



SQL Mini Project L1

Data Analytics SQL Mini-Project

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----Reading the whole table

```
SELECT * FROM CAR24;
```

The screenshot shows the MySQL80 application window. The query editor at the top contains the following SQL code:

```
3 -----
4 Q1 reading to whole table
5
6 select* from car24;
7 -----
```

Below the query editor, the 'Result Grid' tab is active, displaying a table with 13 columns: name, year, selling_price, km_driven, fuel, seller_type, transmission, owner, mileage, engine [CC], max_power, and seats. The table contains 18 rows of data, including various car models like Hyundai i20 Asta 1.2, Maruti Wagon R LXI Minor, and Honda Civic 1.8 S AT.

At the bottom, the 'Output' tab shows the execution log:

#	Time	Action	Message
9	07:30:16	select* from car24 LIMIT 0, 1000	1000 row(s) returned
10	07:32:39	select* from car24 LIMIT 0, 1000	1000 row(s) returned

----Counting the total number car present in the data set

```
SELECT COUNT (*) FROM CAR24;
```

The screenshot displays the SQL Server Enterprise Manager interface. The query editor shows the following SQL statement:

```
-- Q2 counting the total number car present in the data set  
select count(*) from car24;
```

The query has been executed, and the results are shown in the 'Result Grid' pane. The results are as follows:

count(*)
8128

The 'Output' pane at the bottom shows the execution details:

#	Time	Action	Message	Duration / Fe
10	07:32:39	select* from car24 LIMIT 0, 1000	1000 row(s) returned	0.000 sec / C
11	08:13:47	select count(*) from car24 LIMIT 0, 1000	1 row(s) returned	0.047 sec / C

The Windows taskbar at the bottom shows the system clock as 8:14 AM on 2/22/20, with a temperature of 21°C and clear weather.

---- **How many are in that combination ?**

```
select distinct selling_price, seller_type
```

```
from car24
```

```
order by selling_price, seller_type;
```

The screenshot shows the SQL Developer interface. The query editor at the top contains the following SQL code:

```
21 select distinct selling_price, seller_type
22 from car24
23
24 order by selling_price, seller_type;
25
```

Below the query editor, the 'Result Grid' displays the results of the query. The grid has two columns: 'selling_price' and 'seller_type'. The results are sorted by selling_price in ascending order. The first few rows are:

selling_price	seller_type
29999	Individual
30000	Individual
31000	Individual
31504	Individual
33351	Individual
33983	Individual
35000	Individual
39000	Individual
40000	Individual
42000	Individual
45000	Individual
45957	Individual
46000	Individual
50000	Individual
52000	Individual

The 'Output' window at the bottom shows the execution history:

Action	Time	Message
select count(*) from car24 LIMIT 0, 1000	11 08:13:47	1 row(s) returned
select distinct selling_price, seller_type from car24 order by selling_price, seller_type LIMIT 0, 1000	12 08:18:51	890 row(s) returned

-----Reading the car from the dataset where selling_price between 200000 to 500000 by desc order

```
select * from car24
```

```
where selling_price between 200000 and 500000
```

```
order by selling_price desc;
```

The screenshot shows the MySQL 8.0 interface with a query window titled 'project 1'. The query is as follows:

```
29
30 select * from car24
31 where selling_price between 200000 and 500000
32 order by selling_price desc;
33
```

The 'Result Grid' displays the following data:

