STORED PROCEDURES:

1) Stored Procedure "getremainingamount":

```
Final Queries.sql...F2SDD96\panch (64)) + ×
  CREATE PROCEDURE getremainingamount
    @customerid int,
    @remaining_payment int output
   ⊨BEGIN
   ĖWΙΤΗ
     t1 AS (
     Select VehicleID as VehicleID, CustomerID as CustomerID, SUM(Amount) as total_pay
     from PaymentInfo
     GROUP BY VehicleID ,CustomerID
    HAVING CustomerID = @customerid),
     Select t1.VehicleID as vid,t1.CustomerID as cid,t1.total_pay as total_pay,v.VehicleType as vt ,v.VehicleModel as vm,v.Brand as brand,v.Cc
     FROM t1
     JOIN Vehicle v
     ON t1.VehicleID = v.VehicleID AND t1.CustomerID = @customerid)
     SELECT @remaining_payment = (t2.Price-t2.total_pay)
     FROM t2;
     END
     DECLARE @remp int
     EXECUTE getremainingamount 16828,@remaining_payment = @remp OUT
     SELECT @remp as RemainingPayment
100 % ▼ ◀
 RemainingPayment
    2500
                                                                DESKTOP-F2SDD96 (14.0 RTM) | DESKTOP-F2SDD96\panch ... | VehicleVendingMachine | 00:00:00 | 1 rows
Query executed successfully.
```

2) Stored Procedure "ServiceCenter":

```
Final Queries.sql...F2SDD96\panch (64)) + ×
    SELECT @remp as RemainingPayment
    -----Stored Procedure to check if vehicle is serviced at service center or vending maching------
   create procedure ServiceCenter @VehicleID int,@message varchar(100) output
    as
   ⊨begin
   if not exists (select VehicleID from Vehicle where VehicleID=@VehicleID)
    set @message='VehicleID is invalid'
    else if exists (select CustomerID,s.ServiceCenterID,Brand,v.VehicleModel from Vehicle v join [Service] s on v.VehicleID=s.VehicleID
    where s.ServiceCenterID IS NOT NULL AND s.VehicleID=@VehicleID)
    set @message='Vehicle serviced from Service Center'
    else set @message='Vehicle serviced from Vending machine'
    end
     declare @result varchar(100)
     exec ServiceCenter 1327724,@result output
    print @result
     -------Stored Procedure to check for Vehicle Store Pickup or Vehicle Delivery------
  CREATE procedure DeliveryStatus @CustomerID int, @VehicleID int output, @CustomerName varchar(100) output,
    @Delivery_Status varchar(50) output
    as
   ⊨begin
    set @VehicleID= (select v.VehicleID from Vehicle v join Customer c on v.CustomerID=c.CustomerID where v.CustomerID=@CustomerID)
    set @CustomerName= (select c.CustomerName from Customer c join Vehicle v on v.CustomerID= c.CustomerID where v.CustomerID= @CustomerID)
    |set @Delivery_Status= (select Case when VehicleID in (Select d.VehicleID from Delivery d) then 'Delivery'
        else 'Pickup' end from Vehicle v join Customer c on v.CustomerID=c.CustomerID where v.CustomerID=@CustomerID
    end
100 % 🕶

    Messages

  Vehicle serviced from Service Center
  Completion time: 2019-11-19T20:08:16.3811627-05:00
100 % ▼ ◀
Query executed successfully.
                                                               DESKTOP-F2SDD96 (14.0 RTM) | DESKTOP-F2SDD96\panch ... | VehicleVendingMachine | 00:00:00 | 0 rows
```

