

# IMPLEMENTATION OF 15th JDC PUBLIC DEFENDER'S OFFICE DATABASE

By

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## **Contribution Breakdown**

Erwin Kristel: Worked on Normalization, SQL Statements, Demo, Testing of Attorney and District records. Edited ER Diagram, Abstracts, mission statement, mission objectives and did part of use case.

Charaf Lachouri: Worked on ER Diagram, SQL Statement, Testing of Prosecutor and Client Records, Conclusion

Patrick Cardozo: Worked on Abstract, Mission Statement, Mission Objectives, Use Case, Database Functionalities, Testing of Court date and Criminal case record, contribution.

## **References**

- Erwin Kristel – experience as a public defender in the 15th JDC PDO
- 15th Judicial District Public Defenders Office of Louisiana, 15jdpdo.org
- District Attorney for the 15th Judicial Court, <https://districtattorney15thjdc.org/>
- 15th Judicial District Court Acadia, Lafayette, & Vermilion Parishises, Louisiana, <https://www.15thjdc.org/>

## **Abstract**

We plan to develop a database for the 15th JDC Public Defender's Office (PDO), who is interested in a database aid their attorneys in tracking case information. It should be easy for attorneys to view and update case data and client information. For any instance of a case, only the attorney assigned to the case, the Section Chief of the district where the case is located, the First Defender, and Second Defender should be able to view and update case data.

## **Mission Statement**

The Purpose of the PDO's database system is to maintain the data that is generated to support the public defenders in updating and tracking case and client information.

## **Mission Objectives**

To maintain (enter, update and delete) data on attorneys

To maintain (enter, update and delete) data on districts

To maintain (enter, update and delete) data on prosecutors

To maintain (enter, update and delete) data on clients

To maintain (enter, update and delete) data on criminal cases

To perform searches on attorneys

To perform searches on districts

To perform searches on prosecutors

To perform searches on clients

To perform searches on cases

To track the status of cases

To track the status of clients (e.g. incarcerated, active warrants, bonded, etc.)

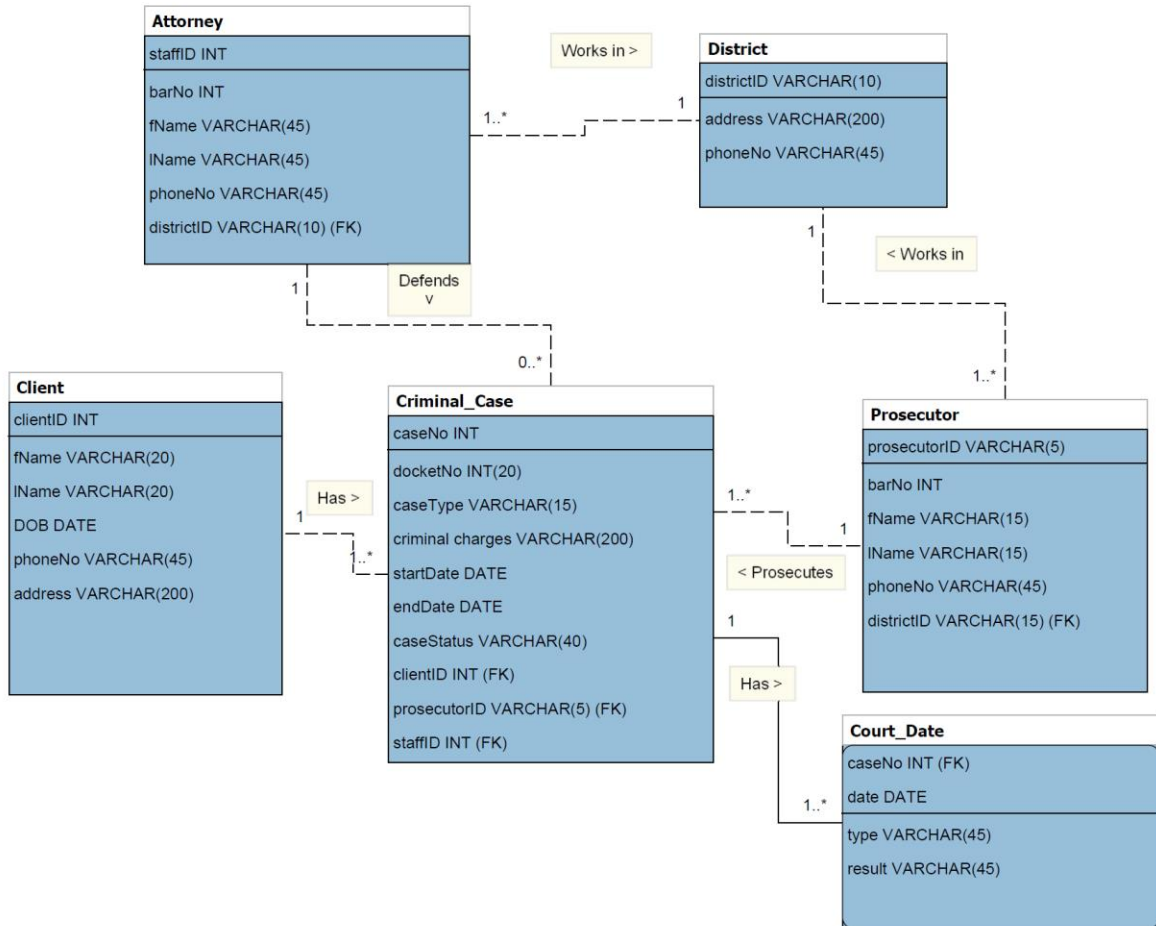
To report on attorneys

To report on districts

To report on prosecutors

To report on cases

## E/R Diagram



## Relational Model After Normalization

**RELATIONS** (primary key -> solid underline, foreign key -> dashed underline)

**Attorney**(staffID, barNo, fName, lName, phoneNo, districtID)

**District**(districtID, address, phoneNo)

**Client**(clientID, fName, lName, DOB, phoneNo, address)

**Prosecutor**(prosecutorID, barNo, fName, lName, phoneNo, districtID)

**Criminal Case**(caseNo, docketNo, caseType, criminal charges, strtDate, endDate, caseStatus, clientID, prosecutorID, staffID, districtID)

**Court Date**(caseNo, date, type, result)

\*note: caseNo is both a foreign key and part of the primary key

## DEPENDENCIES

### Attorney

staffID -> barNo, fName, lName, phoneNo, districtID

### District

districtID -> address, phoneNo

### Client

clientID -> fName, lName, DOB, phoneNo, address

### Prosecutor

prosecutorID -> barNo, fName, lName, phoneNo, districtID

### Criminal Case

caseNo -> docketNo, caseType, criminal charges, strtDate, endDate, caseStatus, clientID, prosecutorID, staffID, districtID

### Court Date

caseNo, date -> type, result

## NORMAL FORM

All the relations are in 3NF. They are in 3NF because they are in 2NF and no non-primary key attribute is transitively dependent on the primary key. They are in 2NF because every non-primary key attribute is fully functionally dependent on the primary key. They are in 1NF because the intersection of each row and column will contain one and only one value.