	name	year	selling_price	km_driven	fuel	seller_type	transmission	owner	mileage	engine [CC]	max_power	seats
▶	Honda Amaze VX i-DTEC	2013	500000	116104	Diesel	Dealer	Manual	First Owner	25.8	1498	98.6	5
	Mahindra Scorpio LX	2013	500000	115717	Diesel	Individual	Manual	First Owner	12.05	2179	120	9
	Honda City i DTEC SV	2014	500000	110000	Diesel	Individual	Manual	First Owner	26	1498	98.6	5
	Mahindra Bolero 2011-2019 SLE	2013	500000	110000	Diesel	Individual	Manual	First Owner	15.96	2523	62.1	7
	Ford Endeavour 3.0L 4X2 AT	2012	500000	110000	Diesel	Individual	Automatic	First Owner	11.4	2953	153.86	7
	Renault Duster 110PS Diesel RxL	2012	500000	110000	Diesel	Individual	Manual	Second Owner	19.01	1461	108.45	5
	Honda City i DTEC E	2015	500000	100000	Diesel	Individual	Manual	First Owner	26	1498	98.6	5
	Mahindra Bolero 2011-2019 SLE	2014	500000	100000	Diesel	Individual	Manual	First Owner	15.96	2523	62.1	7
	Chevrolet Captiva LT	2011	500000	99500	Diesel	Individual	Manual	Third Owner	11.5	1991	147.9	7
	Chevrolet Captiva LT	2011	500000	99500	Diesel	Individual	Manual	Third Owner	11.5	1991	147.9	7
	Fiat Avventura Power Up 1.3 E...	2015	500000	96500	Diesel	Individual	Manual	First Owner	20.5	1248	91.72	5
	Maruti Ertiga VDI	2013	500000	92000	Diesel	Individual	Manual	Third Owner	20.77	1248	88.76	7
	Hyundai i20 Sportz Option 1.4 C...	2015	500000	90000	Diesel	Individual	Manual	First Owner	22.54	1396	88.73	5
	Mahindra Bolero 2011-2019 SLX...	2014	500000	90000	Diesel	Individual	Manual	First Owner	15.96	2523	62.1	7
	Tata Aria Pure i Y dv?	2014	500000	90000	Diesel	Individual	Manual	Second Owner	15.05	2179	147.9	7

The 'Output' window at the bottom shows the following log entries:

#	Time	Action	Message
12	08:18:51	select distinct selling_price, seller_type from car24 order by selling_price, seller_type LIMIT 0, 1000	890 row(s) returned
13	09:09:01	select * from car24 where selling_price between 200000 and 500000 order by selling_price desc LIMIT ...	1000 row(s) returned

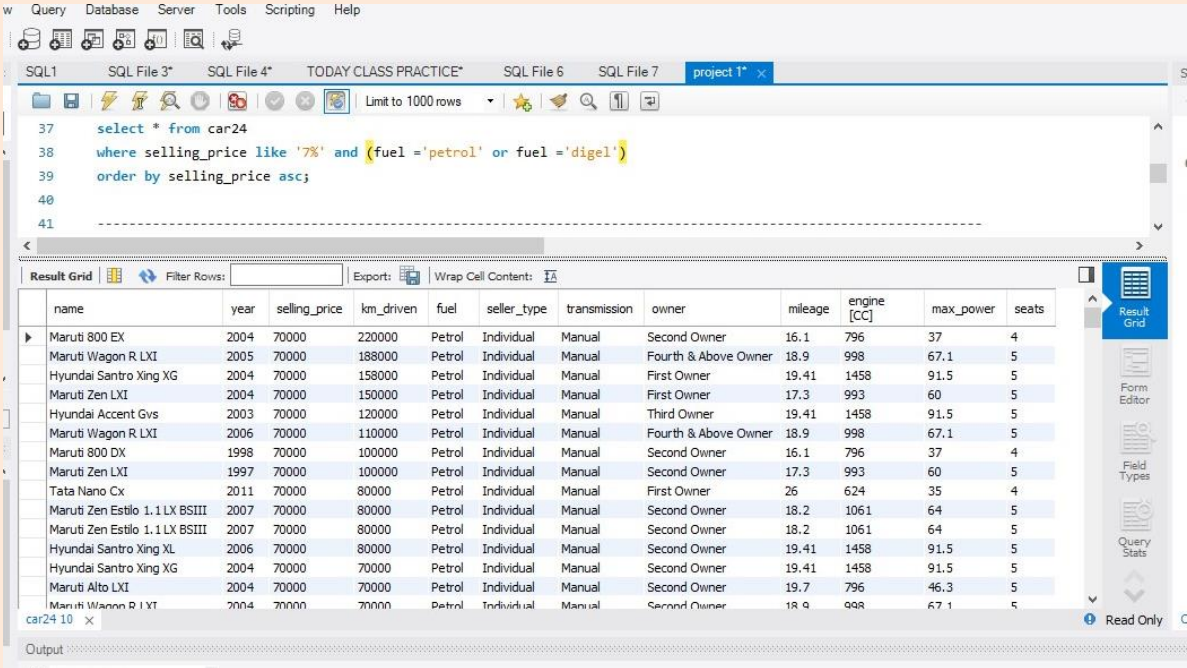
-----Print all details of car24 whose selling price starts with the number 7 and whose reside in the fuel of petrol or digel.

