

Crime Management

NAME:S.S.RITHANYAA

```
CREATE DATABASE CRIMEMANAGEMENT;
```

```
USE CRIMEMANAGEMENT;
```

```
CREATE TABLE Crime (
```

```
    CrimeID INT PRIMARY KEY,  
    IncidentType VARCHAR(255),  
    IncidentDate DATE,  
    Location VARCHAR(255),  
    Description TEXT,  
    Status VARCHAR(20)
```

```
);
```

```
CREATE TABLE Victim (
```

```
    VictimID INT PRIMARY KEY,  
    CrimeID INT,  
    Name VARCHAR(255),  
    ContactInfo VARCHAR(255),  
    Injuries VARCHAR(255),  
    FOREIGN KEY (CrimeID) REFERENCES Crime(CrimeID)
```

```
);
```

```
CREATE TABLE Suspect (
```

```
    SuspectID INT PRIMARY KEY,  
    CrimeID INT,  
    Name VARCHAR(255),  
    Description TEXT,  
    CriminalHistory TEXT,  
    FOREIGN KEY (CrimeID) REFERENCES Crime(CrimeID)
```

```
);
```

```
INSERT INTO Crime (CrimeID, IncidentType, IncidentDate, Location, Description, Status)
```

```
VALUES
```

```
(1, 'Robbery', '2023-09-15', '123 Main St, Cityville', 'Armed robbery at a convenience store',  
'Open'),
```

```
(2, 'Homicide', '2023-09-20', '456 Elm St, Townsville', 'Investigation into a murder case', 'Under  
Investigation'),
```

```
(3, 'Theft', '2023-09-10', '789 Oak St, Villagetown', 'Shoplifting incident at a mall', 'Closed');
```

```
INSERT INTO Victim (VictimID, CrimeID, Name, ContactInfo, Injuries)
```

```
VALUES
```

```
(1, 1, 'John Doe', 'johndoe@example.com', 'Minor injuries'),
```

```
(2, 2, 'Jane Smith', 'janesmith@example.com', 'Deceased'),
```

```
(3, 3, 'Alice Johnson', 'alicejohnson@example.com', 'None');
```

```
INSERT INTO Suspect (SuspectID, CrimeID, Name, Description, CriminalHistory)
```

```
VALUES
```

```
(1, 1, 'Robber 1', 'Armed and masked robber', 'Previous robbery convictions'),
```

```
(2, 2, 'Unknown', 'Investigation ongoing', NULL),
```

```
(3, 3, 'Suspect 1', 'Shoplifting suspect', 'Prior shoplifting arrests');
```

1. Select all open incidents.

```
SELECT * FROM CRIME
```

```
WHERE STATUS = 'Open';
```

| CrimeID | IncidentType | IncidentDate | Location | Description | Status |
|---------|--------------|--------------|-------------------------|--|--------|
| 1 | Robbery | 2023-09-15 | 123 Main St, Cityville | Armed robbery at a convenience store | Open |
| 4 | Fraud | 2023-10-01 | 101 Maple St, Cityville | Fraudulent financial activities | Open |
| 6 | Fraud | 2023-10-06 | 202 Pine St, Townsville | Fraudulent financial activities involving online sc... | Open |
| NULL | NULL | NULL | NULL | NULL | NULL |

2. Find the total number of incidents.

```
SELECT COUNT(*) AS TotalIncidents
FROM Crime;
```

| TotalIncidents |
|----------------|
| 6 |

3. List all unique incident types.

```
SELECT DISTINCT IncidentType
FROM CRIME;
```

| IncidentType |
|--------------|
| Robbery |
| Homicide |
| theft |
| Fraud |
| Assault |

4. Retrieve incidents that occurred between '2023-09-01' and '2023-09-10'.

```
SELECT * FROM Crime
WHERE IncidentDate BETWEEN '2023-09-01' AND '2023-09-10';
```

| CrimeID | IncidentType | IncidentDate | Location | Description | Status |
|---------|--------------|--------------|-------------------------|--------------------------------|--------|
| 3 | theft | 2023-09-10 | 789 Oak St, Villagetown | Shoplifting incident at a mall | Closed |
| NULL | NULL | NULL | NULL | NULL | NULL |

5. List persons involved in incidents in descending order of age.

```
ALTER TABLE VICTIM
ADD AGE INT;
DESCRIBE VICTIM;
UPDATE Victim SET Age = 32 WHERE VictimID = 1;
UPDATE Victim SET Age = 41 WHERE VictimID = 2;
UPDATE Victim SET Age = 25 WHERE VictimID = 3;
SELECT VictimID, Name, Age, CrimeID, Injuries
FROM Victim
ORDER BY Age DESC;
```


| Result Grid | Filter Rows: | Export: | Wrap Cell Content: |
|---------------|--------------|---------|--------------------|
| Name | Status | | |
| John Doe | Open | | |
| Alice Johnson | Closed | | |
| James Black | Open | | |