## Use Cases

<b>Use Case:</b>	<b>ENTER NEW ATTORNEY</b>	<b>ENTER NEW CLIENT</b>	<b>ENTER NEW CASE</b>
<b>Actor:</b>	<b>1<sup>st</sup> Defender, 2<sup>nd</sup> Defender</b>	<b>Attorney assigned to case</b>	<b>1<sup>st</sup> Defender, 2<sup>nd</sup> Defender, Attorney assigned to case</b>
<b>Steps:</b>	<ol style="list-style-type: none"> <li>1. Actor clicks on “New staff” button.</li> <li>2. A new staff ID is shown.</li> <li>3. Prompt to enter name, DOB, job title, salary, branch information</li> <li>4. All information is displayed; ask for confirmation</li> <li>5. User clicks on “Confirm” button</li> </ol>	<ol style="list-style-type: none"> <li>1. Actor clicks on “New client” button.</li> <li>2. New client ID is shown.</li> <li>3. Prompt to enter name, DOB, address, phone, case number</li> <li>4. All information is displayed; ask for confirmation</li> <li>5. User clicks on “Confirm” button</li> </ol>	<ol style="list-style-type: none"> <li>1. The actor clicks on “New case” button.</li> <li>2. New caseNo is shown.</li> <li>3. Prompt to docket number, charge, date charged, bond amount, if bonded, attorney assigned</li> <li>4. All information is displayed; ask for confirmation</li> <li>5. User clicks on “Confirm” button</li> </ol>
<b>Use Case:</b>	<b>SEARCH/UPDATE CASE</b>	<b>SEARCH/UPDATE CLIENT</b>	<b>SEARCH/UPDATE BRANCH</b>
<b>Actor:</b>	<b>1<sup>st</sup> Defender, 2<sup>nd</sup> Defender, Attorney assigned to case</b>	<b>1<sup>st</sup> Defender, 2<sup>nd</sup> Defender, Attorney assigned to case</b>	<b>1<sup>st</sup> Defender</b>
<b>Steps:</b>	<ol style="list-style-type: none"> <li>1. The actor clicks “search cases” button.</li> <li>2. Prompt to enter any of the attributes of case.</li> <li>3. All search results are returned.</li> <li>4. Actor clicks on desired search result to view instance.</li> <li>5. All information is displayed.</li> <li>6. Actors may update any field</li> </ol>	<ol style="list-style-type: none"> <li>1. The actor clicks “search client” button.</li> <li>2. Prompt to enter any of the attributes of client.</li> <li>3. All search results are returned.</li> <li>4. Actor clicks on desired search result to view instance.</li> <li>5. All information is displayed.</li> <li>6. Actors may update any field</li> </ol>	<ol style="list-style-type: none"> <li>1. Actor clicks “search branches” button.</li> <li>2. Prompt to enter branch no.</li> <li>3. All instance information is displayed.</li> <li>4. Actors may update any field</li> </ol>

## Use Cases cont'd

<b>Use Case:</b>	<b>SEARCH/UPDATE ATTORNEY</b>	<b>SEARCH/UPDATE DISTRICT</b>	<b>SEARCH PROSECUTOR</b>
<b>Actor:</b>	<b>1<sup>st</sup> Defender, 2<sup>nd</sup> Defender</b>	<b>1<sup>st</sup> Defender, 2<sup>nd</sup> Defender</b>	<b>1<sup>st</sup> Defender, 2<sup>nd</sup> Defender, IT, Attorneys.</b>
<b>Steps:</b>	<ol style="list-style-type: none"> <li>1. The actor clicks “search staff” button.</li> <li>2. Prompt to enter any of the attributes of staff.</li> <li>3. All search results are returned.</li> <li>4. The actor clicks on the desired search result to view instance information.</li> <li>5. All information is displayed.</li> <li>6. Actors may update any field</li> </ol>	<ol style="list-style-type: none"> <li>1. The actor clicks “search district” button.</li> <li>2. Prompt to enter any of the attributes of district.</li> <li>3. All search results are returned;</li> <li>4. Actor clicks on desired search result to view instance information;</li> <li>5. All information is displayed;</li> <li>6. Actor may update any field</li> </ol>	<ol style="list-style-type: none"> <li>1. The actor clicks “search prosecutor” button.</li> <li>2. Prompt to enter any of the attributes of prosecutor.</li> <li>3. All search results are returned;</li> <li>4. Actor clicks on desired search result to view instance information;</li> <li>5. All information is displayed;</li> <li>6. Actor may update any field</li> </ol>
<b>Use Case:</b>	<b>CREATE NEW TABLE</b>	<b>DELETE RECORDS/TABLES</b>	<b>UPDATE USER PROFILE/DATABASE FUNTIONALITIES</b>
<b>Actor:</b>	<b>IT Employees (Data Analyst)</b>	<b>IT Employees (Data Analyst)</b>	<b>IT Employees (Data Analyst)</b>
<b>Steps:</b>	<ol style="list-style-type: none"> <li>1. Actor clicks “Create Table” button.</li> <li>2. Prompt to set table name.</li> <li>3. Prompts to select no of columns.</li> <li>4. Prompts to name and set data types for each column.</li> <li>5. A new table is formed, and additional security steps can be implemented if needed</li> </ol>	<ol style="list-style-type: none"> <li>1. Actor Clicks on Delete Records/Table button.</li> <li>2. Prompt to specify which table/rows/column to delete</li> <li>3. Specify which of the table/rows/column</li> <li>4. Access is confirmed and request is granted if access is confirmed.</li> <li>5. Record/table is then deleted</li> </ol>	<ol style="list-style-type: none"> <li>1. The actor clicks on Advanced settings.</li> <li>2. Click on update user profile.</li> <li>3. Actor searches through the list of users in the database.</li> <li>4. Prompt to enter the name of user to update.</li> <li>5. All information is displayed.</li> <li>6. Actor clicks on edit User.</li> <li>7. update any field necessary and select submit</li> <li>8. Profile is then updated.</li> </ol>

## Use Cases cont'd

Use Case:	INSERT NEW PROSECUTOR	UPDATE PROSECUTOR	REMOVE/DELETE/PROSECUTOR
Actor:	Secretary to the 1 <sup>st</sup> public defender	1st Public defender/2nd Public defender	IT Employees, Head of HR
Steps	<ol style="list-style-type: none"> <li>1. The actor clicks on “New Prosecutor” button.</li> <li>2. New Prosecutor ID is shown.</li> <li>3. Prompt to enter name, DOB, address, phone, Bar number</li> <li>4. All information is displayed; ask for confirmation</li> <li>5. User clicks on “Confirm” button</li> </ol>	<ol style="list-style-type: none"> <li>1. Actor clicks “search Prosecutor” button.</li> <li>2. Prompt to enter any of the attributes of Prosecutor.</li> <li>3. All search results are returned.</li> <li>4. The actor clicks on desired search result to view instance.</li> <li>5. All information is displayed.</li> <li>6. Actor clicks on update record.</li> <li>7. The actor Verifies credentials</li> <li>8. Update is verified and updated if credential is authorized.</li> </ol>	<ol style="list-style-type: none"> <li>1. Actor clicks “search Prosecutor” button.</li> <li>2. Prompt to enter any of the attributes of Prosecutor.</li> <li>3. All search results are returned.</li> <li>4. Actor clicks on desired search result to view instance.</li> <li>5. All information is displayed.</li> <li>6. Actor selects Prosecutor record to delete.</li> <li>7. The actor Verifies credentials</li> <li>8. Deleted action is shown again so actor can be double certain about the action.</li> <li>9. Credential is verified and Prosecutor record is deleted if credential is authorized.</li> </ol>



