms
4	4	2024-11-10 17:00:00.000	Career Fair	1	Career	Meet potential employers
5	5	2024-12-15 18:00:00.000	Holiday Party	0	Social	Celebrate the holidays
6	6	2024-08-25 15:00:00.000	Welcome Back BBQ	1	Social	BBQ to welcome students
7	7	2024-09-10 16:00:00.000	Health Workshop	0	Health	Mental health awareness
8	8	2024-10-20 13:00:00.000	Tech Workshop	0	Academic	Learn new tech skills
9	9	2024-11-25 10:00:00.000	Finals Prep	1	Academic	Get ready for finals
10	10	2024-12-01 19:00:00.000	Alumni Networking	0	Career	Meet alumni in your field

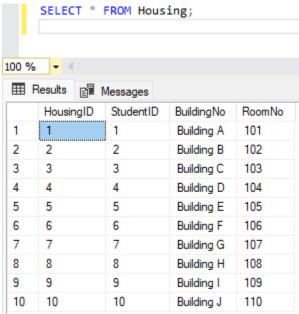
SELECT * FROM Course;

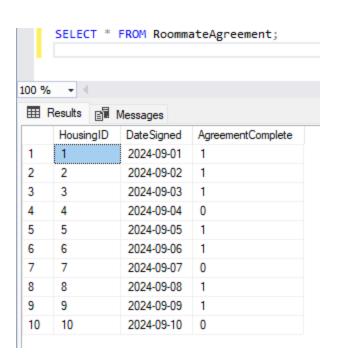
⊞ Results							
	CourseID	CourseName	ClassroomNo	Day	StartTime	EndTime	
1	1	Intro to Computer Science	B101	Monday	09:00:00.0000000	10:30:00.0000000	
2	2	Data Structures	C202	Wednesday	10:00:00.0000000	11:30:00.0000000	
3	3	Calculus I	A303	Monday	11:00:00.0000000	12:30:00.0000000	
4	4	Physics I	B202	Thursday	12:00:00.0000000	13:30:00.0000000	
5	5	History of Art	C101	Friday	09:00:00.0000000	10:30:00.0000000	
6	6	Operating Systems	A105	Tuesday	14:00:00.0000000	15:30:00.0000000	
7	7	Algorithms	B201	Thursday	15:00:00.0000000	16:30:00.0000000	
8	8	Discrete Mathematics	C303	Monday	13:00:00.0000000	14:30:00.0000000	
9	9	Linear Algebra	A204	Wednesday	14:00:00.0000000	15:30:00.0000000	
10	10	Database Systems	B102	Friday	10:00:00.0000000	11:30:00.0000000	



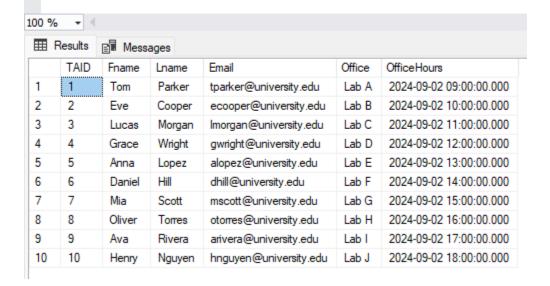


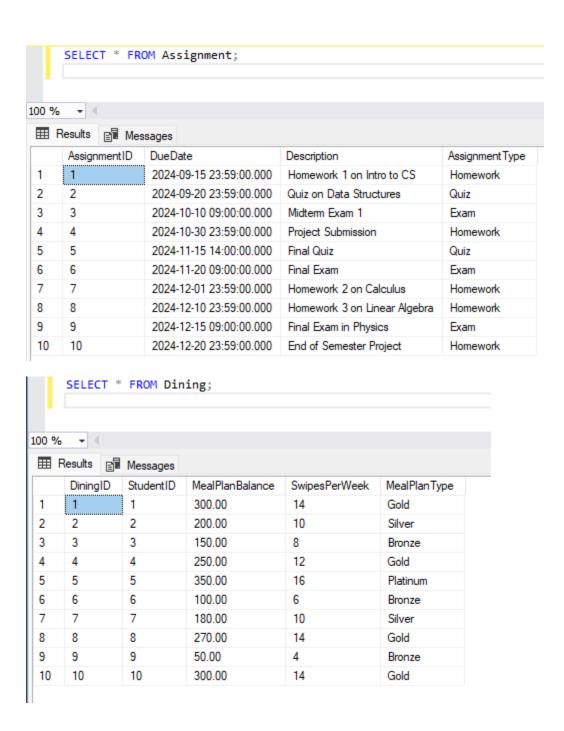






SELECT * FROM TA;





3.4. Database Query Execution (from inside your SQL client):

Use an SQL platform to provide sample executions for each of the following operations on each table of your database: o Query – to perform operations such as list employees earning more than 150K per year o Insert – to add new tuple(s), and/or field(s) to your table(s) o Delete - to remove tuple(s), and/or field(s) from your table(s) o Update - to modify tuple(s), and/or field(s) from your table(s) Provide a screenshot of each operation and each resulting table in your report exactly in this section.