3) Stored Procedure "DeliveryStatus":

```
Final Queries.sql...F2SDD96\panch (64)) = X
    declare @result varchar(100)
    exec ServiceCenter 1327724,@result output
    print @result
     ------Stored Procedure to check for Vehicle Store Pickup or Vehicle Delivery---------
 CREATE procedure DeliveryStatus @CustomerID int, @VehicleID int output, @CustomerName varchar(100) output,
    @Delivery_Status varchar(50) output
   ⊨begin
    set @VehicleID= (select v.VehicleID from Vehicle v join Customer c on v.CustomerID=c.CustomerID where v.CustomerID=@CustomerID)
    set @CustomerName= (select c.CustomerName from Customer c join Vehicle v on v.CustomerID= c.CustomerID where v.CustomerID=@CustomerID)
   ⊟set @Delivery Status= (select Case when VehicleID in (Select d.VehicleID from Delivery d) then 'Delivery'
        else 'Pickup' end from Vehicle v join Customer c on v.CustomerID=c.CustomerID where v.CustomerID=@CustomerID
    declare @VehicleID int, @CustomerName varchar(50), @Delivery_Status varchar(50)
     exec DeliveryStatus 53044, @VehicleID output, @CustomerName output, @Delivery_Status output
    select @VehicleID as VehicleID, @CustomerName as Customer_Name, @Delivery_Status as Delivery_Status
    ------Stored Procedure to retrieve Safety Rating for Vehicles-------
   点create procedure VehicleRating @VehicleModel varchar(50),@Rating float output, @VehicleName varchar(50) output
   begin
   ⊨set @Rating=(select case when VehicleModel = 'A6 Premium' then 3.5
                            when VehicleModel = 'Acadia Denali Sport Utility' then 5
                            when VehicleModel = 'Beetle 1.8T Dune' then 4
                            when VehicleModel = 'Camaro Z/28' then 3
                             when VehicleModel = 'Colorado Crew Cab' then 5
100 % ▼ ◀
VehicleID Customer_Name Delivery_Status
    1219315 James Butt

    Query executed successfully.

                                                             DESKTOP-F2SDD96 (14.0 RTM) | DESKTOP-F2SDD96\panch ... | VehicleVendingMachine | 00:00:00 | 1 rows
```

4) Stored Procedure "VehicleRating":