10. List incident types where there are persons aged 30 or 35 involved.

```
INSERT INTO Crime (CrimeID, IncidentType, IncidentDate, Location, Description, Status)
VALUES
    (4, 'Fraud', '2023-10-01', '101 Maple St, Cityville', 'Fraudulent financial activities', 'Open'),
    (5, 'Assault', '2023-10-05', '202 Birch Ave, Townsville', 'Deliberate fire set to a building', 'Under Investigation');
SELECT * FROM CRIME;
INSERT INTO Victim (VictimID, CrimeID, Name, ContactInfo, Injuries, AGE)
VALUES
    (4, 4, 'James Black', 'jamesblack@example.com', 'None', 35),
    (5, 5, 'Emily White', 'emilywhite@example.com', 'Burns', 30);
SELECT * FROM VICTIM;
SELECT C.IncidentType
FROM Victim V
JOIN Crime C ON V.CrimeID = C.CrimeID
WHERE V.Age IN (30, 35);
```

| Result Grid | Filter Rows: | Export: | Wrap Cell Content: |
|--------------|--------------|---------|--------------------|
| IncidentType | | | |
| Fraud | | | |
| Assault | | | |

11. Find persons involved in incidents of the same type as 'Robbery'.

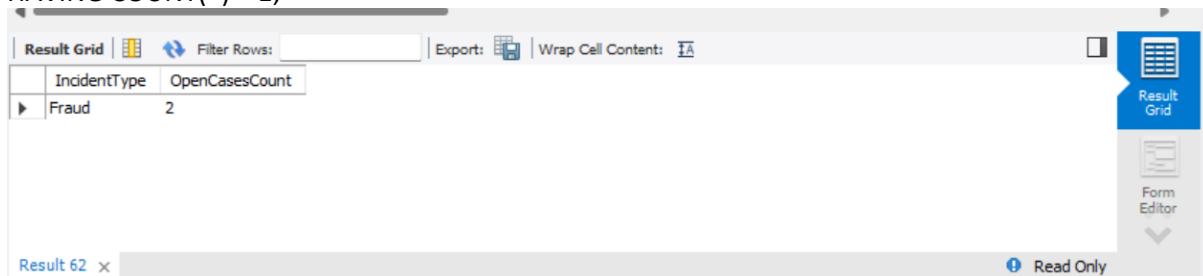
```
SELECT V.Name AS VictimName, C.IncidentType
FROM Crime C
JOIN Victim V ON C.CrimeID = V.CrimeID
WHERE C.IncidentType = 'Robbery';
```

| Result Grid | Filter Rows: | Export: | Wrap Cell Content: |
|-------------|--------------|---------|--------------------|
| VictimName | IncidentType | | |
| John Doe | Robbery | | |

12. List incident types with more than one open case.

```
INSERT INTO Crime (CrimeID, IncidentType, IncidentDate, Location, Description, Status)
VALUES
    (6, 'Fraud', '2023-10-06', '202 Pine St, Townsville', 'Fraudulent financial activities involving online scams', 'Open');
SELECT IncidentType, COUNT(*) AS OpenCasesCount
FROM Crime
WHERE Status = 'Open'
```

GROUP BY IncidentType
HAVING COUNT(*) > 1;



| IncidentType | OpenCasesCount |
|--------------|----------------|
| Fraud | 2 |

13. List all incidents with suspects whose names also appear as victims in other incidents.

```
INSERT INTO Suspect (SuspectID, CrimeID, Name, Description, CriminalHistory)
VALUES
```

```
(4, 4, 'John Doe', 'Witness to the incident, now considered a suspect', 'No previous criminal history'),
(5, 5, 'Alice Johnson', 'Involved in the incident, now being investigated as a suspect', 'No previous criminal history');
```

```
SELECT * FROM SUSPECT;
```

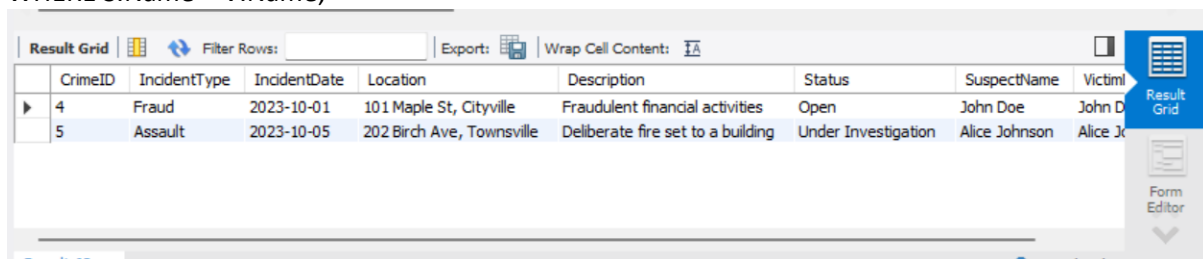
```
SELECT C.CrimeID, C.IncidentType, C.IncidentDate, C.Location, C.Description, C.Status,
       S.Name AS SuspectName, V.Name AS VictimName
```

```
FROM Crime C
```

```
JOIN Suspect S ON C.CrimeID = S.CrimeID
```

```
JOIN Victim V ON S.Name = V.Name
```

```
WHERE S.Name = V.Name;
```



