



Coding Challenge SQL

Crime Management Shema DDL and DML

-- Create tables

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 sample data  
  
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');

Solve the below queries:

1. **Select all open incidents.**
2. **Find the total number of incidents.**
3. **List all unique incident types.**
4. **Retrieve incidents that occurred between '2023-09-01' and '2023-09-10'.**
5. **List persons involved in incidents in descending order of age.**
6. **Find the average age of persons involved in incidents.**
7. **List incident types and their counts, only for open cases.**
8. **Find persons with names containing 'Doe'.**
9. **Retrieve the names of persons involved in open cases and closed cases.**
10. **List incident types where there are persons aged 30 or 35 involved.**
11. **Find persons involved in incidents of the same type as 'Robbery'.**
12. **List incident types with more than one open case.**
13. **List all incidents with suspects whose names also appear as victims in other incidents.**
14. **Retrieve all incidents along with victim and suspect details.**
15. **Find incidents where the suspect is older than any victim.**
16. **Find suspects involved in multiple incidents:**
17. **List incidents with no suspects involved.**
18. **List all cases where at least one incident is of type 'Homicide' and all other incidents are of type 'Robbery'.**
19. **Retrieve a list of all incidents and the associated suspects, showing suspects for each incident, or 'No Suspect' if there are none.**



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