CAR SALES SQL QUERIES

A. KPI's

1) Sales Overview:

a. Total Sales:

```
select sum(Price) as Total_Sales
from car_data
```

	Total_Sales
1	671525465

b. YTD Total Sales:

```
select sum(Price) as YTD_Total_Sales
from car_data
where year(Date) = 2023
```

	YTD_Total_Sales
1	371185120

c. PYTD Total Sales:

```
select sum(Price) as PYTD_Total_Sales
from car_data
where year(Date) = 2022
```

	PYTD_Total_Sales
1	300340345

d. Month-to-Date(MTD) Total Sales:

```
select sum(Price) as MTD_Total_Sales
from car_data
where month(Date) = 12 and year(Date) = 2023
```

	MTD_Total_Sales
1	54281601

2) Average Price Analysis

a. Total Average Price:

```
select sum(Price) / count(Car_id) as Avg_Price
from car_data
```

	YTD_Avg_Price
1	27990

b. YTD Average Price:

```
select sum(Price) / count(Car_id) as YTD_Avg_Price
from car_data
where year(Date) = 2023
```

	PYTD_Avg_Price
1	28214

c. PYTD Average Price:

```
select sum(Price) / count(Car_id) as PYTD_Avg_Price
from car_data
where year(Date) = 2022
```

	PYTD_Avg_Price
1	28214

d. MTD Average Price:

```
select sum(Price) / count(Car_id) as MTD_Avg_Price
from car_data
where month(Date) = 12 and year(Date) = 2023
```

	MTD_Avg_Price
1	28256

3) Cars Sold Metrics

a. Total Cars Sold:

```
select count(Car_id) as Total_Cars_Sold
from car_data
```

	Total_Cars_Sold
1	23906

b. YTD Cars Sold:

```
select count(Car_id) as YTD_Cars_Sold
from car_data
where year(Date) = 2023
```

	YTD_Cars_Sold
1	13261

c. PYTD Cars Sold:

```
select count(Car_id) as PYTD_Cars_Sold
from car_data
where year(Date) = 2022
```

	PYTD_Cars_Sold
1	10645

d. MTD Cars Sold:

```
select count(Car_id) as MTD_Cars_Sold
from car_data
where month(Date) = 12 and year(Date) = 2023
```

	MTD_Cars_Sold
1	1921

B. Chart's

1) YTD Sales Weekly Trend:

```
select datepart(week, Date) as Week,
       sum(Price) as YTD_Total_Sales
from car_data
where year(date) = 2023
group by datepart(week, Date)
order by datepart(week, Date)
```

	Week	YTD_Total_Sales
1	1	2296582
2	2	2279760
3	3	2936337
4	4	3164845
5	5	3522840

2) YTD Total Sales by Body Style:

```
select Body_style as Bod_Style,
       sum(Price) as YTD_Total_Sales
from car_data
where year(date) = 2023
group by Body_Style
```

	Body_Style	YTD_Total_Sales
1	SUV	99892343
2	Hatchback	82767328
3	Sedan	73686576
4	Hardtop	51395949
5	Passenger	63442924

3) YTD Total Sales by Color:

```
select Color as Color,
       sum(Price) as YTD_Total_Sales
from car_data
where year(date) = 2023
group by Color
```

	Color	YTD_Total_Sales
1	Pale White	174531713
2	Red	71410385
3	Black	125243022

4) YTD Total Sales by Dealer Region:

```
select Dealer_Region as Dealer_Region,
       sum(Price) as YTD_Total_Sales
from car_data
where year(date) = 2023
group by Dealer_Region
```

	Dealer_Region	YTD_Total_Sales
1	Janesville	58729582
2	Pasco	48363916
3	Aurora	49192302
4	Austin	65036190
5	Middletown	47566476
6	Scottsdale	53413391
7	Greenville	48883263

5) Company-Wise Sales Trend in Grid Form:

```
select Company,
       sum(Price) / count(Car_id) as Avg_Price,
       count(Car_id) as YTD_Cars_Sold,
       sum(Price) as YTD_Total_Sales
from car_data
```

```
where year(date) = 2023
group by Company
order by Company desc
```

	Company	Avg_Price	YTD_Cars_Sold	YTD_Total_Sales
1	Volvo	27913	458	12784239
2	Volkswagen	25396	718	18234357
3	Toyota	29515	593	17502675
4	Subaru	27749	230	6382440
5	Saturn	30402	326	9911196
6	Saab	37407	111	4152188

6) YTD Total Sales by Company:

```
select Company as Company,
       sum(Price) as YTD_Total_Sales
from car_data
where year(Date) = 2023
group by Company
order by YTD_Total_Sales desc
```

	Company	YTD_Total_Sales
1	Chevrolet	27112493
2	Ford	25429240
3	Dodge	25017441
4	Oldsmobile	19627272
5	Mercedes-B	19030864
6	Mitsubishi	18722992

7) Top 5 YTD Total Sales by Model:

```
select top 5 Model as Model,
       sum(Price) as YTD_Total_Sales
from car_data
where year(Date) = 2023
group by Model
order by YTD_Total_Sales desc
```

	Model	YTD_Total_Sales
1	LS400	7962296
2	Silhouette	6725165
3	Jetta	6271161
4	Ram Pickup	6131348
5	Montero Sport	5931587

8) Model by Annual Income:

```
select Company as Company,
       Model as Model,
       Annual_Income as Annual_Income
from car_data
where year(Date) = 2023
order by Annual_Income desc
```

	Company	Model	Annual_Income
1	Oldsmobile	Bravada	11200000
2	Mercedes-B	S-Class	8000000
3	Mercury	Sable	6600000
4	Ford	Mustang	6500000
5	Nissan	Quest	6400000

9) Details Grid Showing All Car Sales Information:

```
select Car_id,
       Date as Date,
       Customer_Name as Customer_Name,
       Dealer_Name as Dealer_Name,
       Company as Company,
       Color as Color,
       Model as Model
from car_data
where year(Date) = 2023
```

	Car_id	Date	Customer_Name	Dealer_Name	Company	Color	Model
1	C_CND_010646	2023-01-02	Owen	Diehl Motor CO Inc	Ford	Black	Focus
2	C_CND_010647	2023-01-02	Patrick	Enterprise Rent A Car	Mitsubishi	Red	3000GT
3	C_CND_010648	2023-01-02	William	Scrivener Performance Engineering	Plymouth	Pale White	Neon
4	C_CND_010649	2023-01-02	Wyatt	Star Enterprises Inc	Chevrolet	Red	Lumina
5	C_CND_010650	2023-01-02	Izabella	Tri-State Mack Inc	Mercedes-B	Pale White	CLK Coupe
6	C_CND_010651	2023-01-02	Jacqueline	U-Haul CO	Honda	Pale White	Civic

NOTE