| CrimeID | IncidentType | IncidentDate | Location | Description | Status | SuspectName | VictimName |
|---------|--------------|--------------|---------------------------|-----------------------------------|---------------------|---------------|---------------|
| 4 | Fraud | 2023-10-01 | 101 Maple St, Cityville | Fraudulent financial activities | Open | John Doe | John Doe |
| 5 | Assault | 2023-10-05 | 202 Birch Ave, Townsville | Deliberate fire set to a building | Under Investigation | Alice Johnson | Alice Johnson |

14. Retrieve all incidents along with victim and suspect details.

```
SELECT
```

```
C.CrimeID, C.IncidentType, C.IncidentDate, C.Location, C.Description AS CrimeDescription,
C.Status, V.Name AS VictimName, V.ContactInfo AS VictimContact, V.Injuries, S.Name AS
```

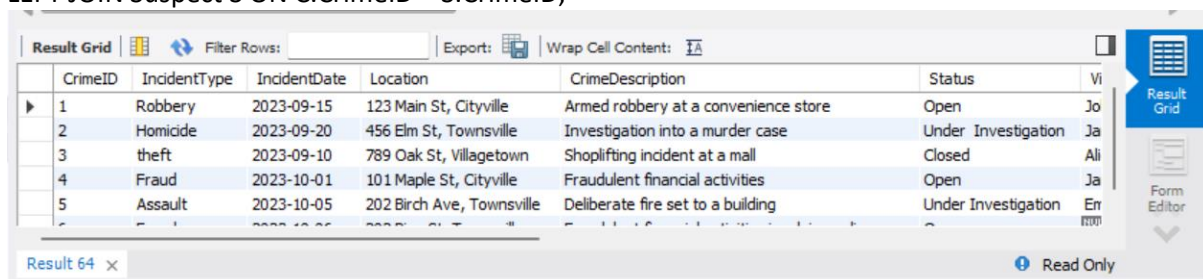
```
SuspectName,
```

```
S.Description AS SuspectDescription, S.CriminalHistory
```

```
FROM Crime C
```

```
LEFT JOIN Victim V ON C.CrimeID = V.CrimeID
```

```
LEFT JOIN Suspect S ON C.CrimeID = S.CrimeID;
```



| CrimeID | IncidentType | IncidentDate | Location | CrimeDescription | Status | VictimName |
|---------|--------------|--------------|---------------------------|--------------------------------------|---------------------|------------|
| 1 | Robbery | 2023-09-15 | 123 Main St, Cityville | Armed robbery at a convenience store | Open | John Doe |
| 2 | Homicide | 2023-09-20 | 456 Elm St, Townsville | Investigation into a murder case | Under Investigation | John Doe |
| 3 | theft | 2023-09-10 | 789 Oak St, Villagetown | Shoplifting incident at a mall | Closed | Ali |
| 4 | Fraud | 2023-10-01 | 101 Maple St, Cityville | Fraudulent financial activities | Open | Ja |
| 5 | Assault | 2023-10-05 | 202 Birch Ave, Townsville | Deliberate fire set to a building | Under Investigation | Err |

15. Find incidents where the suspect is older than any victim.

```
ALTER TABLE SUSPECT
```

```
ADD AGE INT;
```

```
UPDATE Suspect SET Age = 23 WHERE SuspectID = 1;
```

```
UPDATE Suspect SET Age = 34 WHERE SuspectID = 2;
```

```

UPDATE Suspect SET Age = 56 WHERE SuspectID = 3;
UPDATE Suspect SET Age = 32 WHERE SuspectID = 4;
UPDATE Suspect SET Age = 25 WHERE SuspectID = 5;
SELECT
    C.CrimeID,
    V.Name AS VictimName, V.Age AS VictimAge,
    S.Name AS SuspectName, S.Age AS SuspectAge
FROM Crime C
JOIN Victim V ON C.CrimeID = V.CrimeID
JOIN Suspect S ON C.CrimeID = S.CrimeID
WHERE S.Age > V.Age;

```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

| | CrimeID | VictimName | VictimAge | SuspectName | SuspectAge |
|---|---------|---------------|-----------|-------------|------------|
| ▶ | 3 | Alice Johnson | 25 | Suspect 1 | 56 |

Result Grid

Form Editor

Result 65

×

!