## Use Cases cont'd

Use Case:	REMOVE/DELETE ATTORNEY	REMOVE/DELETE DISTRICTS	REMOVE/DELETE CLIENTS
Actor:	1st Public defender/2nd Public defender	1st Public defender/2nd Public defender	Section chief/Assistant public defenders
Steps	<ol style="list-style-type: none"> <li>1. Actor clicks “search Attorney” button.</li> <li>2. Prompt to enter any of the attributes of Attorney.</li> <li>3. All search results are returned.</li> <li>4. The actor clicks on desired search result to view instance.</li> <li>5. All information is displayed.</li> <li>6. Actor selects Attorney record to delete.</li> <li>7. The actor Verifies credentials</li> <li>8. Deleted action is shown again so the actor can be double certain about the action.</li> <li>9. Credential is verified and Attorney record is deleted if credential is authorized.</li> </ol>	<ol style="list-style-type: none"> <li>1. Actor clicks “search District” button.</li> <li>2. Prompt to enter any of the attributes of District.</li> <li>3. All search results are returned.</li> <li>4. The actor clicks on desired search result to view instance.</li> <li>5. All information is displayed.</li> <li>6. The actor selects District record to delete.</li> <li>7. The actor Verifies credentials</li> <li>8. Deleted action is shown again so actor can be double certain about the action.</li> <li>9. Credential is verified and District record is deleted if credential is authorized.</li> </ol>	<ol style="list-style-type: none"> <li>1. The actor clicks “search Client” button.</li> <li>2. Prompt to enter any of the attributes of Client.</li> <li>3. All search results are returned.</li> <li>4. Actor clicks on the desired search result to view instance.</li> <li>5. All information is displayed.</li> <li>6. Actor selects Client record to delete.</li> <li>7. The actor Verifies credentials</li> <li>8. Deleted action is shown again so the actor can be double certain about the action.</li> <li>9. Credential is verified and Client record is deleted if credential is authorized.</li> </ol>

## Use Cases cont'd

<b>Use Case</b>	<b>REMOVE/DELETE CASE</b>	<b>REMOVE/DELETE BRANCH</b>	<b>INSERT NEW DISTRICT</b>
<b>Actor:</b>	<b>Case administrator</b>	<b>1st Public defender/2nd Public defender</b>	<b>1st Public defender/2nd Public defender, Case administrator, Office administrator</b>
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. The actor clicks “search cases” button.</li> <li>2. Prompt to enter any of the attributes of Case.</li> <li>3. All search results are returned.</li> <li>4. Actor clicks on the desired search result to view instance.</li> <li>5. All information is displayed.</li> <li>6. Actor selects Case record to delete.</li> <li>7. The actor Verifies credentials</li> <li>8. Deleted action is shown again so the actor can be double certain about the action.</li> <li>9. Credential is verified and case record is deleted if credential is authorized.</li> </ol>	<ol style="list-style-type: none"> <li>1. The actor clicks “search Client” button.</li> <li>2. Prompt to enter any of the attributes of Client.</li> <li>3. All search results are returned.</li> <li>4. The actor clicks on desired search result to view instance.</li> <li>5. All information is displayed.</li> <li>6. Actor selects Client record to delete.</li> <li>7. Verify credentials</li> <li>8. Deleted action is shown again so actor can be double certain about the action.</li> <li>9. Credential is verified and Client record is deleted if credential is authorized.</li> </ol>	<ol style="list-style-type: none"> <li>1. Actor clicks on “New District” button.</li> <li>2. New District ID is shown.</li> <li>3. Prompt to enter name, DOB, address, phone, Bar number</li> <li>4. All information is displayed; ask for confirmation</li> <li>5. User clicks on “Confirm” button</li> </ol>
<b>Use Case:</b>	<b>INSERT/UPDATE COURT DATE</b>	<b>SEARCH COURT DATE</b>	<b>DELETE COURT DATE</b>
<b>Actor:</b>	<b>Case Administrator</b>	<b>Anyone with access to portal</b>	<b>Case administrator</b>
<b>Steps:</b>	<ol style="list-style-type: none"> <li>1. The actor clicks on “New Court Date” button.</li> <li>2. Actor is asked to input case No</li> <li>3. Once case No is authenticated, Actor is then asked to put new date and if new date is available per system requirement.</li> <li>4. New Court date is then confirmed.</li> </ol>	<ol style="list-style-type: none"> <li>1. The actor clicks “search Court date” button.</li> <li>2. Prompt to enter any of range of date to search from.</li> <li>3. All search results within the input range are returned.</li> <li>4. Actor clicks on desired search date to view instance.</li> <li>5. All information is displayed.</li> </ol>	<ol style="list-style-type: none"> <li>1. The actor clicks “search Court date” button.</li> <li>2. Actor is asked to input caseNo</li> <li>3. Once caseNo is authenticated, the actor clicks on the option button and selects delete court date.</li> <li>4. The actor Verifies credentials</li> <li>5. The Delete action is shown again so the actor can be double certain about the action.</li> <li>6. Credential is verified and Court date is deleted if credential is authorized.</li> </ol>

## Use Case Implementation (SQL statements)

### Attorney

**How many attorneys are employed by the 15<sup>th</sup> JDC Public Defenders Office? (aggregate):**

```
SELECT COUNT(staffID) AS attorneyCount  
FROM Attorney;
```

**Insert new attorney staff (insert):**

```
INSERT INTO Attorney  
VALUES (7, 661093383, 'Philip', 'Fry', '337-342-8894', 'D1');
```

**Remove attorney with staffID 4 (delete):**

```
DELETE FROM Attorney  
WHERE staffID = 4
```

**Update BarNo for attorney with staffID 2 (update):**

```
UPDATE Attorney  
SET barNo = 3455197  
WHERE staffID = 2
```

**For all attorneys, list staffID, lname, fname, districtID, and district address; sorted by lname, fname (join Attorney/District):**

```
SELECT a.staffID, lName, fName, a.districtID, address  
FROM Attorney a, District d  
WHERE a.districtID = d.districtID  
ORDER BY lname, fname;
```

**List docketNo and staffID for all cases belonging to attorney with staffID = 1 (join attorney/criminal case)**

```
SELECT docketNo, c.staffID  
FROM criminal_case c, attorney a  
WHERE c.staffID = a.staffID AND c.staffID = 1
```

**List docketNo, districtID, and address from all criminal cases (join criminal\_case/district)**

### District

**How many districts are covered by the 15<sup>th</sup> JDC PDO? (aggregate):**

```
SELECT COUNT(districtID) AS districtCount  
FROM District;
```

