



## **SQL project on a used car business:**

The used car market is a dynamic and competitive industry, requiring efficient data management for inventory tracking, sales analysis, and customer insights. This SQL project focuses on designing and querying a database for a used car dealership, enabling streamlined operations and data-driven decision-making. The database will store information on vehicle inventory, customer details, sales transactions, and pricing trends, allowing for comprehensive analysis and reporting.

By leveraging SQL, this project aims to optimize data retrieval, enhance business insights, and support strategic decision-making for better sales performance and customer satisfaction.

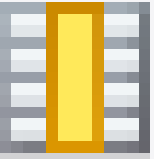


total cars and get a count of total record

```
SELECT  
COUNT(*)  
FROM  
cars.used_car;
```

Result Grid			
	count(*)		
▶	7927		

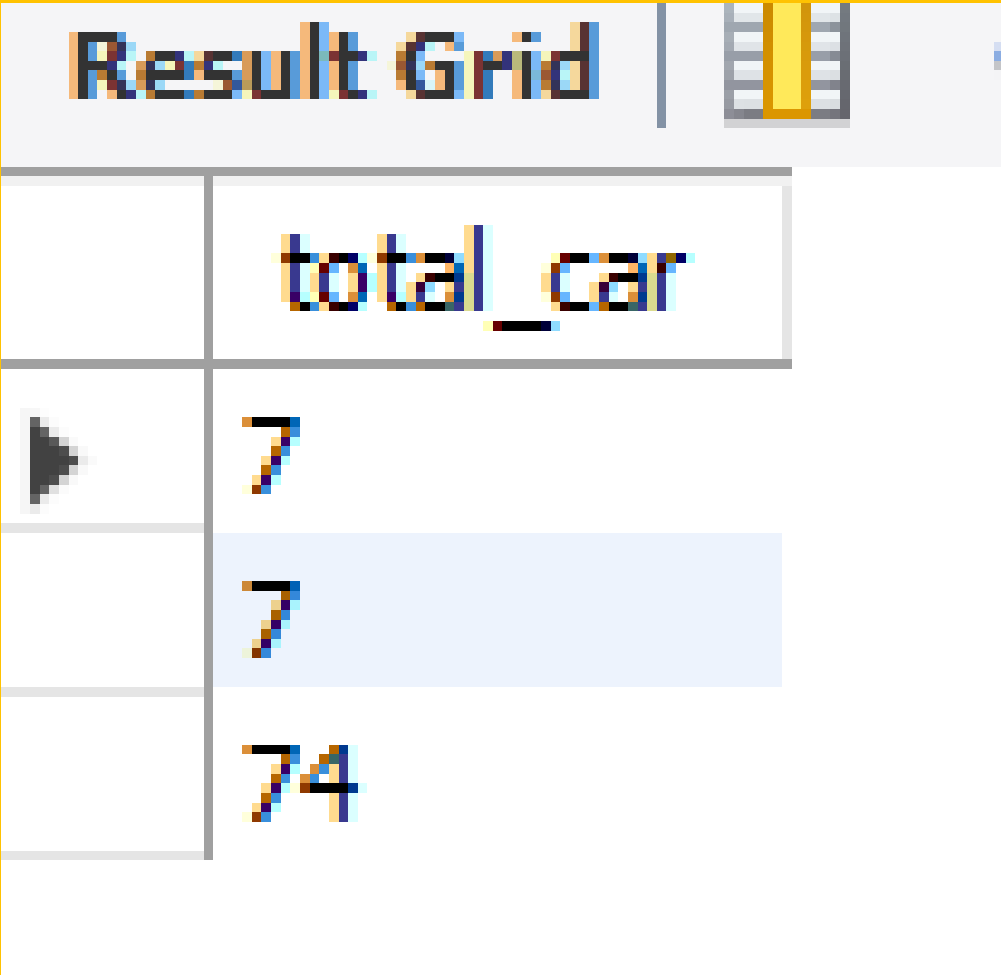
the manger asked the data analysis how many cars wil be  
avaiable in 2023?..

```
SELECT  
COUNT(*)  
FROM  
cars.used_car  
WHERE  
year = 2023;
```

Result Grid			
	count(*)		
	6		

how many cars available 2020,2021,2022?..

```
SELECT
COUNT(*) AS total_car
FROM
cars.used_car
WHERE
year IN (2020 , 2021, 2022)
GROUP BY year;
```



The screenshot shows a 'Result Grid' window with a table containing the results of the SQL query. The table has two columns: an unnamed column for the year and a column named 'total\_car'. The data rows show 7 cars for 2020, 7 cars for 2021, and 74 cars for 2022. The row for 2021 is highlighted in light blue.

	total_car
▶ 2020	7
2021	7
2022	74

client asked me to print the total of all cars by year.i don't see all the detail

```
SELECT
year, COUNT(*)
FROM
cars.used_car
GROUP BY year;
```

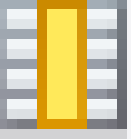


Result Grid		
	year	count(*)
	2023	6
	2022	7
	2021	7
	2020	74
	2019	583
	2018	806
	2017	1010
	2016	856
	2015	775
	2014	620

Result Grid		
	year	count(*)
	2013	668
	2012	621
	2011	570
	2010	375
	2009	231
	2008	201
	2007	173
	2006	102
	2005	76
	2004	51

