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';
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

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

CRIME 51 | Apply | Revert

2. Find the total number of incidents.

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

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

TotalIncidents
6

Result 52 | Read Only

3. List all unique incident types.

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

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

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';
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

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: | Edit: | Export/Import: | Wrap Cell Content:

VictimID	Name	Age	CrimeID	Injuries
2	Jane Smith	41	2	Deceased
4	James Black	35	4	None
1	John Doe	32	1	Minor injuries
5	Emily White	30	5	Burns
3	Alice Johnson	25	3	None
NULL	NULL	NULL	NULL	NULL

Victim 55 | Apply | Revert

6. Find the average age of persons involved in incidents.

```
SELECT AVG(Age) AS AverageAge
FROM Victim;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

AverageAge
32.6000

7. List incident types and their counts, only for open cases.

```
SELECT IncidentType, COUNT(*) AS IncidentCount
FROM Crime
WHERE Status = 'Open'
GROUP BY IncidentType;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

IncidentType	IncidentCount
Robbery	1
Fraud	2

8. Find persons with names containing 'Doe'.

```
SELECT *
FROM Victim
WHERE Name LIKE '%Doe%';
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

VictimID	CrimeID	Name	ContactInfo	Injuries	AGE
1	1	John Doe	johndoe@example.com	Minor injuries	32
NULL	NULL	NULL	NULL	NULL	NULL

Victim 58 | Apply | Revert

9. Retrieve the names of persons involved in open cases and closed cases.

```
SELECT V.Name, C.Status
FROM Victim V
JOIN Crime C ON V.CrimeID = C.CrimeID
WHERE C.Status IN ('Open', 'Closed');
```

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

Result 60 | Read Only

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

Result 61 | Read Only

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;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

IncidentType	OpenCasesCount
Fraud	2

Result 62 × Read Only

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;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

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

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;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

CrimeID	IncidentType	IncidentDate	Location	CrimeDescription	Status	Vi
1	Robbery	2023-09-15	123 Main St, Cityville	Armed robbery at a convenience store	Open	Jo
2	Homicide	2023-09-20	456 Elm St, Townsville	Investigation into a murder case	Under Investigation	Ja
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	Em

Result 64 × Read Only

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 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 × Read Only

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;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

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

Result Grid | Form Editor | Crime 72 | Apply | Revert | Output

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;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

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

Result Grid | Form Editor | Result 73 | Read Only

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:

SuspectID	Name	IncidentType
1	Robber 1	Robbery
5	Alice Johnson	Assault

Result Grid

Form Editor

Result 75

Read Only