**Insert new district (insert):**

```
INSERT INTO District  
VALUES ('D4', '123 Congress Street, Lafayette, LA 70507', 33788900);
```

## Use Case Implementation (SQL statements) cont'd

### District cont'd

#### **Delete district with districtID D1 (delete):**

```
DELETE FROM District  
WHERE districtID = 'D1';
```

#### **Update phoneNo for district with districtID D2 (update):**

```
UPDATE District  
SET phoneNo = 3372230099  
WHERE districtID = 'D2';
```

#### **List lName, fName, and districtID for all prosecutors that work in district with districtID D2 (join District/Prosecutor):**

```
SELECT lName, fName, p.districtID  
FROM District d, Prosecutor p  
WHERE p.districtID = 'D2' AND p.districtID = d.districtID;
```

### Client

#### **How many clients does the 15<sup>th</sup> JDC PDO represent? (aggregate):**

```
SELECT COUNT(clientID) AS clientCount  
FROM Client;
```

#### **Insert new client (insert):**

```
INSERT INTO Client  
VALUES (20, 'Ryan', 'Sullivan', '1980-10-11', '337-333-3244', '123 Main St., Crowley, LA  
76036');
```

#### **Delete client with clientID 1(delete):**

```
DELETE FROM Client  
WHERE clientID = 1;
```

#### **Update phoneNo for client with clientID 2(update)**

```
UPDATE Client  
SET phoneNo = 3378889388  
WHERE clientID = 2;
```

#### **List ClientID, lName, fName, caseNo and docketNo for all cases belonging to client with clientID 1(join Client/Criminal case)**

```
SELECT b.clientID, lName, fName, caseNo, docketNo  
FROM Client a, Criminal_Case b  
WHERE b.clientID = 1 AND b.clientID = a.clientID;
```

## Use Case Implementation (SQL statements) cont'd

### Prosecutor

**How many prosecutors work in District with districtID D2?(aggregate):**

```
SELECT COUNT(ProsecutorID) AS prosecutorCount
FROM Prosecutor
WHERE districtID = 'D2';
```

**Insert new prosecutor (insert):**

```
INSERT INTO Prosecutor
VALUES ('A3', '33344409', 'James', 'Franco', '337-455-9909', 'D2');
```

**Delete prosecutor with prosecutorID 1 (delete):**

```
DELETE FROM Prosecutor
Where prosecutorID = 1;
```

**Update phoneNo for prosecutor with prosecutor ID 2(update)**

```
UPDATE Prosecutor
SET phoneNo = 3374445545
WHERE prosecutorID = 2;
```

**List lName, fName, districtID, and address for all Prosecutors, sorted by districtID (join prosecutor/district)**

```
SELECT lName, fName, d.districtID, address
FROM District d, Prosecutor p
WHERE d.districtID = p.districtID;
```

**List caseNo, client fName, client lName, prosecutorID, prosecutor fName and prosecutor lName for all cases (join prosecutor/criminal case)**

```
SELECT caseNo, docketNo, c.prosecutorID, p.fName, p.lName
FROM criminal_case c, prosecutor p
WHERE c.prosecutorID = p.prosecutorID;
```

### Criminal Case

**How many cases are assigned to the attorney with staffID 1? (aggregate)**

```
SELECT COUNT(caseNo) AS caseCount
FROM Criminal_Case
WHERE staffID = 1;
```

**Insert new criminal case (insert):**

```
INSERT INTO Criminal_Case (CaseNo, docketNo, caseType, `criminal charges`, startDate,
caseStatus, clientID, prosecutorID, staffID)
VALUES (20, 2022236345, 'felony', 'Armed Robbery', '2022-04-21', 'open', 2, 'A2', 3);
```

## Use Case Implementation (SQL statements) cont'd

### Criminal\_Case cont'd

#### **Delete all closed cases (delete)**

```
DELETE FROM Criminal_Case  
WHERE caseStatus = 'closed';
```

#### **Update endDate and caseStatus for Criminal Case with caseNo 11(update):**

```
UPDATE Criminal_Case  
SET endDate = '2022-04-21', caseStatus = 'closed';  
WHERE caseNo = 11;
```

#### **List ClientID, lName, fName, caseNo, and docketNo for all cases belonging to client with ClientID 20 (join):**

```
SELECT a.clientID, lName, fName, caseNo, docketNo  
FROM Criminal_Case a, Client b  
WHERE a.clientID = 20 AND a.clientID = b.clientID;
```

#### **List clientID, docketNo and district for all cases belonging to client with ClientID 20 (join):**

```
SELECT clientID, docketNo, b.districtID  
FROM Criminal_Case a, District b  
WHERE clientID = 20 AND districtID = b.districtID
```

### Court\_date

#### **How many court dates has Criminal Case with caseNo 5(aggregate)?**

```
SELECT COUNT(date) AS courtDateCount  
FROM Court_Date  
WHERE caseNo = 1;
```

#### **Insert new future Court Date for Criminal Case with caseNo 2 (insert):**

```
INSERT INTO court_date (caseNo, date, type)  
VALUES (2, '2022-07-09', 'trial')
```

#### **Delete Court Date for caseNo 4, date '2022-07-09' (delete):**

```
DELETE FROM Court Date  
WHERE caseNo = 4 AND date = '2022-07-09';
```

#### **Update Court date with caseNo 11, date '2022-04-21' (update)**

```
UPDATE Court Date  
SET result = 'pled 8 yrs HL'  
WHERE caseNo = 11 AND date = '2022-04-21';
```

## Use Case Implementation (SQL statements) cont'd

Court\_date cont'd

**List caseNo, docketNo, date, type, and result for all Court Dates for caseNo 4 (join Criminal Case/Court Date):**

```
SELECT c.caseNo, docketNo, date, type, result
FROM Criminal_Case c, Court_Date d
WHERE c.caseNo = 4 AND c.caseNo = d.caseNo;
```

## Test Plan and Records

### Attorney Entity

#### 1. Insert new attorneys (insert)

##### ➤ The Input:

```
INSERT INTO attorney
VALUES
```

```
(1, 38593290, 'Robert', 'Johnson', '337-555-4356', 'D1'),
(2, 28591949, 'Samantha', 'Green', '337-555-3890', 'D1'),
(3, 886959403, 'Jack', 'Robertson', '337-250-9498', 'D2'),
(4, 74646477, 'Amy', 'Schoemer', '337-250-9994', 'D2'),
(5, 38472222, 'Helen', 'Pierce', '337-854-3324', 'D3'),
(6, 90009867, 'Robert', 'Smith', '337-854-3324', 'D3');
```

##### ➤ The Expected Output :

StaffID	barNo	fName	lName	phoneNo	DistrictID
1	38593290	Robert	Johnson	337-555-4356	D1
2	28591949	Samantha	Green	337-555-3890	D1
3	886959403	Jack	Robertson	337-250-9498	D2
4	74646477	Amy	Schoemer	337-250-9994	D2
5	38472222	Helen	Pierce	337-854-2343	D3
6	90009867	Robert	Smith	337-854-3324	D3

