

# MANNEM SHIVA VARDHAN REDDY-J719

## CRIME MANAGEMENT DATABASE

### 1. Select all open incidents.

```
SELECT IncidentType ,IncidentDate FROM Crime WHERE Status='open';
```

### 2. Find the total number of incidents.

```
SELECT COUNT(IncidentType) AS NumberOfIncidents FROM Crime;
```

### 3. List all unique incident types.

```
SELECT DISTINCT IncidentType FROM Crime;
```

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

```
SELECT CrimeID, IncidentType, IncidentDate FROM Crime WHERE IncidentDate BETWEEN '2023-09-01' AND '2023-09-10';
```

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

```
ALTER TABLE Victim ADD COLUMN Age int;
```

```
UPDATE Victim SET age=72 WHERE victimID=1;
```

```
UPDATE Victim SET age=23 WHERE victimID=2;
```

```
UPDATE Victim SET age=44 WHERE victimID=3;
```

```
SELECT * FROM Victim ORDER BY Age DESC;
```

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

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

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

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

**8. Find persons with names containing 'Doe'.**

```
SELECT Name FROM Victim WHERE Name Like '%DOE%';
```

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

```
SELECT s.name, c.status FROM Suspect as s JOIN Crime AS c ON s.CrimeID=c.CrimeID WHERE  
c.STATUS IN ('open','closed');
```

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

```
SELECT c.IncidentType, v.age FROM Victim as v JOIN Crime as c ON v.CrimeID=c.CrimeID WHERE  
v.age IN(30,35);
```

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

```
SELECT v.name AS VictimName ,s.name AS SuspectName ,c.IncidentType FROM Victim as v JOIN  
Crime as c ON v.CrimeID=c.CrimeID JOIN Suspect AS s ON s.CRIMEID=c.CrimeID WHERE  
c.IncidentType='Robbery';
```

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

```
SELECT IncidentType, COUNT(Status) AS NoOfOpenCases FROM Crime WHERE Status='open'  
GROUP BY IncidentType HAVING(COUNT(Status)>1);
```

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

```
SELECT * FROM Crime as c JOIN (SELECT * FROM Suspect WHERE Name IN (SELECT DISTINCT  
name FROM Victim)) as s WHERE s.CrimeID=c.CrimeID;
```

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

```
SELECT c.*, v.*, s.* FROM Victim as v JOIN Crime as c ON c.CrimeID=v.CrimeID JOIN Suspect as s  
ON s.CrimeID=c.CrimeID;
```

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

```
ALTER TABLE Suspect ADD COLUMN Age int;
```

```
UPDATE Suspect SET age=32 WHERE SuspectID=1;
```

```
UPDATE Suspect SET age=28 WHERE SuspectID=2;
```

```
UPDATE Suspect SET age=20 WHERE SuspectID=3;
```

```
SELECT c.*, s.age as SuspectAge, v.age AS VictimAge FROM Crime AS c JOIN Suspect as s ON  
s.CrimeID=c.CrimeID JOIN Victim as v ON v.CrimeID=c.CrimeID WHERE s.age>v.age;
```

**16. Find suspects involved in multiple incidents:**

```
SELECT SUSPECTID ,name, COUNT(CRIMEID) FROM Suspect GROUP BY SUSPECTID ,name  
HAVING Count(CrimeID)>1;
```

**17. List incidents with no suspects involved.**

```
SELECT c.CrimeID, c.IncidentType, c.IncidentDate, c.Status FROM Crime c LEFT JOIN Suspect s  
ON c.CrimeID = s.CrimeID WHERE s.name IS NULL;
```

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

```
SELECT c.* FROM Crime AS c LEFT JOIN (SELECT DISTINCT CrimeID  
FROM Crime WHERE IncidentType = 'Homicide' ) AS h ON c.CrimeID = h.CrimeID  
WHERE h.CrimeID IS NOT NULL OR c.IncidentType = 'Robbery';
```

**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.*, IF(s.Name IS NULL, 'No Suspect', s.Name) AS SuspectName FROM Crime AS c LEFT  
JOIN Suspect as s ON s.CrimeID=c.CrimeID ;
```

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

```
SELECT DISTINCT s.SuspectID, s.Name FROM Suspect s JOIN Crime c ON s.CrimeID = c.CrimeID  
WHERE c.IncidentType IN ('Robbery', 'Assault');
```