1. Student Table

king456 password123

```
USE StudentRecordSystem
        G-1. Student Table Operations

-- Query: List students with usernames starting with 'john'

GSELECT * FROM Student WHERE Username LIKE 'john%';
           -- Insert: Add a new student
        INSERT INTO Student (StudentID, Fname, Lname, Username, Password)
          VALUES (11, 'Jane', 'Doe', 'janedoe', 'password123');
            -- Delete: Remove a student with StudentID = 11
          DELETE FROM Student WHERE StudentID = 11;
             -- Update: Change the username of StudentID = 2
           UPDATE Student SET Username = 'johnnydoe' WHERE StudentID = 2;
110 % 🕶 🖣

        StudentID
        Fname
        Lname
        Username
        Password

        1
        1
        John
        Doe
        johndoe
        password123

Create Student Rec...JBURK9\abbas (56)) Update Tables.sql...9JBURK9\abbas (55))* + ×
          USE StudentRecordSystem
       ☐-- 1. Student Table Operations

[-- Query: List students with usernames starting with 'john'
☐SELECT * FROM Student WHERE Username LIKE 'john%';
         -- Insert: Add a new student
SELECT * FROM Student

"INSERT INTO Student (StudentID, Fname, Lname, Username, Password)
VALUES (11, 'Jane', 'Doe', 'janedoe', 'password123');
SELECT * FROM Student
         -- Delete: Remove a student with StudentID = 11
DELETE FROM Student WHERE StudentID = 11;
           -- Update: Change the username of StudentID = 2

<u>UDDATE</u> Student SFT Username = 'iohnnvdoe' WHERE StudentTD = 2:
 110 %
 ⊞ Results ⊜ Messages

        Alex
        Johnson
        alexj
        mypasswon

        Emma
        Brown
        emmab 23
        emmab 23

        Michael
        White
        mwhite
        mikepass

        Emily
        Taylor
        emilyt
        tay123

        David
        Clark
        dclark
        david123

                          Sophia Anderson sophiaa
Chris Lee clee
Sarah King sarahk
                                                                          sophpass
  8
9
10
                          Fname Lname Username
Emma Brown emmab
Michael White mwhite
                                                                       Password
emma123

        Michael
        White
        mwhite

        Emily
        Taylor
        emilyt

        David
        Clark
        dclark

        Sophia
        Anders...
        sophiaa

        Chris
        Lee
        clee

        Sarah
        King
        sarahk

        Jane
        Doe
        janedoe

                                                                        tay123
david123
                                                                        sophpass
                                                                         lee123
```

```
Update Tables.sql...9JBURK9\abbas (55)) → ×
         USE StudentRecordSystem
         GO
       ⊡-- 1. Student Table Operations
      -- Query: List students with usernames starting with 'john' 
□SELECT * FROM Student WHERE Username LIKE 'john%';
     -- Insert: Add a new student
        -- Insert: Add a new student
DINSERT INTO Student (StudentID, Fname, Lname, Username, Password)
VALUES (11, 'Jane', 'Doe', 'janedoe', 'password123');
          -- Delete: Remove a student with StudentID = 11
         SELECT * FROM Student
DELETE FROM Student WHERE StudentID = 11;
         SELECT * FROM Student
          -- Update: Change the username of StudentID = 2
υρνατε: tidlige the username of StudentID = 2

IIDDATE Student SET Hisername = 'iohnnydoe' WHERE StudentID = 2:

110 % ▼ 4
 emma123
                      Emma
                      Michael White
                                            mwhite
                                                           mikepass
                      Emily Taylor
David Clark
                                             emilyt
dclark
                                                           tay123
david123
                      Sophia Anderson sophiaa
                                                           sophpass
                     Chris Lee
Sarah King
Jane Doe
  9
10
11
                                             clee
                                                           lee123
                                                          king456
password123
                                             janedoe

        StudentID
        Fname
        Lname

        3
        Alex
        Johnson

        4
        Emma
        Brown

        5
        Michael
        White

                                          Username Password
                                 Johnson alexi
                                                           emma123
                      Emily
                                Taylor
                                           emilyt
                                                          tay123
                      David Clark
                                                           david123
                      Sophia Anders... sophiaa
Chris Lee clee
                                                          sophpass
lee123
                      Chris Lee clee lee123
Sarah King sarahk king456
Create Student Rec._JBURK9\abbas (56)

__INSERT INTO Student (StudentID, Friame, Liname, Osername, Password

VALUES (11, 'Jane', 'Doe', 'janedoe', 'password123');
          -- Delete: Remove a student with StudentID = 11
        DELETE FROM Student WHERE StudentID = 11;
          -- Update: Change the username of StudentID = 2
         SELECT * FROM Student
        UPDATE Student SET Username = 'johnnydoe' WHERE StudentID = 2;
SELECT * FROM Student
        -- 2. Event Table Operations
        -- Query: List all events that are 'RSVPComplete'
SELECT * FROM Event WHERE RSVPComplete = 1;
          -- Insert: Add a new event
 Username Password
johndoe password123
janesmith password456
alexj mypassword
emmab emma123

        StudentID
        Fname

        1
        John

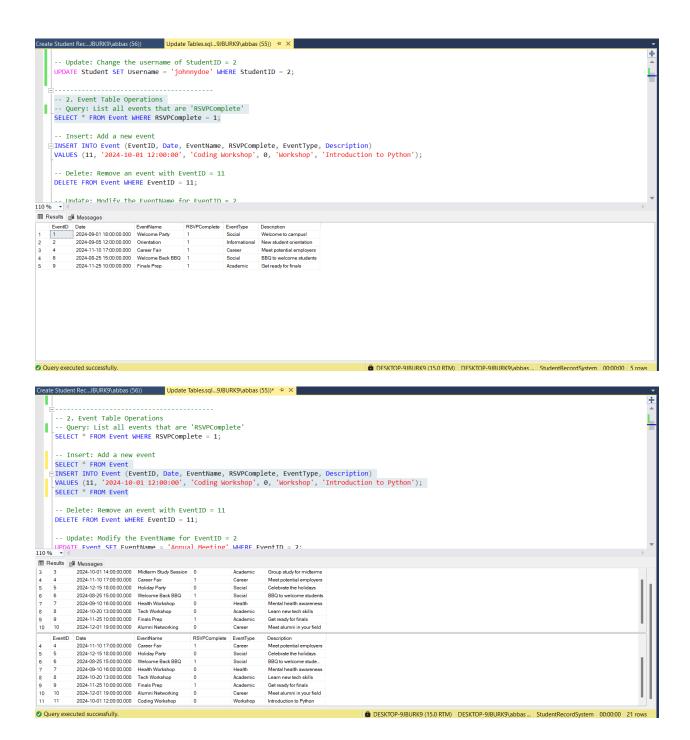
        2
        Jane

        3
        Alex

                               Johnson
                     Emma Brown
                     Michael White
Emily Taylor
David Clark
                                                         mikepass
tay123
                                                         david123
                                            dclark
                     Sophia
                              Anderson
                                           sophiaa
                                                          sophpass
      | StudentID | Fname | Lname | 1 | John | Doe | 2 | Jane | Smith | 3 | Alex | Johnson | 4 | Emma | Brown |
                                                        Password
password123
password456
                               Johnson alexj
                                                        mypassword
                     Emma Brown
Michael White
Emily Taylor
David Clark
                                          emmab
mwhite
emilyt
dclark
                                                        emma123
mikepass
tay123
david123
                                                                                                                                                        â DESKTOP-9JBURK9 (15.0 RTM) │ DESKTOP-9JBURK9\abbas ... │ StudentRecordSystem │ 00:00:00 │ 20 r

    Query executed successfully.
```

