CAR_SALES -
BUSINESS_ANALYSIS_CASE_STUDY
MS EXCEL 365

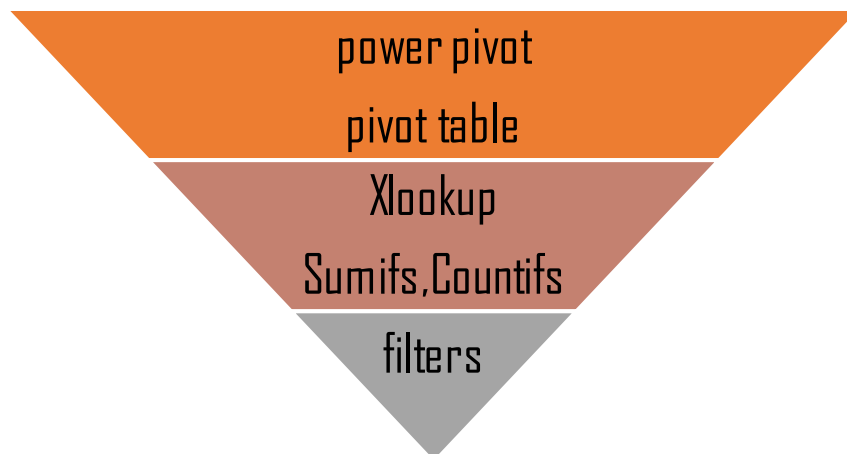**Techniques_used:**

power pivot

pivot table

Xlookup

Sumifs,Countifs

filters

table:Car

car_id	make	type	style	cost_$
1	Honda	Civic	Sedan	30000
2	Toyota	Corolla	Hatchback	25000
3	Ford	Explorer	SUV	40000
4	Chevrolet	Camaro	Coupe	36000
5	BMW	X5	SUV	55000
6	Audi	A4	Sedan	48000
7	Mercedes	C-Class	Coupe	60000
8	Nissan	Altima	Sedan	26000

Table:Sales_person

salesman_id	name	age	city
1	John Smith	28	New York
2	Emily Wong	35	San Fran
3	Tom Lee	42	Seattle
4	Lucy Chen	31	LA

Table:Sales

sale_id	car_id	salesman_id	purchase_date
1	1	1	01-01-2021
2	3	3	03-02-2021
3	2	2	10-02-2021
4	5	4	01-03-2021
5	8	1	02-04-2021
6	2	1	05-05-2021
7	4	2	07-06-2021
8	5	3	09-07-2021
9	2	4	01-01-2022
10	1	3	03-02-2022
11	8	2	10-02-2022
12	7	2	01-03-2022
13	5	3	02-04-2022
14	3	1	05-05-2022
15	5	4	07-06-2022
16	1	2	09-07-2022
17	2	3	01-01-2023
18	6	3	03-02-2023
19	7	1	10-02-2023
20	4	4	01-03-2023

1. What are the details of all cars purchased in the year 2022?

	A	B	C	D	E	F	G	H
1	sale_id	car_id	salesman_id	purchase_date	Maker	Type	Style	Cost
10	9	2	4	01-01-2022	Toyota	Corolla	Hatchback	25000
11	10	1	3	03-02-2022	Honda	Civic	Sedan	30000
12	11	8	2	10-02-2022	Nissan	Altima	Sedan	26000
13	12	7	2	01-03-2022	Mercedes	C-Class	Coupe	60000
14	13	5	3	02-04-2022	BMW	X5	SUV	55000
15	14	3	1	05-05-2022	Ford	Explorer	SUV	40000
16	15	5	4	07-06-2022	BMW	X5	SUV	55000
17	16	1	2	09-07-2022	Honda	Civic	Sedan	30000
22								

2. What is the total number of cars sold by each salesperson?

A	B
Sales_man_name	No_of_Cars_Sold
Emily Wong	5
John Smith	5
Lucy Chen	4
Tom Lee	6