##### ➤ The Actual Output :

staffID	barNo	fName	lName	phoneNo	districtID
1	38593290	Robert	Johnson	337-555-4356	D1
2	38591949	Samantha	Green	337-555-3890	D1
3	886959403	Jack	Robertson	337-250-9498	D2
4	74646477	Amy	Schoemer	337-250-9994	D2
5	38472222	Helen	Pierce	337-854-2343	D3
6	90009867	Robert	Smith	337-854-3324	D3

## Test Plan and Records cont'd

### 2. How many attorneys are employed by the 15<sup>th</sup> JDC Public Defenders Office? (aggregate):

#### ➤ The Input:

```
SELECT COUNT(staffID) AS attorneyCount
FROM Attorney;
```

#### ➤ The Expected Output :

attorneyCount
6

#### ➤ The Actual Output :

attorneyCount
6

### 3. Remove attorney with staffID 4 (delete)

#### ➤ The Input:

```
DELETE FROM Attorney
WHERE staffID = 4
```

#### ➤ The Expected Output :

StaffID	barNo	fName	lName	phoneNo	DistrictID
1	38593290	Robert	Johnson	337-555-4356	D1
2	28591949	Samantha	Green	337-555-3890	D1
3	886959403	Jack	Robertson	337-250-9498	D2
5	38472222	Helen	Pierce	337-854-2343	D3
6	90009867	Robert	Smith	337-854-3324	D3

#### ➤ The Actual Output :

staffID	barNo	fName	lName	phoneNo	districtID
1	38593290	Robert	Johnson	337-555-4356	D1
2	38591949	Samantha	Green	337-555-3890	D1
3	886959403	Jack	Robertson	337-250-9498	D2
5	38472222	Helen	Pierce	337-854-2343	D3
6	90009867	Robert	Smith	337-854-3324	D3

### 4. Update BarNo for attorney with staffID 2 (update)

#### ➤ The Input:

```
UPDATE Attorney
SET barNo = 3455197
WHERE staffID = 2
```



## Test Plan and Records cont'd

### ➤ The Expected Output :

StaffID	barNo	fName	lName	phoneNo	DistrictID
1	38593290	Robert	Johnson	337-555-4356	D1
2	3455197	Samantha	Green	337-555-3890	D1
3	886959403	Jack	Robertson	337-250-9498	D2
5	38472222	Helen	Pierce	337-854-2343	D3
6	90009867	Robert	Smith	337-854-3324	D3

### ➤ The Actual Output :

staffID	barNo	fName	lName	phoneNo	districtID
1	38593290	Robert	Johnson	337-555-4356	D1
2	3455197	Samantha	Green	337-555-3890	D1
3	886959403	Jack	Robertson	337-250-9498	D2
5	38472222	Helen	Pierce	337-854-2343	D3
6	90009867	Robert	Robert	337-854-3324	D3

5. For all attorneys, list staffID, lname, fname, districtID, and district address; sorted by lname, fname (join Attorney/District):

### ➤ The Input:

```
SELECT a.staffID, lName, fName, a.districtID, address
FROM Attorney a, District d
WHERE a.districtID = d.districtID
ORDER BY lname, fname;
```

### ➤ The Expected Output :

StaffID	lName	fName	districtID	address
2	Green	Samantha	D1	800 S. Buchanan St., Lafayette, LA 70501
1	Johnson	Robert	D1	800 S. Buchanan St., Lafayette, LA 70501
5	Pierce	Helen	D3	100 North State St., Abbeville, LA 70510
3	Robertson	Jack	D2	500 N. Parkerson Ave., Crowley, LA 70527
6	Smith	Robert	D3	100 North State St., Abbeville, LA 70510

### ➤ The Actual Output :

staffID	lName	fName	districtID	address
2	Green	Samantha	D1	800 S. Buchanan St., Lafayette, LA 70501
1	Johnson	Robert	D1	800 S. Buchanan St., Lafayette, LA 70501
5	Pierce	Helen	D3	100 North State St., Abbeville, LA 70510
3	Robertson	Jack	D2	500 N. Parkerson Ave., Crowley, LA 70527
6	Smith	Robert	D3	100 North State St., Abbeville, LA 70510

## Test Plan and Records cont'd

6. List docketNo and staffID for all cases belonging to attorney with staffID = 1 (join attorney/criminal case)

➤ **The Input:**

```
SELECT docketNo, c.staffID
FROM criminal_case c, attorney a
WHERE c.staffID = a.staffID AND c.staffID = 1
```

➤ **The Expected Output :**

docketNo	staffID
202094567	1
202244432	1

➤ **The Actual Output :**

docketNo	staffID
202094567	1
202244432	1

### District Entity

1. Insert new district (insert):

➤ **The Input:**

```
INSERT INTO district
VALUES
('D1', '800 S. Buchanan St., Lafayette, LA 70501', '337-291-6400'),
('D2', '500 N. Parkerson Ave., Crowley, LA 70527', '337-788-8881'),
('D3', '100 North State St., Abbeville, LA 70510', '337-898-1992')
('D4', '0 North State St., Aleville, LA 70510', '337-898-1992');
```

➤ **The Expected Output :**

districtID	address	phoneNo
D1	800 S. Buchanan St., Lafayette, LA 70501	337-291-6400
D2	500 N. Parkerson Ave., Crowley, LA 70527	337-788-8881
D3	100 North State St., Abbeville, LA 70510	337-898-1992
D4	0 North State St., Aleville, LA 70510	337-898-1992

➤ **The Actual Output :**

districtID	address	phoneNo
D1	800 S. Buchanan St., Lafayette, LA 70501	337-291-6400
D2	500 N. Parkerson Ave., Crowley, LA 70527	337-788-8881
D3	100 North State St., Abbeville, LA 70510	337-898-1992
D4	0 North State St., Aleville, LA 70510	337-898-1992

## Test Plan and Records cont'd

### 2. How many districts are covered by the 15<sup>th</sup> JDC PDO? (aggregate):

#### ➤ The Input:

```
SELECT COUNT(districtID) AS districtCount
FROM District;
```

#### ➤ The Expected Output :

districtCount
4

#### ➤ The Actual Output :

districtCount
4

### 3. Delete district with districtID D1 (delete):

#### ➤ The Input:

```
DELETE FROM District
WHERE districtID = 'D4';
```

#### ➤ The Expected Output :

districtID	address	phoneNo
D1	800 S. Buchanan St., Lafayette, LA 70501	337-291-6400
D2	500 N. Parkerson Ave., Crowley, LA 70527	337-788-8881
D3	100 North State St., Abbeville, LA 70510	337-898-1992

#### ➤ The Actual Output :

districtID	address	phoneNo
D1	800 S. Buchanan St., Lafayette, LA 70501	337-291-6400
D2	500 N. Parkerson Ave., Crowley, LA 70527	337-788-8881
D3	100 North State St., Abbeville, LA 70510	337-898-1992

### 4. Update phoneNo for district with districtID D2 (update):

#### ➤ The Input:

```
UPDATE District
SET phoneNo = '337-223-0099'
WHERE districtID = 'D2';
```

#### ➤ The Expected Output :

districtID	address	phoneNo
D1	800 S. Buchanan St., Lafayette, LA 70501	337-291-6400
D2	500 N. Parkerson Ave., Crowley, LA 70527	337-223-0099
D3	100 North State St., Abbeville, LA 70510	337-898-1992