2. Event Table



```
Create Student Rec..JBURK9\abbas(56))

Update Tablessql..9JBURK9\abbas(55))

VALUES (11, '2024-10-01 12:00:00', 'Coding Workshop', 0, 'Workshop', 'Introduction to Python');

SELECT * FROM Event
               -- Delete: Remove an event with EventID = 11
               SELECT * FROM Event
DELETE FROM Event WHERE EventID = 11;
               SELECT * FROM Event
                -- Update: Modify the EventName for EventID = 2
               SELECT * FROM Event
                 JPDATE Event SET EventName = 'Annual Meeting' WHERE EventID = 2;
               SELECT * FROM Event
               -- 3. Course Table Operations
-- Query: List all courses happening on 'Monday'

SELECT * FROM Course WHERE Day = 'Monday':
Results Messages
                             2024-11-10 17:00:00.000 Career Fair
                                                                                                                                                            Social
Social
Health
                                                                                                                                                                                        Mental health awareness
                                                                                                                                                            Academic
                                                                                                                                                                                        Learn new tech skills
                                                                                                                                                             Academic
                                                                                                                                                                                        Get ready for finals
                                                                                                                                                             Workshop
                                                                                                                                                                                        Introduction to Python
                                                                                                                           RSVPComplete EventType
            EventID Date

        Date
        EventName
        RSVPComplete

        2024-10-01 14:00:00.000
        Midterm Study Session
        1

        2024-11-10 17:00:00.000
        Career Fair
        1

        2024-12-15 18:00:00:000
        Holiday Party
        0

        2024-02-10:00:0000
        Holiday Party
        0

        2024-09-10:16:00:00:0000
        Health Workshop
        0

        2024-10-20:30:00:00000
        Tech Workshop
        0

        2024-11-25:10:00:00:00000
        Tech Workshop
        1

        2024-11-25:10:00:00:00000
        Aliamis Prep
        1

        2024-12-20:19:00:00:0000
        Aliamis Prep
        1

                                                                                                                                                                                       Description
                                                                                                                                                             Academic
                                                                                                                                                                                        Group study for midterms
                                                                                                                                                            Career
Social
Social
                                                                                                                                                                                        BBQ to welcome stude.
                                                                                                                                                           Health
                                                                                                                                                                                        Mental health awareness
                                                                                                                                                                                        Learn new tech skills
Get ready for finals
                                                                                                                                                            Career
                                                                                                                                                                                        Meet alumni in your field
                                                                                                                                                                                                                                                                      â DESKTOP-9JBURK9 (15.0 RTM) │ DESKTOP-9JBURK9\abbas ... │ StudentRecordSystem │ 00:00:00 │ 21 rows
Create Student Rec..JBURK9\abbas (56))

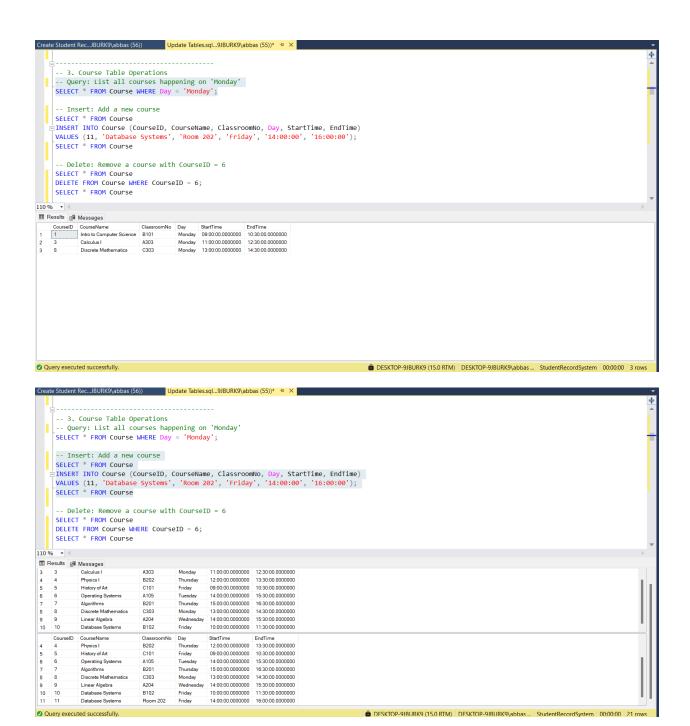
Update Tablessql...9JBURK9\abbas (55))* ** X

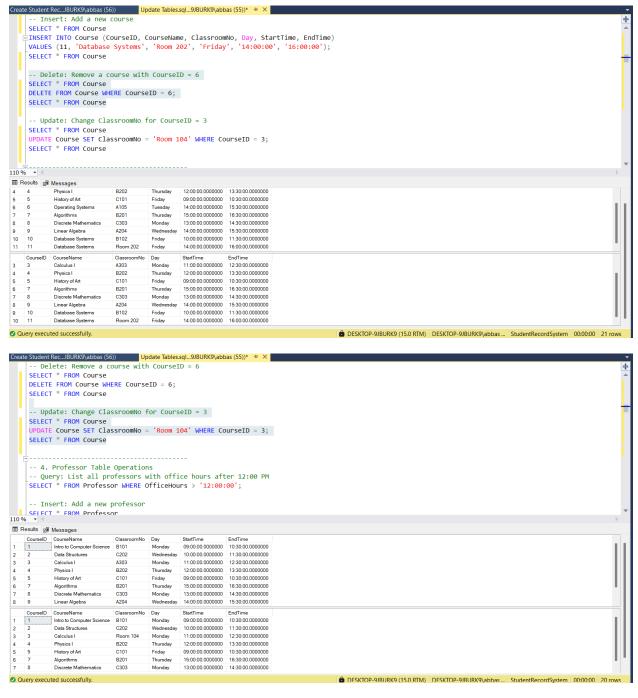
VALUES (11, '2024-10-01 12:00:00', 'Coding Workshop', 0, 'Workshop', 'Introduction to Python');

SELECT * FROM Event
                   - Delete: Remove an event with EventID = 11
              SELECT * FROM Event
DELETE FROM Event WHERE EventID = 11;
               SELECT * FROM Event
                 -- Update: Modify the EventName for EventID = 2
                         DATE Event SET EventName = 'Annual Meeting' WHERE EventID = 2;
               SELECT * FROM Event
               -- 3. Course Table Operations
-- Query: List all courses happening on 'Monday'

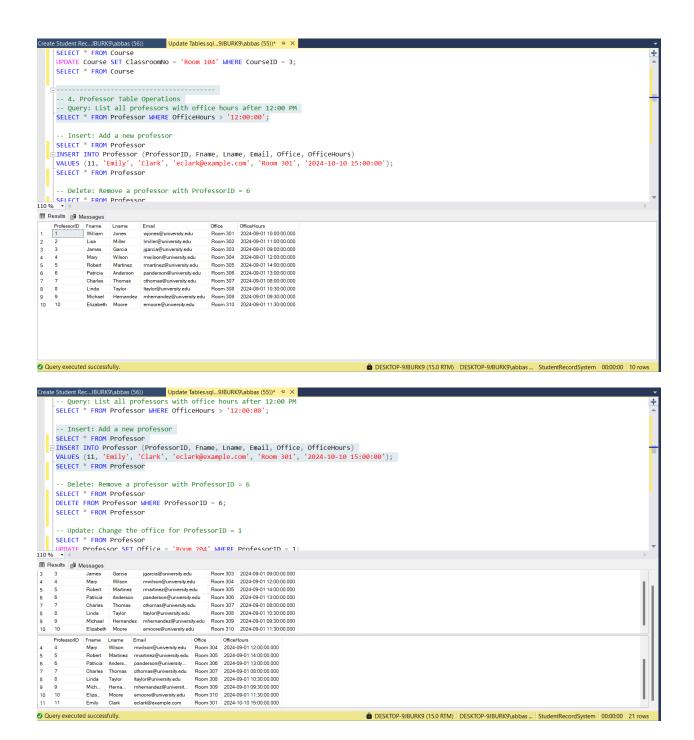
SEFECT * FROM Course WHERE Day = 'Monday':
  | Newton | New | N
                                                                                                                                                             Academic
                                                                                                                                                                                        Group study for midterms
                                                                                                                                                            Career
Social
Social
                                                                                                                                                                                        Meet potential employers
                                                                                                                                                             Health
                                                                                                                                                                                         Mental health awareness
                                                                                                                                                                                        Learn new tech skills
                                                                                                                            RSVPComplete EventType
1 Social
1 Informational
           Academic
                                                                                                                                                                                        Group study for midterms
                                 2024-11-10 17:00:00.000 Career Fair
                                                                                                                                                             Career
                                                                                                                                                                                        Meet potential employers
                               2024-12-15 18:00:00.000 Holiday Party 0
2024-08-25 15:00:00.000 Welcome Back BBQ 1
2024-09-10 16:00:00.000 Health Workshop 0
                                                                                                                                                                                        Celebrate the holidays
BBQ to welcome stude...
Mental health awareness
                                                                                                                                                           Health
                                                                                                                                                                                                                                                                       DESKTOP-9JBURK9 (15.0 RTM) | DESKTOP-9JBURK9\abbas ... | StudentRecordSystem | 00:00:00 | 10 ro
```

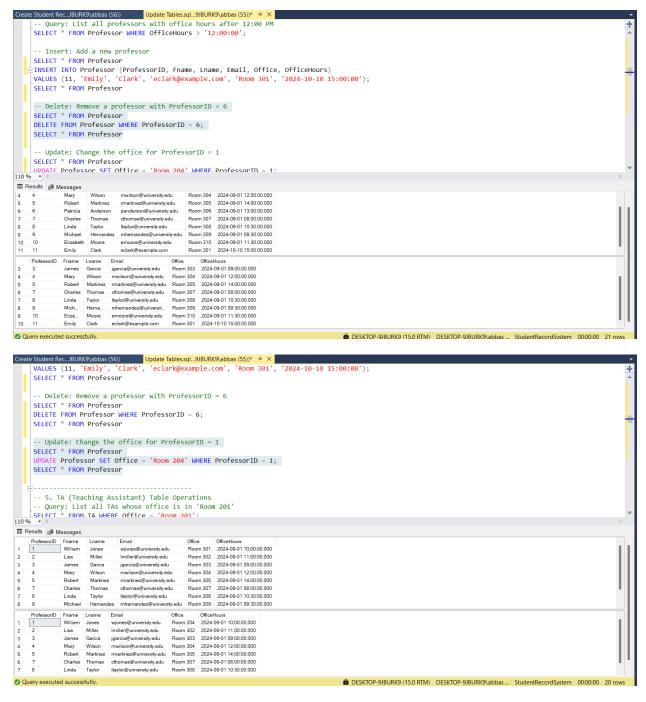
3. Course Table





4. Professor Table





5. TA Table

```
Create Student Rec...JBURK9\abbas (56)) Update Tables.sql...9JBURK9\abbas (55))* + ×
      -- 5. TA (Teaching Assistant) Table Operations
     -- Query: List all TAs whose office is in 'Lab B'
SELECT * FROM TA WHERE Office = 'Lab B';
      -- Insert: Add a new TA
SELECT * FROM TA
     EINSERT INTO TA (TAID, Fname, Lname, Email, Office, OfficeHours)

VALUES (11, 'Jake', 'Miller', 'jmiller@example.com', 'Room 202', '2024-10-11 13:00:00');

SELECT * FROM TA
       -- Delete: Remove a TA with TAID = 6
     SELECT * FROM TA
DELETE FROM TA WHERE TAID = 6;
SELECT * FROM TA
 110 % 🔻 🔻
 a DESKTOP-9JBURK9 (15.0 RTM) | DESKTOP-9JBURK9\abbas ... | StudentRecordSystem | 00:00:00 | 1 rows
Query executed successfully.
Create Student Rec...JBURK9\abbas (56)) Update Tables.sql...9JBURK9\abbas (55))* + ×
      --- 5. TA (Teaching Assistant) Table Operations
-- Query: List all TAs whose office is in 'Lab B'
SELECT * FROM TA WHERE Office = 'Lab B';
      -- Insert: Add a new TA
      SELECT * FROM TA
INSERT INTO TA (TAID, Fname, Lname, Email, Office, OfficeHours)
VALUES (11, 'Jake', 'Miller', 'jmiller@example.com', 'Room 202', '2024-10-11 13:00:00');
      SELECT * FROM TA
     -- Delete: Remove a TA with TAID = 6

SELECT * FROM TA

DELETE FROM TA WHERE TAID = 6;

SELECT * FROM TA
110 %
```

â DESKTOP-9JBURK9 (15.0 RTM) □ DESKTOP-9JBURK9\abbas ... □ StudentRecordSystem □ 00:00:00 □ 21 rows