3. What is the total revenue generated by each salesperson?

Sales_man_ID	No_of_Cars_sold	Total_rev_gen
1	5	181000
2	5	177000
3	6	253000
4	4	171000

4. What are the details of the cars sold by each salesperson?

sale_id	car_id	salesman_id	purchase_date	Maker	Type	Style	Cost
1	1	1	01-01-2021	Honda	Civic	Sedan	30000
5	8	1	02-04-2021	Nissan	Altima	Sedan	26000
6	2	1	05-05-2021	Toyota	Corolla	Hatchback	25000
14	3	1	05-05-2022	Ford	Explorer	SUV	40000
19	7	1	10-02-2023	Mercedes	C-Class	Coupe	60000

sale_id	car_id	salesman_id	purchase_date	Maker	Type	Style	Cost
3	2	2	10-02-2021	Toyota	Corolla	Hatchback	25000
7	4	2	07-06-2021	Chevrolet	Camaro	Coupe	36000
11	8	2	10-02-2022	Nissan	Altima	Sedan	26000
12	7	2	01-03-2022	Mercedes	C-Class	Coupe	60000
16	1	2	09-07-2022	Honda	Civic	Sedan	30000

sale_id	car_id	salesman_id	purchase_date	Maker	Type	Style	Cost
2	3	3	03-02-2021	Ford	Explorer	SUV	40000
8	5	3	09-07-2021	BMW	X5	SUV	55000
10	1	3	03-02-2022	Honda	Civic	Sedan	30000
13	5	3	02-04-2022	BMW	X5	SUV	55000
17	2	3	01-01-2023	Toyota	Corolla	Hatchback	25000
18	6	3	03-02-2023	Audi	A4	Sedan	48000

sale_id	car_id	salesman_id	purchase_date	Maker	Type	Style	Cost
4	5	4	01-03-2021	BMW	X5	SUV	55000
9	2	4	01-01-2022	Toyota	Corolla	Hatchback	25000
15	5	4	07-06-2022	BMW	X5	SUV	55000
20	4	4	01-03-2023	Chevrolet	Camaro	Coupe	36000

5. What is the total revenue generated by each car type?

	A	B	C	D
1	Maker	Car_Name	Car_ID	Rev_Gen
2	BMW	X5	5	220000
3	Mercedes	C-Class	7	120000
4	Toyota	Corolla	2	100000
5	Honda	Civic	1	90000
6	Ford	Explorer	3	80000
7	Chevrolet	Camaro	4	72000
8	Nissan	Altima	8	52000
9	Audi	A4	6	48000

6. What are the details of the cars sold in the year 2021 by salesperson 'Emily Wong'?

	A	B	C	D	E
1	sale_id	car_id	salesman_id	purchase_date	Cost
4	3	2	2	10-02-2021	25000
8	7	4	2	07-06-2021	36000

7. What is the total revenue generated by the sales of hatchback cars?

C	D	E
Car_ID	Rev_Gen	
Hatchback	100000	

8. What is the total revenue generated by the sales of SUV cars in the year 2022?

	A	B	C	D	E
	sale_id	car_id	salesman_id	purchase_date	Cost
4	13	5	3	02-04-2022	55000
5	14	3	1	05-05-2022	40000
6	15	5	4	07-06-2022	55000
2				Rev_Gen	150000
3					

9. What is the name and city of the salesperson who sold the most number of cars in the year 2023?

	C	D	E	F	G
	Count of car_id	Column Labels			
	Sales_man_ID	2022			
	2		3	Emily Wong	San Fran
	4		2	Lucy Chen	LA
	3		2	Tom Lee	Seattle
	1		1	John Smith	New York

10. What is the name and age of the salesperson who generated the highest revenue in the year 2022?

	C	D	E	F	G	H
		Column Labels				
		Count of car_id	Rev_Gen			
	Sales_man_ID	2022	2022	Name	Age	
	2	3	116000	Emily Wong	35	
	3	2	85000	Tom Lee	42	
	4	2	80000	Lucy Chen	31	
	1	1	40000	John Smith	28	