```
-- Query #1: Electric Vehicle Information
      USE ev_population;
      DROP VIEW IF EXISTS Electric_Vehicle_Details;
      CREATE VIEW Electric_Vehicle_Details AS
      SELECT
                  v.Vehicle_ID,
                  v.DOL_Vehicle_ID,
                  v.VIN,
                  m.Make,
                  m.Model_Name AS Model,
                  m.Model_Year,
                  evt.Electric_Vehicle_Type,
                  CASE
                              WHEN v.Electric_Range = 0 THEN
'Unspecified/Usage Based'
                              ELSE v.Electric_Range
                  END AS Electric_Range,
                  CASE
                              WHEN v.Base_MSRP > 0 THEN v.Base_MSRP
                              ELSE 'Unspecified/Dealer Specific'
                  END AS Base_MSRP
      FROM
                  Vehicle v
      JOIN
                  Model m ON v.Model_ID = m.Model_ID
      JOIN
                  Electric_Vehicle_Type evt ON v.Electric_Vehicle_Type_ID =
evt.Electric_Vehicle_Type_ID
      ORDER BY
                  v.Electric_Range DESC;


-- Query #2: Model Availability by Location
      DROP VIEW IF EXISTS Model_Availability_By_Location;
      CREATE VIEW Model_Availability_By_Location AS
      SELECT

                  Model.Model_ID,
                  Model.Make,

                  Model.Model_Year,
                  Model.Model_Name,
                  COUNT(DISTINCT Model_Location.Location_ID) AS
Location_Count
      FROM
                  Model
      INNER JOIN
                  Model_Location
      ON
                  Model.Model_ID = Model_Location.Model_ID
      GROUP BY
                  Model.Model_ID,
                  Model.Make,
                  Model.Model_Name
      Order By COUNT(DISTINCT Model_Location.Location_ID) DESC;

      SELECT * FROM Model_Availability_By_Location;


-- Query #3: Plug-In Hybrid Model Electric Range
      USE ev_population;
      DROP VIEW IF EXISTS PHEV_Range;
      CREATE VIEW PHEV_Range AS
      SELECT DISTINCT
                 Make,
                 Model_Name AS Model,
                 Model_Year,
                 Electric_Vehicle_Type,
                 Electric_Range
      FROM
                 (
                            SELECT
                                 v.Model_ID,
                                 v.Electric_Range,
                                 m.Make,
                                 m.Model_Name,
                                 m.Model_Year,
                                 evt.Electric_Vehicle_Type
                            FROM
                                 Vehicle v
                            JOIN
                                 Model m ON v.Model_ID = m.Model_ID
                            JOIN
                                 Electric_Vehicle_Type evt ON
v.Electric_Vehicle_Type_ID = evt.Electric_Vehicle_Type_ID
                            WHERE
                                 v.Electric_Vehicle_Type_ID = 2
                                 AND v.Electric_Range > 0
                 ) AS Subquery
      ORDER BY
                 Electric_Range DESC;


-- Query #4: The Total Amount of PHEVs and BEVs
      USE ev_population;
      DROP VIEW IF EXISTS EV_Totals;
      CREATE VIEW EV_Totals AS

      SELECT
                 evt.Electric_Vehicle_Type,
                 COUNT(v.Vehicle_ID) AS Total_Vehicles,
                 (
                 SELECT CONCAT(m.Make, ' ', m.Model_Name)
                            FROM vehicle AS v2
                            JOIN model AS m ON v2.Model_ID = m.Model_ID
                            WHERE v2.Electric_Vehicle_Type_ID =
evt.Electric_Vehicle_Type_ID
                            GROUP BY v2.Model_ID
```

```
                             ORDER BY COUNT(v2.Vehicle_ID) DESC
                             LIMIT 1
                 ) AS Most_Popular_Model
      FROM
                 vehicle AS v
      JOIN
                 electric_vehicle_type AS evt ON
v.Electric_Vehicle_Type_ID = evt.Electric_Vehicle_Type_ID
      GROUP BY
                 evt.Electric_Vehicle_Type, evt.Electric_Vehicle_Type_ID;


-- Query #5: The Total Amount of PHEVs and BEVs
      USE ev_population;
      DROP VIEW IF EXISTS Brand_Median_and_Percentage;
      CREATE VIEW Brand_Median_and_Percentage AS
      SELECT
                 m.Make AS Brand,
                 CASE
                             WHEN mode_table.Mode_Electric_Range_In_Miles
IS NULL THEN 'No Data Available'
                             ELSE mode_table.Mode_Electric_Range_In_Miles
                 END AS Mode_Electric_Range_In_Miles,
                 ROUND((CASE
                                           WHEN COUNT(v.Vehicle_ID) = 0
THEN 0
                                           ELSE COUNT(v.Vehicle_ID) /
total_cars.total_count * 100
                               END), 2) AS Percentage_of_Total_Cars
      FROM
                 model AS m
      LEFT JOIN (
                 SELECT
                             m.Make,
                             CASE
                                   WHEN COUNT(v_inner.Vehicle_ID) = 0 THEN
NULL
                                   ELSE (
                                               SELECT

      v_inner.Electric_Range
                                               FROM
                                                           vehicle AS
v_inner
                                               WHERE
                                                           v_inner.Model_ID
IN (
                                                                 SELECT

m_sub.Model_ID
                                                                 FROM model
AS m_sub
                                                                 WHERE

m_sub.Make = m.Make
```

```
                                                         )
                                                         AND
v_inner.Electric_Range > 0 -- Exclude electric ranges of 0
                                              GROUP BY

      v_inner.Electric_Range
                                              ORDER BY
                                                         COUNT(*) DESC
                                              LIMIT 1
                                  )
                            END AS Mode_Electric_Range_In_Miles
                 FROM
                            model AS m
                 LEFT JOIN vehicle AS v_inner ON m.Model_ID =
v_inner.Model_ID
                 GROUP BY
                            m.Make
      ) AS mode_table ON m.Make = mode_table.Make
      CROSS JOIN (
                 SELECT COUNT(*) AS total_count FROM vehicle
      ) AS total_cars
      LEFT JOIN vehicle AS v ON m.Model_ID = v.Model_ID
      GROUP BY
                 m.Make, mode_table.Mode_Electric_Range_In_Miles,
total_cars.total_count
      ORDER BY
                 Percentage_of_Total_Cars DESC;
```