Query executed successfully.

```
Create Student Rec...JBURK9\abbas (56))
                                                                                                           Update Tables.sql...9JBURK9\abbas (55))* → ×
                -- Insert: Add a new TA
SELECT * FROM TA
                INSERT INTO TA (TAID, Fname, Lname, Email, Office, OfficeHours)
VALUES (11, 'Jake', 'Miller', 'jmiller@example.com', 'Room 202', '2024-10-11 13:00:00');
                 -- Delete: Remove a TA with TAID = 6
                 SELECT * FROM TA
DELETE FROM TA WHERE TAID = 6;
                 SELECT * FROM TA
                   -- Update: Change the OfficeHours for TAID = 3
                 SELECT * FROM TA
               UPDATE TA SET OfficeHours = '2024-10-12 14:00:00' WHERE TAID = 3; SELECT * FROM TA
 | Finame | Liname | Email | Colora | C
              TAID
Query executed successfully.
                                                                                                                                                                                                                                                                                                          â DESKTOP-9JBURK9 (15.0 RTM) │ DESKTOP-9JBURK9\abbas ... │ StudentRecordSystem │ 00:00:00 │ 21 rows
                 Student Rec...JBURK9\abbas (56))

-- Delete: Remove a TA with TAID = 6
Create Student Rec...JBURK9\abbas (56))
               DELETE FROM TA WHERE TAID = 6;
SELECT * FROM TA
                 -- Update: Change the OfficeHours for TAID = 3
                              ATE TA SET OfficeHours = '2024-10-12 14:00:00' WHERE TAID = 3;
                SELECT * FROM TA
               -- 6. Assignment Table Operations
                          Query: List all assignments due after October 1, 2024
                SELECT * FROM Assignment WHERE DueDate > '2024-10-01';
                 -- Insert: Add a new assignment
SELECT * FROM Assignment
 ⊞ Results ∰ Messages

        TAID
        Fname
        Lname
        Email
        Office

        1
        Tom
        Parker
        tparker@university.edu
        Lab A

        2
        Eve
        Cooper
        ecooper@university.edu
        Lab B

        3
        Lucas
        Morgan
        Imorgan@university.edu
        Lab C

                                                                                                                                                      OfficeHours
2024-09-02 09:00:00.000
2024-09-02 10:00:00.000
                                                                                                                                                      2024-09-02 11:00:00.000

        Lucas
        Morgan

        Grace
        Winjfle University, edu
        Lab D

        Anna
        Lopez
        Lopez@university, edu
        Lab E

        Mia
        Scott
        mscott@university, edu
        Lab E

        Oliver
        Torres
        ctorres@university, edu
        Lab L

        Ava
        Rivera
        arivera@university, edu
        Lab L

                                                                                                                                                      2024-09-02 12:00:00.000
                                                                                                                                                     2024-09-02 13:00:00.000
2024-09-02 15:00:00.000
                                                                                                                                                     2024-09-02 16:00:00.000
                                                                                                                                                      2024-09-02 17:00:00.000

        Lname
        Email
        Office
        OfficeHours

        Parker
        tparker@university.edu
        Lab A
        2024-09-02 09:00:00:00

        Cooper
        ecooper@university.edu
        Lab B
        2024-09-02 10:00:00:00

                            Lucas Morgan Imorgan@university.edu Lab C 2024-10-12 14:00:00.000

        Grace
        Wight
        gwright@university edu
        Lab D
        2024-09-02 12:00:00:00

        Anna
        Lopez
        alopez@university edu
        Lab E
        2024-09-02 13:00:00:00

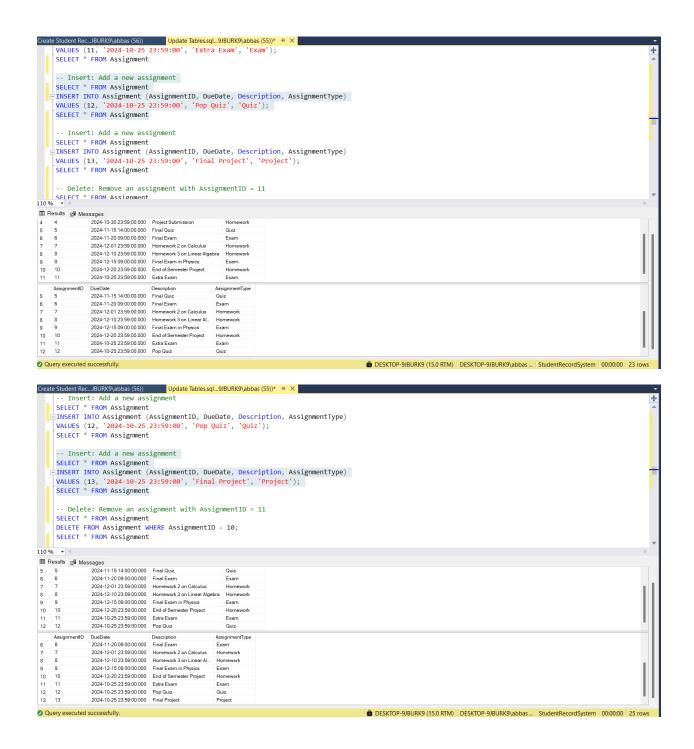
        Mia
        Soot I
        mescot@university edu
        Lab G
        2024-09-02 15:00:00:00

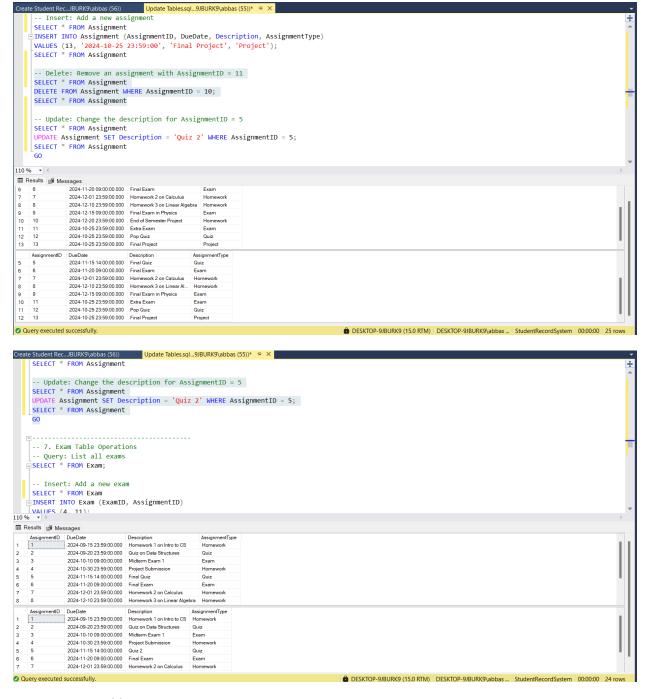
        Oliver
        Torres
        olorres@university edu
        Lab H
        2024-09-02 15:00:00:00

    DESKTOP-9JBURK9 (15.0 RTM) | DESKTOP-9JBURK9\abbas ... | StudentRecordSystem | 00:00:00 | 20 ro
```