## Test Plan and Records cont'd

### ➤ The Actual Output :

districtID	address	phoneNo
D1	800 S. Buchanan St., Lafayette, LA 70501	337-291-6400
D2	500 N. Parkerson Ave., Crowley, LA 70527	337-223-0099
D3	100 North State St., Abbeville, LA 70510	337-898-1992

### 5. List lName, fName, and districtID for all prosecutors that work in district with districtID D2 (join District/Prosecutor):

#### ➤ The Input:

```
SELECT lName, fName, p.districtID
FROM District d, Prosecutor p
WHERE p.districtID = 'D2' AND p.districtID = d.districtID;
```

#### ➤ The Expected Output :

lName	fName	DistrictID
Peterson	Sam	D2
Jackson	Peter	D2
Franco	James	D2

#### ➤ The Actual Output :

lName	fName	districtID
Peterson	Sam	D2
Jackson	Peter	D2
Franco	James	D2

## Client Entity

### 1. Insert new clients (insert):

#### ➤ The Input :

```
INSERT INTO Client
VALUES
('10', 'Ryann', 'Sullivann', DATE '1981-10-11', '33733732', '122 Main St., Crowley, LA 76036'),
('20', 'Stive', 'Bolt', DATE '1989-10-10', '33744332', '121 Main St., Crowley, NM 76036'),
('30', 'John', 'Brown', DATE '1983-10-7', '33733355', '4723 Green St., Houston, TX 77044'),
('40', 'Adam', 'Downson', DATE '1986-10-1', '33733365', '123 Valley St., Dallas, TX 79054'),
('50', 'Oscar', 'Templeton', DATE '1984-5-22', '33733326', '123 Ginosa St., Austin, TX 70022');
```

➤ **The Expected Output :**

clientID	fName	lName	DOB	phoneNo	address
10	Ryann	Sullivann	1981-10-11	33733732	122 Main St., Crowley, LA 76036
20	Stive	Bolt	1989-10-10	33744332	121 Main St., Crowley, NM 76036
30	John	Brown	1983-10-7	33733355	4723 Green St., Houston, TX 77044
40	Adam	Downson	1986-10-1	33733365	123 Valley St., Dallas, TX 79054
50	Oscar	Templeton	1984-5-22	33733326	123 Ginosa St., Austin, TX 70022

➤ **The Actual Output :**

clientID	fName	lName	DOB	phoneNo	address
10	Ryann	Sullivann	1981-10-11	33733732	122 Main St., Crowley, LA 76036
20	Stive	Bolt	1989-10-10	33744332	121 Main St., Crowley, NM 76036
30	John	Brown	1983-10-07	33733355	4723 Green St., Houston, TX 77044
40	Adam	Downson	1986-10-01	33733365	123 Valley St., Dallas, TX 79054
50	Oscar	Templeton	1984-05-22	33733326	123 Ginosa St., Austin, TX 70022

**2. How many clients does the 15<sup>th</sup> JDC PDO represent? (aggregate):**

➤ **The Input :**

```
SELECT COUNT (clientID) AS clientCount
FROM Client;
```

➤ **The Expected Output :**

clientCount
5

**The Actual Output :**

clientCount
5

**3. Delete client with clientID 1(delete):**

➤ **The Input :**

```
DELETE FROM Client
WHERE clientID = 40;
```

➤ **The Expected Output :**

clientID	fName	lName	DOB	phoneNo	address
10	Ryann	Sullivann	1981-10-11	33733732	122 Main St., Crowley, LA 76036
20	Stive	Bolt	1989-10-10	33744332	121 Main St., Crowley, NM 76036
30	John	Brown	1983-10-7	33733355	4723 Green St., Houston, TX 77044
50	Oscar	Templeton	1984-5-22	33733326	123 Ginosa St., Austin, TX 70022

➤ **The Actual Output :**

clientID	fName	lName	DOB	phoneNo	address
10	Ryann	Sullivann	1981-10-11	33733732	122 Main St., Crowley, LA 76036
20	Stive	Bolt	1989-10-10	33744332	121 Main St., Crowley, NM 76036
30	John	Brown	1983-10-07	33733355	4723 Green St., Houston, TX 77044
50	Oscar	Templeton	1984-05-22	33733326	123 Ginosa St., Austin, TX 70022

**4. Update phoneNo for client with clientID 2(update)**

➤ **The Input :**

```
UPDATE Client
SET phoneNo = 33788890
WHERE clientID = 20;
```

➤ **The expected Output :**

clientID	fName	lName	DOB	phoneNo	address
10	Ryann	Sullivann	1981-10-11	33733732	122 Main St., Crowley, LA 76036
20	Stive	Bolt	1989-10-10	33788890	121 Main St., Crowley, NM 76036
30	John	Brown	1983-10-7	33733355	4723 Green St., Houston, TX 77044
50	Oscar	Templeton	1984-5-22	33733326	123 Ginosa St., Austin, TX 70022

➤ **The Actual Output :**

clientID	fName	lName	DOB	phoneNo	address
10	Ryann	Sullivann	1981-10-11	33733732	122 Main St., Crowley, LA 76036
20	Stive	Bolt	1989-10-10	33788890	121 Main St., Crowley, NM 76036
30	John	Brown	1983-10-07	33733355	4723 Green St., Houston, TX 77044
50	Oscar	Templeton	1984-05-22	33733326	123 Ginosa St., Austin, TX 70022

**5. List ClientID, lName, fName, caseNo and docketNo for all cases belonging to client with clientID 2 (join Client/Criminal case)**

➤ **The Input :**

```
SELECT b.clientID, lName, fName, caseNo, docketNo
FROM Client a, Criminal_Case b
WHERE b.clientID = 20 AND b.clientID = a.clientID;
```

➤ **The Expected Output :**

clientID	lName	fName	caseNo	docketNo
20	Bolt	Stive	20	23345

➤ **The Actual Output :**

clientID	lName	fName	caseNo	docketNo
20	Bolt	Stive	20	23345

## Prosecutor Entity

### 1. Insert new prosecutor (insert)

#### ➤ The Input :

```
INSERT INTO Prosecutor  
VALUES
```

```
('15', '33344409', 'Jack', 'Doga', '33745509', 'D4'),  
(16, '33344410', 'Danny', 'Doglas', '33745511', 'D5'),  
(17, '33344411', 'Robert', 'Albert', '33745573', 'D6'),  
(18, '33344412', 'Jason', 'Thomas', '33745577', 'D6'),  
(19, '33344413', 'Peter', 'Rodrigo', '33745500', 'D8');
```

#### ➤ The Expected Output

prosecutorID	barNo	fName	lName	phoneNo	districtID
15	33344409	Jack	Doga	33745509	D4
16	33344410	Danny	Doglas	33745511	D5
17	33344411	Robert	Albert	33745573	D6
18	33344412	Jason	Thomas	33745577	D7
19	33344413	Peter	Rodrigo	33745500	D8