Read Only


16. Find suspects involved in multiple incidents:


```



SELECT Name, COUNT(*) AS IncidentCount
FROM Suspect
GROUP BY Name
HAVING COUNT(*) > 1;


```

Result Grid


 Filter Rows:


 Export:

 Wrap Cell Content: 



| Name | IncidentCount |
|------|---------------|
|------|---------------|

Result 76 

 Read Only

Output

17. List incidents with no suspects involved.

```

SELECT C.CrimeID, C.IncidentType, C.IncidentDate, C.Location, C.Status
FROM Crime C
LEFT JOIN Suspect S ON C.CrimeID = S.CrimeID
WHERE S.SuspectID IS NULL;

```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

| | CrimeID | IncidentType | IncidentDate | Location | Status |
|--|---------|--------------|--------------|-------------------------|--------|
| | 6 | Fraud | 2023-10-06 | 202 Pine St, Townsville | Open |

Result 68

18. List all cases where at least one incident is of type 'Homicide' and all other incidents are of type 'Robbery'.

```

UPDATE Crime SET IncidentType = 'Robbery' WHERE CrimeID IN (3, 4, 5,6);
UPDATE Crime SET IncidentType = 'theft' WHERE CrimeID = 3;
UPDATE Crime SET IncidentType = 'Fraud' WHERE CrimeID = 4;
UPDATE Crime SET IncidentType = 'Assault' WHERE CrimeID = 5;

```

```

UPDATE Crime SET IncidentType = 'Fraud' WHERE CrimeID = 6;
SELECT * FROM Crime
WHERE IncidentType IN ('Homicide', 'Robbery')
AND EXISTS (
    SELECT 1 FROM Crime C2 WHERE C2.IncidentType = 'Homicide'
)
AND NOT EXISTS (
    SELECT 1
    FROM Crime C3
    WHERE C3.IncidentType NOT IN ('Homicide', 'Robbery')
);
SELECT * FROM CRIME;
SELECT * FROM VICTIM;

```

| CrimeID | IncidentType | IncidentDate | Location | Description | Status |
|---------|--------------|--------------|---------------------------|--|---------------------|
| 1 | Robbery | 2023-09-15 | 123 Main St, Cityville | Armed robbery at a convenience store | Open |
| 2 | Homicide | 2023-09-20 | 456 Elm St, Townsville | Investigation into a murder case | Under Investigation |
| 3 | Robbery | 2023-09-10 | 789 Oak St, Villagetown | Shoplifting incident at a mall | Closed |
| 4 | Robbery | 2023-10-01 | 101 Maple St, Cityville | Fraudulent financial activities | Open |
| 5 | Robbery | 2023-10-05 | 202 Birch Ave, Townsville | Deliberate fire set to a building | Under Investigation |
| 6 | Robbery | 2023-10-06 | 202 Pine St, Townsville | Fraudulent financial activities involving online sc... | Open |

19. Retrieve a list of all incidents and the associated suspects, showing suspects for each incident, or 'No Suspect' if there are none.

```

SELECT
    C.CrimeID,
    C.IncidentType,
    C.IncidentDate,
    C.Location,
    COALESCE(S.Name, 'No Suspect') AS SuspectName
FROM
    Crime C
LEFT JOIN
    Suspect S ON C.CrimeID = S.CrimeID;

```

| CrimeID | IncidentType | IncidentDate | Location | SuspectName |
|---------|--------------|--------------|---------------------------|---------------|
| 1 | Robbery | 2023-09-15 | 123 Main St, Cityville | Robber 1 |
| 2 | Homicide | 2023-09-20 | 456 Elm St, Townsville | Unknown |
| 3 | Robbery | 2023-09-10 | 789 Oak St, Villagetown | Suspect 1 |
| 4 | Robbery | 2023-10-01 | 101 Maple St, Cityville | John Doe |
| 5 | Robbery | 2023-10-05 | 202 Birch Ave, Townsville | Alice Johnson |
| 6 | Robbery | 2023-10-06 | 202 Pine St, Townsville | No Suspect |

20. List all suspects who have been involved in incidents with incident types 'Robbery' or 'Assault'

```

SELECT S.SuspectID, S.Name, C.IncidentType
FROM Suspect S
JOIN Crime C ON S.CrimeID = C.CrimeID
WHERE C.IncidentType IN ('Robbery', 'Assault');

```

| | | | | | | | | |
|-------------|-----------|---------------|--------------|--------------|---------|--------------------|-------------|--|
| Result Grid | | | | Filter Rows: | Export: | Wrap Cell Content: | Result Grid | |
| | SuspectID | Name | IncidentType | | | | Form Editor | |
| ▶ | 1 | Robber 1 | Robbery | | | | Read Only | |
| | 5 | Alice Johnson | Assault | | | | | |