6. Assignment Table

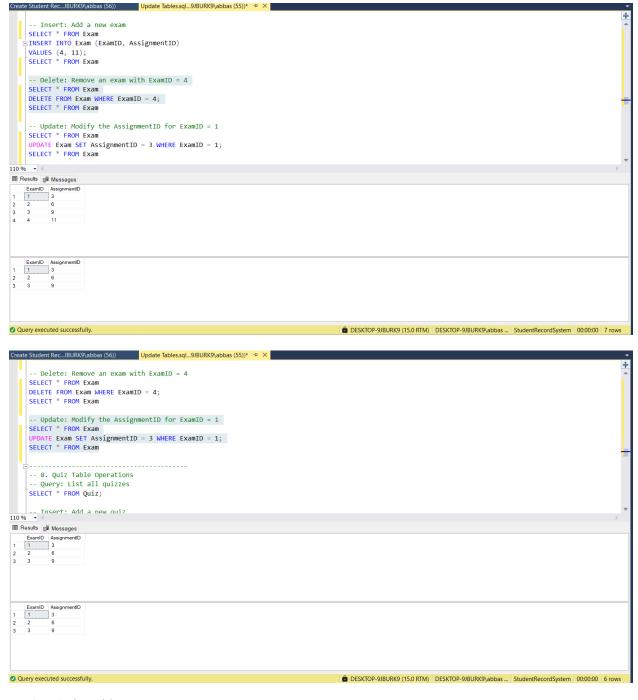






7. Exam Table





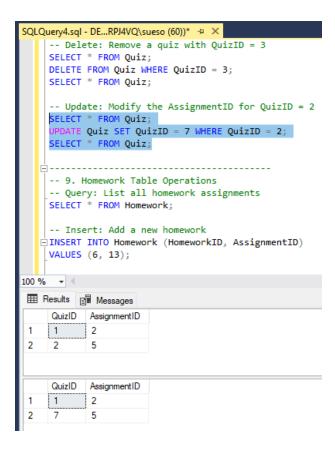
8. Quiz Table

```
-- Insert: Add a new quiz

SELECT * FROM Quiz;

□ INSERT INTO Quiz (QuizID, AssignmentID)
     VALUES (3, 12);
     SELECT * FROM Quiz;
     -- Delete: Remove a quiz with QuizID = 3
     DELETE FROM Quiz WHERE QuizID = 3;
     -- Update: Modify the AssignmentID for QuizID = 2
    UPDATE Quiz SET QuizID = 7 WHERE QuizID = 2;
    -- 9. Homework Table Operations
100 % +
Results Messages
     QuizID AssignmentID
             2
    2
             5
     QuizID AssignmentID
    1
             2
2
             5
      2
3
     3
             12
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* → ×
     -- Query: List all quizzes
     SELECT * FROM Quiz;
     -- Insert: Add a new quiz
     SELECT * FROM Quiz;
   ☐ INSERT INTO Quiz (QuizID, AssignmentID)
     VALUES (3, 12);
     SELECT * FROM Quiz;
     -- Delete: Remove a quiz with QuizID = 3
     SELECT * FROM Quiz;
DELETE FROM Quiz WHERE QuizID = 3;
     SELECT * FROM Quiz;
     -- Update: Modify the AssignmentID for QuizID = 2
     UPDATE Quiz SET QuizID = 7 WHERE QuizID = 2;
     -- 9. Homework Table Operations
     -- Query: List all homework assignments
     SELECT * FROM Homework;
     -- Insert: Add a new homework
   □INSERT INTO Homework (HomeworkID, AssignmentID)
     VALUES (6, 13);
100 % -
 Results Messages
     QuizID AssignmentID
             2
     1
 2
      2
             5
     3
             12
 3
     QuizID AssignmentID
             2
             5
```



9. Homework Table

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* □ ×
     -- 9. Homework Table Operations
     -- Query: List all homework assignments
SELECT * FROM Homework;
     -- Insert: Add a new homework
SELECT * FROM Homework;
INSERT INTO Homework (HomeworkID, AssignmentID)
     VALUES (6, 13);
SELECT * FROM Homework;
      -- Delete: Remove homework with HomeworkID = 6
     DELETE FROM Homework WHERE HomeworkID = 6;
     -- Update: Change the AssignmentID for HomeworkID = 5
UPDATE Homework SET AssignmentID = 4 WHERE HomeworkID = 5;
   ģ-----
100 % -
Results Messages
      HomeworkID AssignmentID
                  1
 2
                    4
 3
      3
                    7
 4
                    8
      4
      Homework ID Assignment ID
     1
                    1
 2
                    4
3
      3
4
                    8
                    13
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* □ ×
    -- Query: List all homework assignments
    SELECT * FROM Homework;
    -- Insert: Add a new homework
    SELECT * FROM Homework;
   □INSERT INTO Homework (HomeworkID, AssignmentID)
    VALUES (6, 13);
    SELECT * FROM Homework;
     -- Delete: Remove homework with HomeworkID = 6
    SELECT * FROM Homework;
     DELETE FROM Homework WHERE HomeworkID = 6;
    SELECT * FROM Homework;
     -- Update: Change the AssignmentID for HomeworkID = 5
    UPDATE Homework SET AssignmentID = 4 WHERE HomeworkID = 5;
    -- 10. Finances Table Operations
100 % ▼ ◀
Results Messages
     HomeworkID
                AssignmentID
    1
                 1
    2
                 4
                 7
 3
     3
                 8
 4
     4
 5
     6
                 13
     Homework ID Assignment ID
                 1
 2
     2
                 4
3
     3
                 7
     4
                 8
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* 💠 🗙
     VALUES (6, 13);
     SELECT * FROM Homework;
     -- Delete: Remove homework with HomeworkID = 6
     SELECT * FROM Homework;
     DELETE FROM Homework WHERE HomeworkID = 6;
     SELECT * FROM Homework;
     -- Update: Change the AssignmentID for HomeworkID = 4
     SELECT * FROM Homework;
     UPDATE Homework SET AssignmentID = 4 WHERE HomeworkID = 4;
     SELECT * FROM Homework;
     -- 10. Finances Table Operations
     -- Query: List all students who owe more than $500
     SELECT * FROM Finances WHERE Amount > 500;
     -- Insert: Add a new finance record
    SELECT * FROM Finances
100 % - <
 Results 🗐 Messages
     HomeworkID
                AssignmentID
     1
 1
 2
                 4
 3
     3
                 7
 4
                 8
     HomeworkID
                AssignmentID
                 1
 1
 2
     2
                 4
 3
                 7
      3
 4
                 4
      4
```

10. Finances Table

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* 😕 🗶
     SELECT * FROM Homework;
     -- Update: Change the AssignmentID for HomeworkID = 5
     SELECT * FROM Homework;
     UPDATE Homework SET AssignmentID = 4 WHERE HomeworkID = 4;
     SELECT * FROM Homework;
     -- 10. Finances Table Operations
     -- Query: List all students who owe more than $500
     SELECT * FROM Finances WHERE Amount > 500;
     -- Insert: Add a new finance record

☐INSERT INTO Finances (FinancesID, StudentID, Amount, FinancesType, PaymentDeadline, Status)

     VALUES (11, 1, 300.00, 'Gym Fee', '2024-12-15 23:59:00', 0);
     -- Delete: Remove a finance record with FinancesID = 11
     DELETE FROM Finances WHERE FinancesID = 11;
100 % -
 Results 🗐 Messages
                                 FinancesType PaymentDeadline
     FinancesID
                StudentID Amount
                                                                   Status
                          1500.00 Tuition
                                               2024-09-30 23:59:00.000 0
 2
                2
                                               2024-09-30 23:59:00.000 1
      2
                          2000.00 Tuition
 3
      6
                6
                          600.00
                                               2024-09-30 23:59:00.000 0
                                  Tuition
      8
                8
                          900.00
                                 Tuition
                                               2024-09-30 23:59:00.000 0
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* → ×
     SELECT * FROM Homework;
     -- Update: Change the AssignmentID for HomeworkID = 5
     SELECT * FROM Homework;
     UPDATE Homework SET AssignmentID = 4 WHERE HomeworkID = 4;
     SELECT * FROM Homework;
     -- 10. Finances Table Operations
     -- Query: List all students who owe more than $500
     SELECT * FROM Finances WHERE Amount > 500;
     -- Insert: Add a new finance record
     SELECT * FROM Finances;
   INSERT INTO Finances (FinancesID, StudentID, Amount, FinancesType, PaymentDeadline, Status)
     VALUES (11, 1, 300.00, 'Gym Fee', '2024-12-15 23:59:00', 0);
     SELECT * FROM Finances;
     -- Delete: Remove a finance record with FinancesID = 11
100 % -
Results Messages
     FinancesID StudentID Amount FinancesType PaymentDeadline
                                                                   Status
                         1500.00 Tuition
                                               2024-09-30 23:59:00.000 0
                         2000.00 Tuition
2
                2
                                               2024-09-30 23:59:00.000 1
                         100.00
3
     3
                3
                                 Library Fine
                                              2024-10-15 23:59:00.000 1
                         250.00 Dom Damage 2024-11-01 23:59:00.000 0
4
     4
                4
                         500.00 Meal Plan
5
     5
                                               2024-09-30 23:59:00 000 1
                5
                         600.00 Tuition
                                              2024-09-30 23:59:00 000 0
6
     6
                6
 7
     7
                7
                         75 00
                                 Lab Fee
                                              2024-10-10 23:59:00 000 1
                         900.00 Tuition
                                             2024-09-30 23:59:00.000 0
     8
8
                8
 9
     9
                9
                         50.00
                                  Gym Fee
                                              2024-11-05 23:59:00.000 1
                         300.00 Parking Fine 2024-11-20 23:59:00.000 0
 10
    10
                10
                                 FinancesType PaymentDeadline
     FinancesID StudentID Amount
                                                              Status
                1
                          1500.00 Tuition
                                              2024-09-30 23:59:00.000 0
2
     2
                2
                         2000.00 Tuition
                                              2024-09-30 23:59:00.000 1
                                            2024-10-15 23:59:00.000 1
3
     3
                3
                         100.00 Library Fine
     4
                         250.00 Dom Damage 2024-11-01 23:59:00.000 0
                         500.00 Meal Plan
5
     5
                5
                                              2024-09-30 23:59:00.000 1
                         600.00 Tuition