#### ➤ The Actual Output

prosecutorID	barNo	fName	lName	phoneNo	districtID
15	33344409	Jack	Doga	33745509	D4
16	33344410	Danny	Doglas	33745511	D5
17	33344411	Robert	Albert	33745573	D6
18	33344412	Jason	Thomas	33745577	D6
19	33344413	Peter	Rodrigo	33745500	D8

### 2. How many prosecutors work in District with districtID D2 ? (aggregate)

#### ➤ The Input :

```
SELECT COUNT(ProsecutorID) AS prosecutorCount  
FROM Prosecutor  
WHERE districtID = 'D4';
```

#### ➤ The Expected Output :

prosecutorCount
1

#### ➤ The Actual Output :

prosecutorCount
1

### 3. Delete prosecutor with prosecutorID 1 (delete)

#### ➤ The Input :

```
DELETE FROM Prosecutor  
WHERE prosecutorID = 16;
```

#### ➤ The Expected Output :

prosecutorID	barNo	fName	lName	phoneNo	districtID
15	33344409	Jack	Doga	33745509	D4
17	33344411	Robert	Albert	33745573	D6
18	33344412	Jason	Thomas	33745577	D7
19	33344413	Peter	Rodrigo	33745500	D8

#### ➤ The Actual Output :

prosecutorID	barNo	fName	lName	phoneNo	districtID
15	33344409	Jack	Doga	33745509	D4
17	33344411	Robert	Albert	33745573	D6
18	33344412	Jason	Thomas	33745577	D6
19	33344413	Peter	Rodrigo	33745500	D8

### 4. Update phoneNo for prosecutor with prosecutor ID 2(update)

#### ➤ The Input :

```
UPDATE Prosecutor  
SET phoneNo = 33744455  
WHERE prosecutorID = 17;
```

#### ➤ The Expected Output :

prosecutorID	barNo	fName	lName	phoneNo	districtID
15	33344409	Jack	Doga	33745509	D4
17	33344411	Robert	Albert	33744455	D6
18	33344412	Jason	Thomas	33745577	D7
19	33344413	Peter	Rodrigo	33745500	D8

#### ➤ The Actual Output :

prosecutorID	barNo	fName	lName	phoneNo	districtID
15	33344409	Jack	Doga	33745509	D4
17	33344411	Robert	Albert	33744455	D6
18	33344412	Jason	Thomas	33745577	D6
19	33344413	Peter	Rodrigo	33745500	D8

### 5. List lName, fName, districtID, and address for all Prosecutors, sorted by districtID (join)



➤ **The Input :**

```
SELECT IName, fName, d.districtID, address
FROM District d, Prosecutor p
WHERE d.districtID = p.districtID;
```

➤ **The Expected Output :**

IName	fName	districtID	address
Doga	Jack	D4	123 Congress Street, Lafayette, LA, 70507
Albert	Robert	D6	222 Main Street, Lafayette, LA, 70563
Thomas	Jason	D7	244 Felona St, Lafayette, LA, 70500
Rodrigo	Peter	D8	111 Rosa STt, Lafayette, LA, 70511

➤ **The Actual Output :**

IName	fName	districtID	address
Doga	Jack	D4	123 Congress Street, Lafayette, LA, 70507
Albert	Robert	D6	222 Main Street, Lafayette, LA, 70563
Thomas	Jason	D7	244 Folena St, Lafayette, LA, 70500
Rodrigo	Peter	D8	111 Rosa St, Lafayette, LA, 70511

## CRIMINAL CASE ENTITY

### 1. Insert new Criminal Case (insert)

➤ **The Input :**

```
INSERT INTO criminal_case
VALUES
```

```
('1', '0001', 'felony', 'Armed Robbery', '2022-04-21', '2022-08-12', 'open', '2', '012', '3'),
('2', '0002', 'misdemeanor', 'shoplifting', '2022-01-15', '2022-09-02', 'open', '4', '111', '3'),
('3', '0003', 'felony', 'Attempted murder', '2022-03-02', '2022-04-17', 'closed', '6', '115', '1'),
('4', '0004', 'misdemeanor', 'petty theft', '2022-04-13', '2022-05-15', 'open', '12', '116', '5'),
('5', '0005', 'felony', 'Aggravated assault', '2021-08-19', '2021-12-17', 'closed', '8', '115', '2'),
('6', '0006', 'misdemeanor', 'simple assault', '2021-05-12', '2022-05-29', 'open', '22', '007', '1');
```

➤ **The Expected Output :**

caseNo	docketNo	caseType	criminal charges	startDate	endDate	caseStatus	clientID	prosecutorID	staffID
1	1	felony	Armed Robbery	4/21/2022	8/12/2022	open	2	12	3
2	2	misdemeanor	shoplifting	1/15/2022	9/2/2022	open	4	111	3
3	3	felony	Attempted murder	3/2/2022	4/17/2022	closed	6	115	1
4	4	misdemeanor	petty theft	4/13/2022	5/15/2022	open	12	116	5
5	5	felony	Aggravated assault	8/19/2021	12/17/2021	closed	8	115	2
6	6	misdemeanor	simple assault	5/12/2021	5/29/2022	open	22	7	1

➤ **The Actual Output :**

caseNo	docketNo	caseType	criminal charges	startDate	endDate	caseStatus	clientID	prosecutorID	staffID
1	1	felony	Armed Robbery	2022-04-21	2022-08-12	open	2	12	3
2	2	misdemeanor	shoplifting	2022-01-15	2022-09-02	open	4	111	3
3	3	felony	Attempted murder	2022-03-02	2022-04-17	closed	6	115	1
4	4	misdemeanor	petty theft	2022-04-13	2022-05-15	open	12	116	5
5	5	felony	Aggravated assault	2021-08-19	2021-12-17	closed	8	115	2
6	6	misdemeanor	simple assault	2021-05-12	2022-05-29	open	22	7	1

## 2. How many cases are assigned to the attorney with staffID 1? (aggregate)

```
SELECT COUNT(caseNo) AS caseCount
FROM Criminal_Case
WHERE staffID = 1;
```

### ➤ The Expected Output :

caseCount
2

### ➤ The Actual Output :

caseCount
2

## 3. Delete all closed cases (delete)

```
DELETE FROM Criminal_Case
WHERE caseStatus = 'closed';
```

### ➤ The Expected Output :

caseNo	docketNo	caseType	criminal charges	startDate	endDate	caseStatus	clientID	prosecutorID	staffID
1	1	felony	Armed Robbery	4/21/2022	8/12/2022	open	2	12	3
4	4	misdemeanor	shoplifting	4/13/2022	5/15/2022	open	12	116	5
6	6	misdemeanor	petty theft	5/12/2021	5/29/2022	open	22	7	1
20	22236345	felony	simple assault	4/21/2022		open	2	12	3

### ➤ The Actual Output :

caseNo	docketNo	caseType	criminal charges	startDate	endDate	caseStatus	clientID	prosecutorID	staffID
1	1	felony	Armed Robbery	2022-04-21	2022-08-12	open	2	12	3
2	2	misdemeanor	shoplifting	2022-01-15	2022-09-02	open	4	111	3
4	4	misdemeanor	petty theft	2022-04-13	2022-05-15	open	12	116	5
6	6	misdemeanor	simple assault	2021-05-12	2022-05-29	open	22	7	1
20	202236345	felony	Armed Robbery	2022-04-21	NULL	open	2	12	3
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