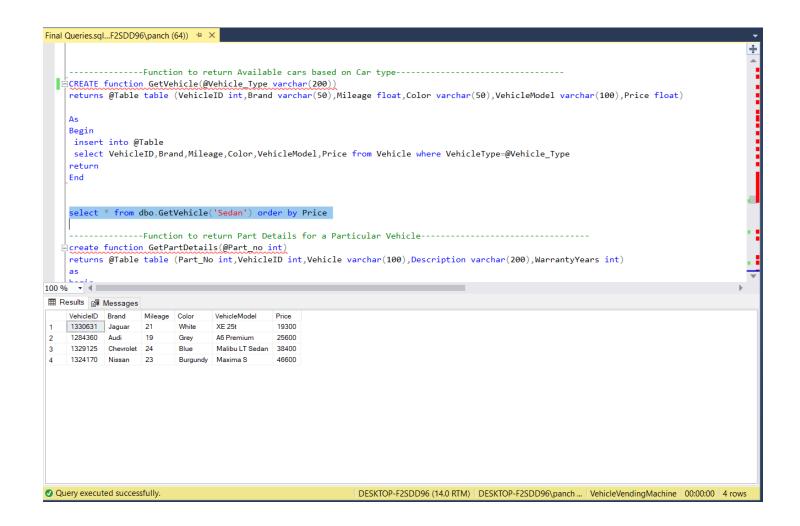
```
Final Queries.sql...F2SDD96\panch (64)) 📮 🗶
     ------ Stored Procedure to retrieve Safety Rating for Vehicles------
   🖶 create procedure VehicleRating @VehicleModel varchar(50),@Rating float output, @VehicleName varchar(50) output
   ⊟begin
   ≒set @Rating=(select case when VehicleModel = 'A6 Premium' then 3.5
                              when VehicleModel = 'Acadia Denali Sport Utility' then 5
                               when VehicleModel = 'Beetle 1.8T Dune' then 4
                               when VehicleModel = 'Camaro Z/28' then 3
                               when VehicleModel = 'Colorado Crew Cab' then 5
                               when VehicleModel = 'Durango SXT' then 2.5
                               when VehicleModel = 'F350 Super Duty' then 4.5
                               when VehicleModel = 'Forte5 LX' then 4
                               when VehicleModel = 'GLK-Class 350' then 5
                               when VehicleModel = 'LX Sport Utility' then 5
                               when VehicleModel = 'Malibu LT Sedan' then 4
                               when VehicleModel = 'Maxima S' then 3.5
                               when VehicleModel = 'RC 350 Coupe 2D' then 3.5
                               when VehicleModel = 'Wrangler Sport' then 3
                               when VehicleModel = 'XE 25t' then 5
                               end from Vehicle where VehicleModel like '%' +@VehicleModel+ '%'
     set @VehicleName= (select VehicleModel from Vehicle where VehicleModel like '%' +@VehicleModel+ '%')
     end
     declare @VehicleRating float, @VehicleName varchar(50)
exec VehicleRating 'A6', @VehicleRating output, @VehicleName output
     select @VehicleName as Model, @VehicleRating as [Safety Rating]
100 % ▼ ◀ ■

    ■ Results    ■ Messages
    Model Safety Rating
A6 Premium 3.5
                                                                  DESKTOP-F2SDD96 (14.0 RTM) | DESKTOP-F2SDD96\panch ... | VehicleVendingMachine | 00:00:00 | 1 rows

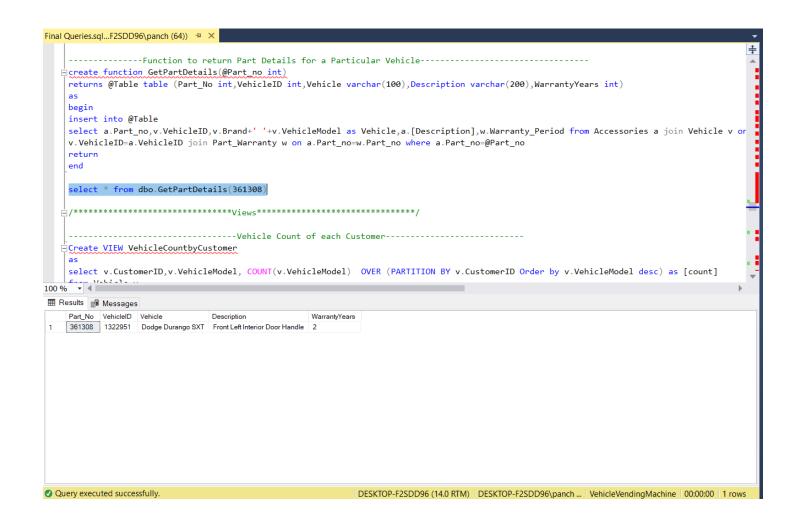
    Query executed successfully.
```

FUNCTIONS:

1) Function "GetVehicle":

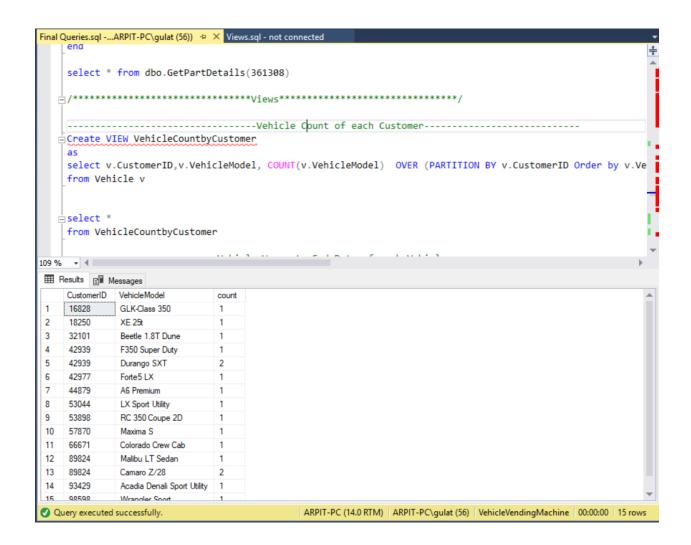


2) Function "GetPartDetails":