6
     6
                6
                                              2024-09-30 23:59:00.000 0
 7
     7
                         75.00 Lab Fee
                                              2024-10-10 23:59:00.000 1
8
     8
                          900.00 Tuition
                                              2024-09-30 23:59:00.000 0
9
     9
                9
                          50.00 Gym Fee
                                              2024-11-05 23:59:00.000 1
 10
     10
                10
                          300.00 Parking Fine 2024-11-20 23:59:00.000 0
 11
     11
                1
                          300.00 Gym Fee
                                              2024-12-15 23:59:00.000 0
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* → ×
     -- Query: List all students who owe more than $500
     SELECT * FROM Finances WHERE Amount > 500;
     -- Insert: Add a new finance record
     SELECT * FROM Finances;
   ☐INSERT INTO Finances (FinancesID, StudentID, Amount, FinancesType, PaymentDeadline, Status)
     VALUES (11, 1, 300.00, 'Gym Fee', '2024-12-15 23:59:00', 0);
     SELECT * FROM Finances;
     -- Delete: Remove a finance record with FinancesID = 11
     SELECT * FROM Finances;
     DELETE FROM Finances WHERE FinancesID = 11;
     SELECT * FROM Finances;
     -- Update: Change the status for FinancesID = 1
     UPDATE Finances SET Status = 1 WHERE FinancesID = 1;
   -- 11. Dining Table Operations
100 % +
Results Messages
     FinancesID
                StudentID Amount FinancesType PaymentDeadline
                                                                    Status
                1
                          1500.00 Tuition
                                               2024-09-30 23:59:00.000 0
2
      2
                2
                          2000.00 Tuition
                                               2024-09-30 23:59:00.000 1
3
     3
                3
                          100.00
                                  Library Fine
                                               2024-10-15 23:59:00.000 1
 4
     4
                4
                          250.00
                                  Dorm Damage 2024-11-01 23:59:00.000 0
 5
     5
                5
                          500.00
                                  Meal Plan
                                               2024-09-30 23:59:00.000 1
 6
      6
                          600.00
                                  Tuition
                                               2024-09-30 23:59:00.000 0
                6
 7
      7
                7
                          75.00
                                               2024-10-10 23:59:00.000 1
                                  Lab Fee
     8
                          900.00
                                               2024-09-30 23:59:00.000 0
 8
                8
                                  Tuition
 9
      9
                9
                          50.00
                                  Gym Fee
                                               2024-11-05 23:59:00.000 1
 10
      10
                10
                          300.00
                                  Parking Fine
                                               2024-11-20 23:59:00.000 0
                          300.00 Gym Fee
 11
     11
                1
                                               2024-12-15 23:59:00.000 0
     FinancesID
                StudentID Amount
                                  FinancesType PaymentDeadline
                          1500.00 Tuition
                                               2024-09-30 23:59:00.000 0
                          2000.00 Tuition
                                               2024-09-30 23:59:00.000 1
2
                2
3
                          100.00
                                               2024-10-15 23:59:00.000 1
     3
                3
                                  Library Fine
4
                          250.00
                                               2024-11-01 23:59:00.000 0
     4
                 4
                                  Dorm Damage
5
     5
                          500.00
                 5
                                  Meal Plan
                                               2024-09-30 23:59:00.000 1
6
      6
                 6
                          600.00
                                  Tuition
                                               2024-09-30 23:59:00.000
 7
      7
                7
                          75.00
                                               2024-10-10 23:59:00.000
                                  Lab Fee
8
     8
                8
                          900.00
                                  Tuition
                                               2024-09-30 23:59:00.000 0
9
     9
                9
                          50.00
                                  Gym Fee
                                               2024-11-05 23:59:00.000 1
 10
      10
                10
                          300.00 Parking Fine 2024-11-20 23:59:00.000 0
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* 😕 🗙
     VALUES (11, 1, 300.00, 'Gym Fee', '2024-12-15 23:59:00', 0);
     SELECT * FROM Finances;
     -- Delete: Remove a finance record with FinancesID = 11
     SELECT * FROM Finances;
     DELETE FROM Finances WHERE FinancesID = 11;
     SELECT * FROM Finances;
      -- Update: Change the status for FinancesID = 1
     SELECT * FROM Finances;
        DATE Finances SET Status = 1 WHERE FinancesID = 1;
     SELECT * FROM Finances;
     -- 11. Dining Table Operations
     -- Query: List all students with a 'Gold' meal plan
     SELECT * FROM Dining WHERE MealPlanType = 'Gold';
     -- Insert: Add a new dining plan
100 % ▼ ◀
Results Messages
      FinancesID StudentID Amount
                                  FinancesType PaymentDeadline
                                                                     Status
                1
                          1500.00 Tuition
                                                2024-09-30 23:59:00.000 0
 2
      2
                2
                          2000.00 Tuition
                                                2024-09-30 23:59:00.000 1
 3
     3
                 3
                          100.00
                                   Library Fine
                                                2024-10-15 23:59:00.000 1
 4
     4
                4
                          250.00 Dom Damage 2024-11-01 23:59:00.000 0
                          500.00 Meal Plan
 5
     5
                5
                                                2024-09-30 23:59:00.000 1
                          600.00 Tuition
                                                2024-09-30 23:59:00.000 0
 6
      6
                 6
      7
                 7
                          75.00
                                   Lab Fee
                                                2024-10-10 23:59:00.000 1
 8
      8
                 8
                          900.00 Tuition
                                                2024-09-30 23:59:00.000 0
                          50.00
                                   Gym Fee
                                                2024-11-05 23:59:00.000 1
                          300.00 Parking Fine 2024-11-20 23:59:00.000 0
                StudentID Amount
                                   FinancesType PaymentDeadline
                1
                           1500.00
                                   Tuition
                                                2024-09-30 23:59:00.000 1
 2
                 2
                          2000.00
                                   Tuition
                                                2024-09-30 23:59:00.000 1
 3
                          100.00
                                                2024-10-15 23:59:00.000 1
     3
                 3
                                   Library Fine
 4
     4
                 4
                          250.00
                                   Dom Damage 2024-11-01 23:59:00.000 0
 5
     5
                 5
                          500.00
                                   Meal Plan
                                                2024-09-30 23:59:00.000 1
 6
                          600.00
                                                2024-09-30 23:59:00.000 0
      6
                                  Tuition
                 6
                          75.00
                                   Lab Fee
                                                2024-10-10 23:59:00.000 1
 8
                          900.00 Tuition
                                                2024-09-30 23:59:00.000 0
                          50.00
                                                2024-11-05 23:59:00.000 1
                                   Gym Fee
 10
      10
                          300.00 Parking Fine 2024-11-20 23:59:00.000 0
```

