```
use mvc;

-- View 1: Retrieve and get all collisions related to TAXI only.
DROP VIEW IF EXISTS collisions_and_vehicles_view;
CREATE VIEW collisions_and_vehicles_view AS
SELECT
    c.COLLISION_ID, c.CRASH_DATE, v.VEHICLE_ID, v.VEHICLE_TYPE, v.VEHICLE_BRAND
FROM
    collisions c
JOIN
    vehicle_and_collision vc ON c.COLLISION_ID = vc.COLLISION_ID
JOIN
    vehicle v ON vc.VEHICLE_ID = v.VEHICLE_ID
WHERE
    c.CRASH_DATE >= '02/03/2019' AND v.VEHICLE_TYPE = "TAXI";

-- View 2: Count of collisions per vehicle type
DROP VIEW IF EXISTS collision_count_by_vehicle_type;
CREATE VIEW collision_count_by_vehicle_type AS
SELECT
    v.VEHICLE_TYPE,
    COUNT(c.COLLISION_ID) AS collision_count
FROM
    vehicle v
JOIN
    vehicle_and_collision vc ON v.VEHICLE_ID = vc.VEHICLE_ID
JOIN
    collisions c ON vc.COLLISION_ID = c.COLLISION_ID
GROUP BY
    v.VEHICLE_TYPE
HAVING
    COUNT(c.COLLISION_ID) > 20;

-- View 3: Demographic of drivers involved in crashes
DROP VIEW IF EXISTS drivers_in_collisions;
CREATE VIEW drivers_in_collisions AS
SELECT
      d.UNIQUE_ID, d.DRIVER_SEX, d.DRIVER_LICENSE_STATUS, c.COLLISION_ID,
c.CRASH_DATE
FROM
      driver d
JOIN
      vehicle v ON d.VEHICLE_ID = v.VEHICLE_ID
JOIN
      vehicle_and_collision vc ON v.VEHICLE_ID = vc.VEHICLE_ID
JOIN
      collisions c ON vc.COLLISION_ID = c.COLLISION_ID
WHERE
      d.DRIVER_LICENSE_STATUS = 'Licensed';

-- View 4: Frequency of crashes in the morning, afternoon, and evening
DROP VIEW IF EXISTS frequent_time_of_crash;
CREATE VIEW frequent_time_of_crash AS
SELECT
    CASE
        WHEN TIME(c.CRASH_TIME) BETWEEN '06:00:00' AND '11:59:59' THEN 'Morning'
        WHEN TIME(c.CRASH_TIME) BETWEEN '12:00:00' AND '17:59:59' THEN 'Afternoon'
        WHEN TIME(c.CRASH_TIME) BETWEEN '18:00:00' AND '23:59:59' THEN 'Evening'
        ELSE 'Night'
```

```
    END AS Time_Period,
    COUNT(c.COLLISION_ID) AS Crash_Count,
    v.VEHICLE_TYPE AS Most_Common_Vehicle_Type,
    COUNT(DISTINCT d.UNIQUE_ID) AS Driver_Count
FROM
    collisions c
JOIN
    vehicle_and_collision vc ON c.COLLISION_ID = vc.COLLISION_ID
JOIN
    vehicle v ON vc.VEHICLE_ID = v.VEHICLE_ID
JOIN
    driver d ON v.VEHICLE_ID = d.VEHICLE_ID
GROUP BY
    Time_Period, v.VEHICLE_TYPE
ORDER BY
    Crash_Count DESC, Driver_Count DESC;


-- View 5: Vehicle damage details per collision using a subquery
DROP VIEW IF EXISTS vehicle_damage_details;
CREATE VIEW vehicle_damage_details AS
SELECT
    vd.DAMAGE_ID,vd.POINT_OF_IMPACT, vd.VEHICLE_DAMAGE, c.COLLISION_ID,
c.CRASH_DATE
FROM
    vehicle_damage vd
JOIN
    vehicle_and_vehicle_damage vvd ON vd.DAMAGE_ID = vvd.VEHICLE_ID
JOIN
    vehicle_and_collision vc ON vvd.VEHICLE_ID = vc.VEHICLE_ID
JOIN
    collisions c ON vc.COLLISION_ID = c.COLLISION_ID
WHERE
    c.COLLISION_ID IN (
        SELECT DISTINCT COLLISION_ID
        FROM collisions
        WHERE CRASH_DATE >= '02/02/2022'
    ) AND vd.VEHICLE_DAMAGE != "";
```