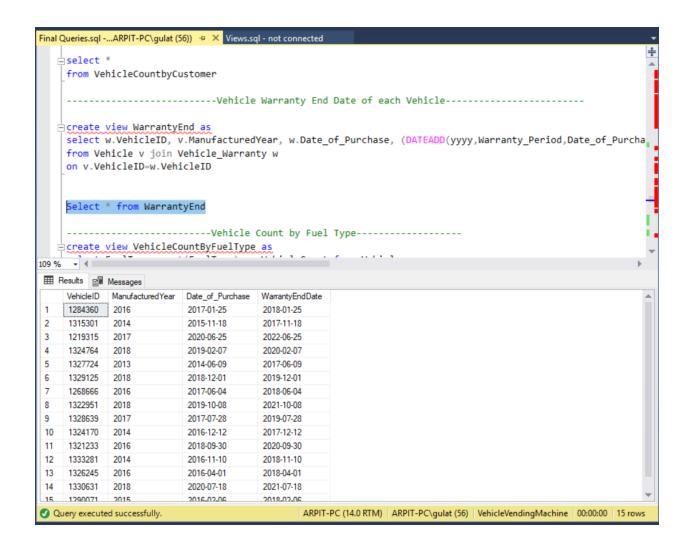


Views

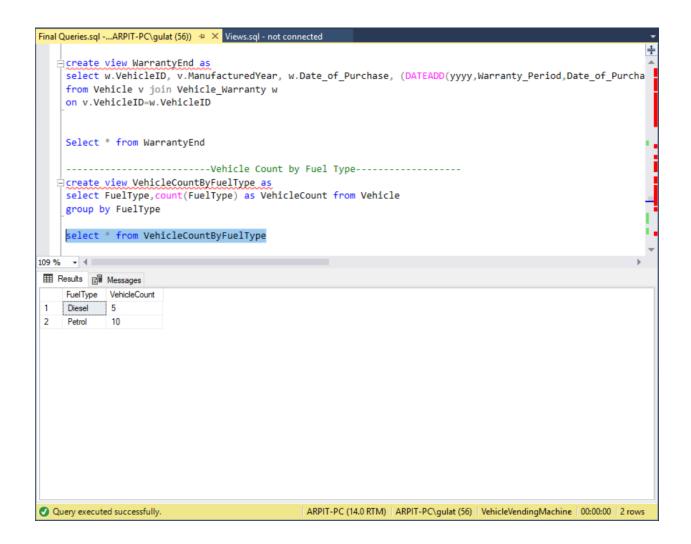
1) Count of Vehicle by Customer



2) Vehicle Warranty End Date of each Vehicle

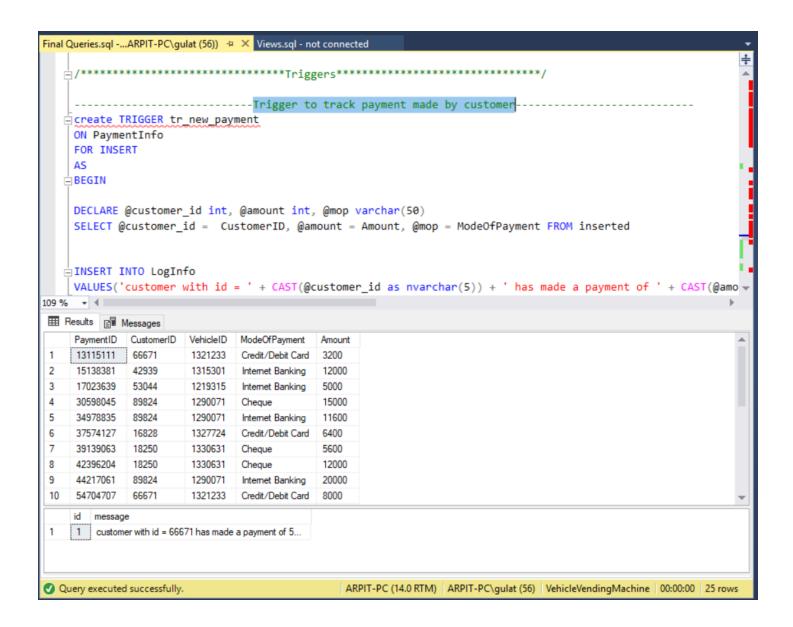


3) Vehicle Count based on Fuel Type

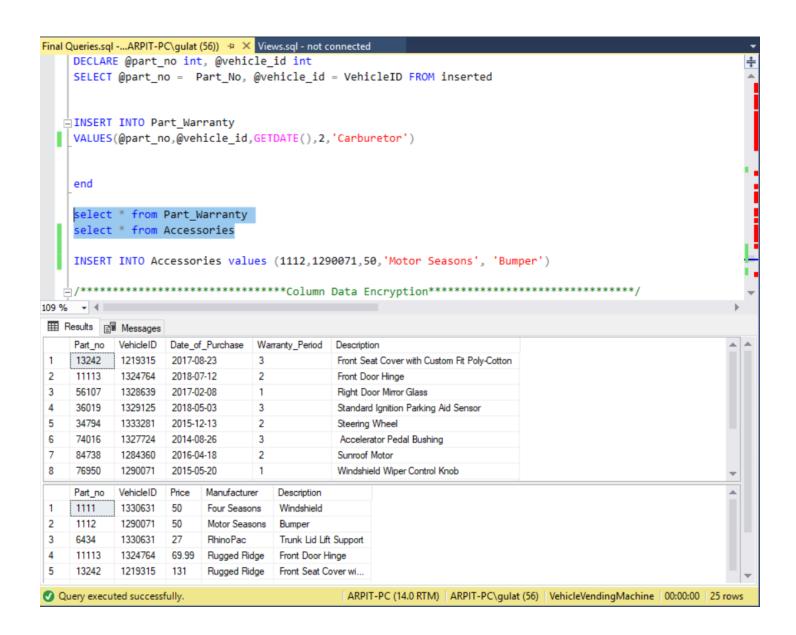


Triggers