11. Dining Table

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* 垣 🗶
     SELECT * FROM Finances;
     UPDATE Finances SET Status = 1 WHERE FinancesID = 1;
     SELECT * FROM Finances;
     -- 11. Dining Table Operations
     -- Query: List all students with a 'Gold' meal plan
     SELECT * FROM Dining WHERE MealPlanType = 'Gold';
     -- Insert: Add a new dining plan
   INSERT INTO Dining (DiningID, StudentID, MealPlanBalance, SwipesPerWeek, MealPlanType
     VALUES (11, 3, 200.00, 12, 'Silver');
     -- Delete: Remove a dining plan with DiningID = 11
     DELETE FROM Dining WHERE DiningID = 11;
     -- Update: Change MealPlanBalance for DiningID = 2
     UPDATE Dining SET MealPlanBalance = 250.00 WHERE DiningID = 2;
100 % +
 Results Messages
     DiningID
              StudentID MealPlanBalance
                                     SwipesPerWeek MealPlanType
                                      14
                       300.00
                                                   Gold
 2
                       250.00
                                      12
                                                    Gold
 3
     8
              8
                       270.00
                                                    Gold
                                      14
                       300.00
                                      14
                                                   Gold
     10
             10
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* → ×
     -- 11. Dining Table Operations
    -- Query: List all students with a 'Gold' meal plan
    SELECT * FROM Dining WHERE MealPlanType = 'Gold';
     -- Insert: Add a new dining plan
    SELECT * FROM Dining;
     INSERT INTO Dining (DiningID, StudentID, MealPlanBalance, SwipesPerWeek, MealPlanType)
     VALUES (11, 3, 200.00, 12, 'Silver');
    SELECT * FROM Dining;
     -- Delete: Remove a dining plan with DiningID = 11
    DELETE FROM Dining WHERE DiningID = 11;
     -- Update: Change MealPlanBalance for DiningID = 2
    UPDATE Dining SET MealPlanBalance = 250.00 WHERE DiningID = 2;
   ______
100 % → ◀
Results Messages
     DiningID
             StudentID MealPlanBalance SwipesPerWeek MealPlanType
              1
                       300.00
                                      14
2
              2
                       200.00
                                      10
                                                    Silver
3
     3
              3
                       150.00
                                      8
                                                    Bronze
4
     4
              4
                       250.00
                                      12
                                                    Gold
5
     5
              5
                       350.00
                                      16
                                                    Platinum
6
     6
              6
                       100.00
                                      6
                                                    Bronze
7
              7
     7
                       180.00
                                      10
                                                    Silver
8
              8
                       270.00
                                      14
                                                    Gold
9
     9
              9
                       50.00
                                      4
                                                    Bronze
10
     10
              10
                       300.00
                                      14
                                                    Gold
                                     SwipesPerWeek
     DiningID
             StudentID MealPlanBalance
                                                    MealPlanType
              1
                       300.00
                                      14
2
              2
                       200.00
                                      10
                                                    Silver
3
     3
              3
                       150.00
                                      8
                                                    Bronze
4
     4
              4
                       250.00
                                      12
                                                    Gold
5
     5
              5
                       350.00
                                      16
                                                    Platinum
6
     6
              6
                       100.00
                                      6
                                                    Bronze
7
     7
              7
                       180.00
                                      10
                                                    Silver
8
     8
              8
                       270.00
                                      14
                                                    Gold
9
     9
              9
                       50.00
                                      4
                                                    Bronze
10
     10
              10
                       300.00
                                      14
                                                    Gold
11
     11
              3
                       200.00
                                                    Silver
                                      12
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* → ×
      -- Query: List all students with a 'Gold' meal plan
     SELECT * FROM Dining WHERE MealPlanType = 'Gold';
     -- Insert: Add a new dining plan
     SELECT * FROM Dining;
   INSERT INTO Dining (DiningID, StudentID, MealPlanBalance, SwipesPerWeek, MealPlanType)
     VALUES (11, 3, 200.00, 12, 'Silver');
     SELECT * FROM Dining;
     -- Delete: Remove a dining plan with DiningID = 11
     SELECT * FROM Dining;
DELETE FROM Dining WHERE DiningID = 11;
     SELECT * FROM Dining;
     -- Update: Change MealPlanBalance for DiningID = 2
     UPDATE Dining SET MealPlanBalance = 250.00 WHERE DiningID = 2;
     -- 12. Housing Table Operations
100 % +
 Results Messages
      DiningID
               StudentID
                         MealPlanBalance
                                         SwipesPerWeek
                                                        MealPlanType
               1
                          300.00
                                         14
                                                         Gold
      2
               2
                          200.00
                                         10
 2
                                                         Silver
               3
                          150.00
                                         8
 3
      3
                                                         Bronze
               4
 4
      4
                          250.00
                                         12
                                                         Gold
               5
                          350.00
                                         16
                                                         Platinum
 6
                          100.00
                                         6
      6
               6
                                                         Bronze
               7
                          180.00
                                         10
                                                         Silver
 8
      8
               8
                          270.00
                                         14
                                                         Gold
               9
                                         4
 9
      9
                          50.00
                                                         Bronze
               10
                          300.00
                                         14
 10
      10
                                                         Gold
 11
      11
               3
                          200.00
                                         12
                                                         Silver
      DiningID
               StudentID
                         MealPlanBalance
                                         SwipesPerWeek
                                                        MealPlanType
               1
                          300.00
                                         14
                                                         Gold
 2
               2
                          200.00
                                         10
                                                         Silver
               3
 3
      3
                          150.00
                                         8
                                                         Bronze
 4
      4
               4
                          250.00
                                         12
                                                         Gold
 5
      5
               5
                          350.00
                                         16
                                                         Platinum
 6
                                         6
      6
               6
                          100.00
                                                         Bronze
 7
               7
                          180.00
                                         10
                                                         Silver
 8
      8
               8
                          270.00
                                         14
                                                         Gold
 9
      9
               9
                          50.00
                                         4
                                                         Bronze
 10
      10
               10
                          300.00
                                         14
                                                         Gold
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* → ×
     VALUES (11, 3, 200.00, 12, 'Silver');
     SELECT * FROM Dining;
     -- Delete: Remove a dining plan with DiningID = 11
     SELECT * FROM Dining;
     DELETE FROM Dining WHERE DiningID = 11;
     SELECT * FROM Dining;
     -- Update: Change MealPlanBalance for DiningID = 2
     SELECT * FROM Dining;
        DATE Dining SET MealPlanBalance = 250.00 WHERE DiningID = 2;
     SELECT * FROM Dining;
     -- 12. Housing Table Operations
     -- Query: List all students in 'Building A'
     SELECT * FROM Housing WHERE BuildingNo = 'Building A';
-- Insert: Add a new housing record
 DiningID StudentID MealPlanBalance SwipesPerWeek
                                                      Meal Plan Type
                        300.00
                                       14
                                                      Gold
                                       10
 2
      2
               2
                        200.00
                                                      Silver
                                                      Bronze
 3
                        150.00
                                       8
      3
               3
 4
                                                      Gold
                        250.00
                                       12
      4
               4
                                                      Platinum
 5
      5
               5
                        350.00
                                       16
 6
                        100.00
                                       6
                                                      Bronze
      6
               6
 7
               7
                                                      Silver
                        180.00
                                       10
                        270.00
                                                      Gold
 8
      8
               8
                                       14
 9
      9
               9
                        50.00
                                       4
                                                      Bronze
 10
      10
               10
                        300.00
                                       14
                                                      Gold
                        MealPlanBalance
                                       SwipesPerWeek
                                                      MealPlanType
                        300.00
                                       14
                                                      Gold
 2
               2
                        250.00
                                       10
                                                      Silver
 3
               3
                         150.00
                                       8
                                                      Bronze
 4
                        250.00
                                       12
                                                      Gold
 5
               5
                        350.00
                                       16
                                                      Platinum
 6
               6
                         100.00
                                       6
                                                      Bronze
 7
                         180.00
                                        10
                                                      Silver
 8
                         270.00
                                        14
                                                      Gold
 9
               9
                         50.00
                                       4
                                                      Bronze
 10
      10
               10
                         300.00
                                       14
                                                      Gold
```

12. Housing Table

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* 💠 🗶
     SELECT * FROM Dining;
    UPDATE Dining SET MealPlanBalance = 250.00 WHERE DiningID = 2;
     SELECT * FROM Dining;
     -- 12. Housing Table Operations
     -- Query: List all students in 'Building A'
     SELECT * FROM Housing WHERE BuildingNo = 'Building A';
    -- Insert: Add a new housing record
   ☐INSERT INTO Housing (HousingID, StudentID, BuildingNo, RoomNo)
    VALUES (11, 2, 'Building B', '201');
    -- Delete: Remove a housing record with HousingID = 10
    DELETE FROM Housing WHERE HousingID = 10;
     -- Update: Change RoomNo for HousingID = 5
    UPDATE Housing SET RoomNo = '206' WHERE HousingID = 5;
100 % -
Results Messages
               StudentID BuildingNo RoomNo
     HousingID
                        Building A
                                 101
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* → ×
     -- 12. Housing Table Operations
     -- Query: List all students in 'Building A'
     SELECT * FROM Housing WHERE BuildingNo = 'Building A';
     -- Insert: Add a new housing record
     SELECT * FROM Housing;
INSERT INTO Housing (HousingID, StudentID, BuildingNo, RoomNo)
     VALUES (11, 2, 'Building B', '201');
     SELECT * FROM Housing;
     -- Delete: Remove a housing record with HousingID = 10
     DELETE FROM Housing WHERE HousingID = 10;
     -- Update: Change RoomNo for HousingID = 5
     UPDATE Housing SET RoomNo = '206' WHERE HousingID = 5;
100 % 🕶 🔻
Results Messages
     HousingID StudentID BuildingNo RoomNo
                         Building A
                1
                                    101
2
     2
                2
                         Building B
                                    102
                         Building C
3
     3
                3
                                    103
                         Building D
4
                4
                                    104
     4
                         Building E
5
     5
                5
                                   105
6
     6
                6
                         Building F
                                    106
 7
     7
                7
                          Building G
                                    107
8
     8
                8
                         Building H
                                    108
 9
     9
                9
                         Building I
                                    109
 10
     10
                10
                         Building J 110
     HousingID StudentID BuildingNo RoomNo
                         Building A
                1
                                    101
                          Building B
2
     2
                2
                                    102
3
                         Building C
     3
                3
                                    103
                         Building D
4
     4
                4
                                    104
                         Building E
5
     5
                5
                                   105
6
                6
                         Building F
     6
                                    106
7
     7
                7
                          Building G
                                    107
8
     8
                8
                          Building H
                                    108
9
     9
                9
                          Building I
                                    109
 10
     10
                10
                          Building J
                                    110
                          Building B 201
 11
      11
                2
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* → ×
     -- Insert: Add a new housing record
     SELECT * FROM Housing;
   ☐INSERT INTO Housing (HousingID, StudentID, BuildingNo, RoomNo)
     VALUES (11, 2, 'Building B', '201');
     SELECT * FROM Housing;
     -- Delete: Remove a housing record with HousingID = 10
     SELECT * FROM Housing;
     DELETE FROM Housing WHERE HousingID = 10;
     SELECT * FROM Housing;
     -- Update: Change RoomNo for HousingID = 5
     UPDATE Housing SET RoomNo = '206' WHERE HousingID = 5;
     -- 13. RoommateAgreement Table Operations
     --- Query: List all agreements that are complete

☐ SELECT * FROM RoommateAgreement WHERE AgreementComplete = 1;

100 % +
 Results Messages
               StudentID BuildingNo RoomNo
      HousingID
                1
                          Building A
                                    101
                          Building B 102
 2
      2
                2
      3
                3
                          Building C 103
      4
                4
                          Building D 104
 5
      5
                5
                          Building E
                                    105
 6
      6
                6
                          Building F
                                    106
      7
                7
                          Building G 107
      8
 8
                8
                          Building H 108
                          Building I
                                    109
                          Building J
 10
      10
                10
                                    110
                          Building B
 11
      11
                2
                                    201
      HousingID
                StudentID BuildingNo RoomNo
                1
                          Building A 101
 2
      2
                2
                          Building B
                                   102
 3
      3
                3
                          Building C
                                    103
 4
      4
                4
                          Building D
                                    104
 5
      5
                5
                          Building E 105
                          Building F
 6
      6
                6
                                    106
 7
      7
                7
                          Building G 107
 8
      8
                8
                          Building H
                                    108
 9
      9
                9
                          Building I
                                    109
                2
 10
      11
                          Building B
                                    201
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))*   □   ×
     VALUES (11, 2, 'Building B', '201');
     SELECT * FROM Housing;
     -- Delete: Remove a housing record with HousingID = 10
     SELECT * FROM Housing;
     DELETE FROM Housing WHERE HousingID = 10;
     SELECT * FROM Housing;
     -- Update: Change RoomNo for HousingID = 5
     SELECT * FROM Housing;
          TE Housing SET RoomNo = '206' WHERE HousingID = 5;
     SELECT * FROM Housing;
     -- 13. RoommateAgreement Table Operations
     -- Query: List all agreements that are complete
   □SELECT * FROM RoommateAgreement WHERE AgreementComplete = 1;
100 % -
 Results Messages
      HousingID
                StudentID
                          BuildingNo RoomNo
                                    101
     1
                 1
                           Building A
 2
      2
                           Building B
                                    102
 3
      3
                3
                          Building C
                                   103
 4
      4
                4
                          Building D
                                     104
 5
      5
                5
                          Building E
                                     105
 6
      6
                 6
                          Building F
                                     106
 7
      7
                7
                          Building G 107
 8
                          Building H
      8
                8
                                    108
 9
      9
                 9
                           Building I
                                     109
 10
      11
                2
                          Building B 201
      HousingID
                StudentID
                          BuildingNo RoomNo
 1
     1
                 1
                           Building A
                                    101
 2
      2
                 2
                           Building B
                                   102
 3
      3
                3
                           Building C
                                     103
 4
      4
                4
                          Building D
                                     104
 5
      5
                5
                          Building E
                                     206
 6
      6
                6
                          Building F
                                     106
 7
      7
                7
                          Building G
                                     107
                          Building H
 8
      8
                8
                                     108
 9
      9
                 9
                           Building I
                                     109
 10
      11
                2
                           Building B
                                     201
```