## 4. List ClientID, lName, fName, caseNo, and docketNo for all cases belonging to client with ClientID 20 (join):

```
SELECT a.clientID, lName, fName, caseNo, docketNo
FROM Criminal_Case a, Client b
WHERE a.clientID = 20 AND a.clientID = b.clientID;
```

### ➤ The Expected Output :

caseNo	docketNo	caseType	criminal charges	startDate	endDate	caseStatus	clientID	prosecutorID	staffID
--------	----------	----------	------------------	-----------	---------	------------	----------	--------------	---------

### ➤ The Actual Output :

caseNo	docketNo	caseType	criminal charges	startDate	endDate	caseStatus	clientID	prosecutorID	staffID
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

### 5. Update endDate and caseStatus for Criminal Case with caseNo 11(update):

UPDATE Criminal\_Case

SET endDate = '2022-03-21', caseStatus = 'closed';

WHERE caseNo = 4;

#### ➤ The Expected Output :

	A	B	C	D	E	F	G	H	I	J
1	caseNo	docketNo	caseType	criminal charges	startDate	endDate	caseStatus	clientID	prosecutorID	staffID
2	1	1	felony	Armed Robbery	4/21/2022	8/12/2022	open	2	12	3
3	2	2	misdemeanor	shoplifting	1/15/2022	9/2/2022	open	4	111	3
4	4	4	misdemeanor	petty theft	4/13/2022	5/15/2022	open	12	116	5
5	6	6	misdemeanor	simple assault	5/12/2021	5/29/2022	open	22	7	1
6	20	22236345	felony	Armed Robbery	4/21/2022		open	2	12	3

#### ➤ The Actual Output :

caseNo	docketNo	caseType	criminal charges	startDate	endDate	caseStatus	clientID	prosecutorID	staffID
1	1	felony	Armed Robbery	2022-04-21	2022-08-12	open	2	12	3
2	2	misdemeanor	shoplifting	2022-01-15	2022-09-02	open	4	111	3
4	4	misdemeanor	petty theft	2022-04-13	2022-03-21	closed	12	116	5
6	6	misdemeanor	simple assault	2021-05-12	2022-05-29	open	22	7	1
20	222236345	felony	Armed Robbery	2022-04-21		open	2	12	3

### COURT DATE RELATION

INSERT INTO court\_date (caseNo, date, type)

VALUES (1 , '2021-04-09', 'trial'),

VALUES (2 , '2022-09-09', 'trial'),

VALUES (3 , '2022-01-15', 'trial'),

VALUES (4 , '2022-07-09', 'trial'),

VALUES (5 , '2022-12-05', 'trial'),

VALUES (11 , '2022-07-09', 'trial');

#### ➤ The Expected Output :

caseNo	date	type	result
1	4/9/2021	trial	1
2	9/9/2022	trial	2
3	1/15/2022	trial	3
4	7/9/2022	trial	4
5	12/5/2022	trial	5
11	7/9/2022	trial	6

#### ➤ The Actual Output :

caseNo	date	type	result
1	2021-04-09	trial	1
2	2022-09-09	trial	2
3	2022-01-15	trial	3
4	2022-07-09	trial	4
5	2022-12-05	trial	5
11	2022-07-09	trial	6

**How many court dates has Criminal Case with caseNo 5(aggregate)?**

```
SELECT COUNT(date) AS courtDateCount
FROM Court_Date
WHERE caseNo = 1;
```

➤ **The Expected Output :**

courtDateCount
1

➤ **The Actual Output :**

courtDateCount
1

**Insert new future Court Date for Criminal Case with caseNo 2 (insert):**

```
INSERT INTO court_date (caseNo, date, type)
VALUES (2 , '2022-07-09', 'trial');
```

➤ **The Expected Output :**

caseNo	date	type	result
1	4/9/2021	trial	1
2	7/9/2022	trial	7
2	9/9/2022	trial	2
3	1/15/2022	trial	3
4	7/9/2022	trial	4
5	12/5/2022	trial	5
11	7/9/2022	trial	6

➤ **The Actual Output :**

**List caseNo, docketNo, date, type, and result for all Court Dates for caseNo 4 (join Criminal Case/Court Date):**

```
SELECT c.caseNo, docketNo, date, type, result
FROM Criminal_Case c, Court_Date d
WHERE c.caseNo = 4 AND c.caseNo = d.caseNo;
```

➤ **The Expected Output :**

caseNo	docketNo	date	type	result
4	4	7/9/2022	trial	4

➤ **The Actual Output :**

caseNo	date	type	result
1	2021-04-09	trial	1
2	2022-07-09	trial	7
2	2022-09-09	trial	2
3	2022-01-15	trial	3
4	2022-07-09	trial	4
5	2022-12-05	trial	5
11	2022-07-09	trial	6

**Update Court date with caseNo 11, date '2022-04-21' (update)**

UPDATE Court Date

SET result = 'pled eight yrs HL'

WHERE caseNo = 11 AND date = '2022-07-21';

➤ **The Expected Output :**

caseNo	date	type	result
1	4/9/2021	trial	1
2	7/9/2022	trial	7
2	9/9/2022	trial	2
3	1/15/2022	trial	3
4	7/9/2022	trial	4
5	12/5/2022	trial	5
11	7/9/2022	pled eight yrs HL	

➤ **The Actual Output :**

caseNo	date	type	result
1	2021-04-09	trial	1
2	2022-07-09	trial	7
2	2022-09-09	trial	2
3	2022-01-15	trial	3
5	2022-12-05	trial	5
11	2022-07-09	trial	pled eight yrs HL

**Delete Court Date for caseNo 4, date '2022-07-09' (delete):**

DELETE FROM Court Date

WHERE caseNo = 4 AND date = '2022-07-09';

➤ **The Expected Output :**

caseNo	date	type	result
1	4/9/2021	trial	1
2	7/9/2022	trial	7
2	9/9/2022	trial	2
3	1/15/2022	trial	3
5	12/5/2022	trial	5
11	7/9/2022	trial	pled eight yrs HL

➤ **The Actual Output :**

caseNo	date	type	result
1	2021-04-09	trial	1
2	2022-07-09	trial	7
2	2022-09-09	trial	2
3	2022-01-15	trial	3
5	2022-12-05	trial	5
11	2022-07-09	trial	6
NULL	NULL	NULL	NULL

## **Conclusion**

The presented DBMS was in the purpose of building a robust DBMS for Public Defenders System. So, in order to achieve that, first of all we had very well determined the mission statement and objectives to define the major aims of the DB system via the experience in the domain of our colleague Erwin Kristel. Then we went throughout all the conceptional and relational modeling tasks to build a strong normalized relational model to prevent some relationship contradictions in further steps. Once we had our physical model ready, we had implemented all our use cases including the SQL statements for every use case. Finally, we ran tests for our statements using simulated data by specifying the input statement, the expected output and the actual output. All tests outputs came out as expected.