1) Trigger to track payment made by Customers

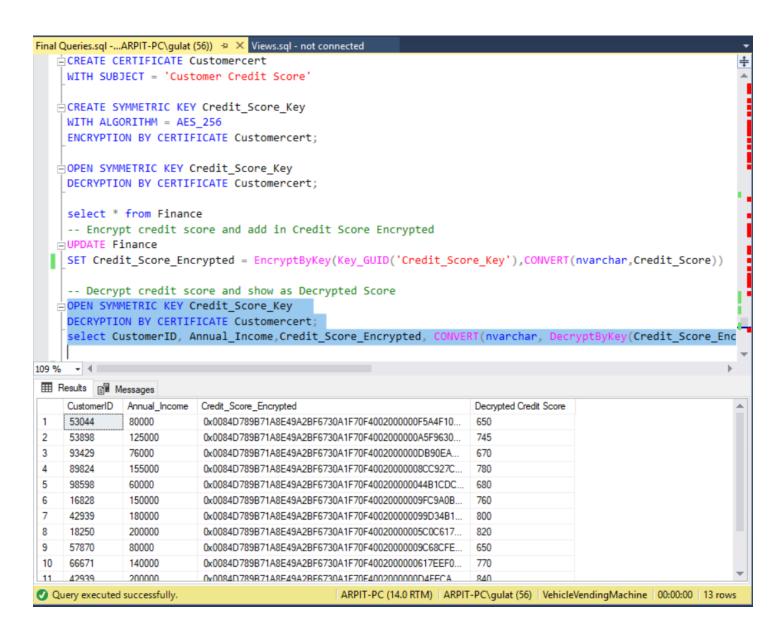


2) Trigger to Track Accessory addition for vehicles



Computed Data Encryption

Column Data Encryption on Credit Score of Customer



Computed Columns

Compute Discount and Effective Price Values in Vehicle Table