13. RoommateAgreement Table

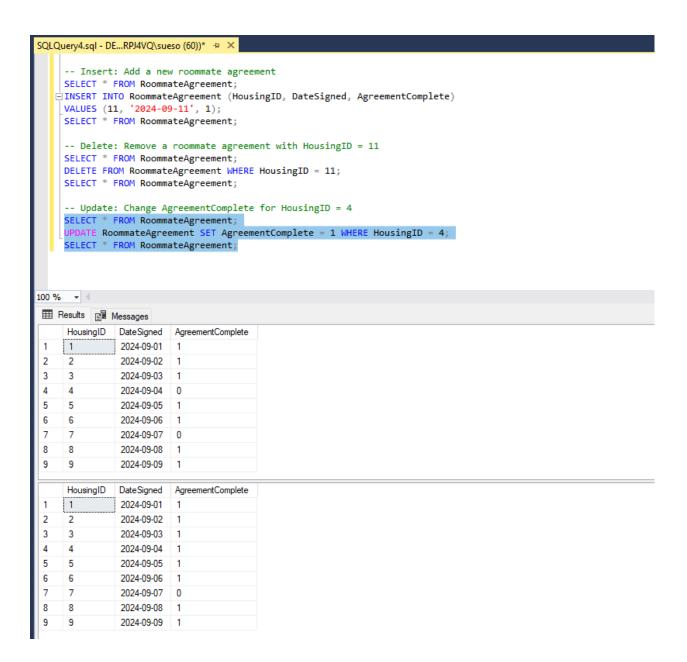
	HousingID	DateSigned	AgreementComplete
1	1	2024-09-01	1
2	2	2024-09-02	1
3	3	2024-09-03	1
4	5	2024-09-05	1
5	6	2024-09-06	1
6	8	2024-09-08	1
7	9	2024-09-09	1

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* → ×
     GO
     -- 13. RoommateAgreement Table Operations
    -- Query: List all agreements that are complete

☐ SELECT * FROM RoommateAgreement WHERE AgreementComplete = 1;

     -- Insert: Add a new roommate agreement
     SELECT * FROM RoommateAgreement;
   ☐INSERT INTO RoommateAgreement (HousingID, DateSigned, AgreementComplete)
     VALUES (11, '2024-09-11', 1);
SELECT * FROM RoommateAgreement;
     -- Delete: Remove a roommate agreement with HousingID = 11
     DELETE FROM RoommateAgreement WHERE HousingID = 11;
     -- Update: Change AgreementComplete for HousingID = 4
    UPDATE RoommateAgreement SET AgreementComplete = 1 WHERE HousingID = 4;
100 % →
Results Messages
     HousingID DateSigned AgreementComplete
           2024-09-01 1
2
              2024-09-02 1
 3
              2024-09-03 1
    3
         2024-09-04 0
 4
 5
     5
              2024-09-05 1
         2024-09-06 1
 6
     6
              2024-09-07 0
 7
     7
         2024-09-08 1
 8
     8
         2024-09-08 1
    9
 9
     HousingID DateSigned AgreementComplete
          2024-09-01 1
               2024-09-02 1
 3
    3
               2024-09-03 1
              2024-09-04 0
5
     5
              2024-09-05 1
6
              2024-09-06 1
     6
7
     7
              2024-09-07 0
              2024-09-08 1
8
     8
              2024-09-09 1
9
     9
 10
              2024-09-11 1
    11
```

```
SQLQuery4.sql - DE...RPJ4VQ\sueso (60))* → ×
     -- Insert: Add a new roommate agreement
    SELECT * FROM RoommateAgreement;
   ☐INSERT INTO RoommateAgreement (HousingID, DateSigned, AgreementComplete)
    VALUES (11, '2024-09-11', 1);
    SELECT * FROM RoommateAgreement;
     -- Delete: Remove a roommate agreement with HousingID = 11
     SELECT * FROM RoommateAgreement;
     DELETE FROM RoommateAgreement WHERE HousingID = 11;
     SELECT * FROM RoommateAgreement;
     -- Update: Change AgreementComplete for HousingID = 4
    UPDATE RoommateAgreement SET AgreementComplete = 1 WHERE HousingID = 4;
100 % 🕶 🖪
Results Messages
     HousingID DateSigned AgreementComplete
          2024-09-01 1
              2024-09-02 1
 2
    2
             2024-09-03 1
 3
    3
        2024-09-04 0
 4
     4
        2024-09-05 1
 5
     5
        2024-09-06 1
 6
     6
             2024-09-07 0
 7
     7
              2024-09-08 1
 8
     8
              2024-09-09 1
 9
     9
 10 11
              2024-09-11 1
     HousingID DateSigned AgreementComplete
        2024-09-01 1
 1
     1
              2024-09-02 1
 2
     2
              2024-09-03 1
 3
     3
 4
     4
              2024-09-04 0
 5
     5
              2024-09-05 1
 6
             2024-09-06 1
     6
             2024-09-07 0
 7
     7
 8
     8
             2024-09-08 1
 9
     9
             2024-09-09 1
```



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