Result Grid		
	year	count(*)
	2003	37
	2002	19
	2001	6
	2000	16
	1999	14
	1998	9
	1997	9
	1996	2
	1995	1
	1994	2

client asked to car dealer agent how many diseal car will be avaiable in 2022?..

```
SELECT  
COUNT(*)  
FROM  
cars.used_car  
WHERE  
year = 2020 AND fuel = 'Diesel';
```

Result Grid				F
	total_car			
	20			



client requested a car dealer how many petrol car available in 2022?



```
SELECT
COUNT(*) AS total_car
FROM
cars.used_car
WHERE
year = 2020 AND fuel = 'Petrol';
```



Result Grid	
	total_car
▶	51

the manager told the employee to give a print all the fuel cars (petrol,diesel,and cng) come by all year.

```
select year,  
sum(case when fuel="Petrol" then 1 else 0 end) as petrol_car,  
sum(case when fuel="diesel" then 1 else 0 end) as diesel_car,  
sum(case when fuel="CNG" then 1 else 0 end) as cng_car  
from cars.used_car  
group by year  
order by year desc;
```

Result Grid			Filter Rows:	
	year	petrol_car	diesel_car	cng_car
	2023	4	1	0
	2022	5	2	0
	2021	5	2	0
	2020	51	20	3
	2019	352	224	7
	2018	394	407	5
	2017	432	569	9
	2016	429	421	6
	2015	278	493	2
	2014	202	414	4



Result Grid			Filter Rows:	
	year	petrol_car	diesel_car	cng_car
	2013	203	460	3
	2012	199	407	5
	2011	200	362	4
	2010	184	179	3
	2009	133	98	0
	2008	107	90	1
	2007	96	73	0
	2006	71	30	0
	2005	54	22	0
	2004	41	10	0

Result Grid			Filter Rows:	
	year	petrol_car	diesel_car	cng_car
	2003	27	10	0
	2002	16	3	0
	2001	6	0	0
	2000	12	3	1
	1999	11	3	0
	1998	9	0	0
	1997	9	0	0
	1996	2	0	0
	1995	1	0	0
	1994	1	1	0



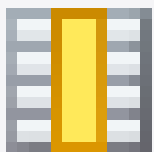


the manager told calcualte which year have more than 100 cars?..

```
SELECT
year, COUNT(*) AS total_car
FROM
cars.used_car
GROUP BY year
HAVING COUNT(*) > 100;
```

Result Grid    		
	year	total_car
▶	2019	583
	2018	806
	2017	1010
	2016	856
	2015	775
	2014	620
	2013	668
	2012	621
	2011	570
	2010	375






calculate all cars count details between 2015 and 2023 give complete list..

```
SELECT
COUNT(*) AS total_cars
FROM
cars.used_car
WHERE
year BETWEEN 2015 AND 2023;
```

Result Grid			
	total_cars		
	4124		

calculate all cars details between 2017 to 2023.

```
SELECT
*
FROM
cars.used_car
WHERE
year BETWEEN 2017 AND 2023
ORDER BY year ASC;
```

Result Grid     Filter Rows: <input type="text"/>   Export:    Wrap Cell Content:    Fetch rows: 													
	Name	year	selling_price	km_driven	fuel	seller_type	transmission	owner	mileage	engine	max_power	torque	seats
	Hyundai Grand i10 1.2 Kappa Asta	2017	600000	5000	Petrol	Individual	Manual	First Owner	18.9 kmpl	1197 CC	81.86 bhp	113.75nm@ 4000rpm	5
	Hyundai Grand i10 1.2 Kappa Era	2017	430000	52000	Petrol	Individual	Manual	First Owner	17.0 kmpl	1197 CC	81.86 bhp	113.75Nm@ 4000rpm	5
	Hyundai Grand i10 1.2 Kappa Magna AT	2017	525000	40000	Petrol	Individual	Automatic	First Owner	18.9 kmpl	1197 CC	81.86 bhp	113.75nm@ 4000rpm	5
	Hyundai Grand i10 1.2 Kappa Magna BSIV	2017	525000	10000	Petrol	Individual	Manual	First Owner	18.9 kmpl	1197 CC	81.86 bhp	113.75nm@ 4000rpm	5
	Hyundai Grand i10 1.2 Kappa Magna BSIV	2017	470000	30000	Petrol	Individual	Manual	First Owner	18.9 kmpl	1197 CC	81.86 bhp	113.75nm@ 4000rpm	5
	Hyundai Grand i10 1.2 Kappa Magna BSIV	2017	445000	27000	Petrol	Individual	Manual	First Owner	18.9 kmpl	1197 CC	81.86 bhp	113.75nm@ 4000rpm	5
	Hyundai Grand i10 1.2 Kappa Magna BSIV	2017	450000	20000	Petrol	Individual	Manual	First Owner	18.9 kmpl	1197 CC	81.86 bhp	113.75nm@ 4000rpm	5
	Hyundai Grand i10 1.2 Kappa Sportz AT	2017	550000	10000	Petrol	Individual	Automatic	First Owner	18.9 kmpl	1197 CC	81.86 bhp	113.75nm@ 4000rpm	5
	Hyundai Grand i10 1.2 Kappa Sportz AT	2017	550000	10000	Petrol	Individual	Automatic	First Owner	18.9 kmpl	1197 CC	81.86 bhp	113.75nm@ 4000rpm	5
	Hyundai Grand i10 1.2 Kappa Sportz BSIV	2017	570000	20000	Petrol	Individual	Manual	First Owner	18.9 kmpl	1197 CC	81.86 bhp	113.75nm@ 4000rpm	5