Sort the result set in ascending order of selling price

```
Select * from car24

where selling_price like '7%' and (fuel ='petrol' or fuel ='digel')

order by selling_price asc;
```



----calculate the sum selling price from 2002 and 2023 and group by the selling price asc order.

select sum(selling_price) as total

from car24

where year between '2002' and '2023'

group by selling_price

order by total asc;

The screenshot shows the MySQL Workbench interface. The top toolbar includes icons for file operations, query execution, and navigation. The main window displays a SQL query in the 'SQL1' tab:

```
42 QZ calculate the sum selling price from 2002 and 2023 and group by the selling price asc order.  
43  
44 select sum(selling_price) as total  
45 from car24  
46 where year between '2002' and '2023'  
47 group by selling_price  
48 order by total asc;  
49
```

Below the query editor, the 'Result Grid' is visible, showing the results of the query. The results are sorted by the 'total' column in ascending order. The first few rows are:

total
31504
33351
42000
46000
54000
56000
58000
59000
59259
64000
66000
67000

The bottom of the interface shows the 'Output' tab, which is currently empty. The status bar at the bottom indicates the current state of the application.

----Read name , selling_price, engine [CC] where mileage = 25.17

```
SELECT name, selling_price, 'engine [CC]'
```

```
FROM car24
```

```
WHERE mileage = 25.17;
```

The screenshot shows a SQL IDE interface with a query editor and a result grid. The query editor contains the following SQL code:

```
52  
53 SELECT name, selling_price, 'engine [CC]'  
54 FROM car24  
55 WHERE mileage = 25.17;  
56
```

The result grid displays the following data:

name	selling_price	engine [CC]
Renault KWID RXT	210000	engine [CC]
Renault KWID RXT	261000	engine [CC]
Renault KWID RXL	220000	engine [CC]
Renault KWID RXL	260000	engine [CC]
Renault KWID RXT	300000	engine [CC]
Renault KWID RXT	315000	engine [CC]
Renault KWID RXT	300000	engine [CC]
Renault KWID RXT	300000	engine [CC]
Renault KWID RXT Optional	295000	engine [CC]
Renault KWID RXT Optional	275000	engine [CC]
Renault KWID RXT	260000	engine [CC]
Renault KWID RXT	240000	engine [CC]
Renault KWID RXT	315000	engine [CC]
Renault KWID RXT	270000	engine [CC]
Renault KWID RXT	265000	engine [CC]

The bottom of the screen shows the Action Output pane with the following message:

```
15 09:19:06 select sum(selling_price) as total from car24 where year between '2002' and '2023' group by selling_price... 667 row(s) returned  
16 09:23:34 SELECT name, selling_price, 'engine [CC]' FROM car24 WHERE mileage = 25.17 LIMIT 0, 1000 64 row(s) returned
```


-----Read the table where transmission = Manual AND max_power = 198.25

SELECT * FROM car24

WHERE transmission = "Manual" AND max_power = 198.25;

The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
59  
60 SELECT * FROM car24  
61 WHERE transmission = "Manual" AND max_power = 198.25;  
62  
63 -----
```

The Results tab displays the following data:

	name	year	selling_price	km_driven	fuel	seller_type	transmission	owner	mileage	engine [cc]	max_power	seats
▶	Hyundai Sonata 2.4 GDI MT	2012	550000	330000	Petrol	Individual	Manual	Second Owner	13.44	2359	198.25	5
▶	Hyundai Sonata 2.4 GDI MT	2012	500000	330000	Petrol	Individual	Manual	Second Owner	13.44	2359	198.25	5
▶	Hyundai Sonata 2.4 GDI MT	2012	525000	70000	Petrol	Individual	Manual	Second Owner	13.44	2359	198.25	5

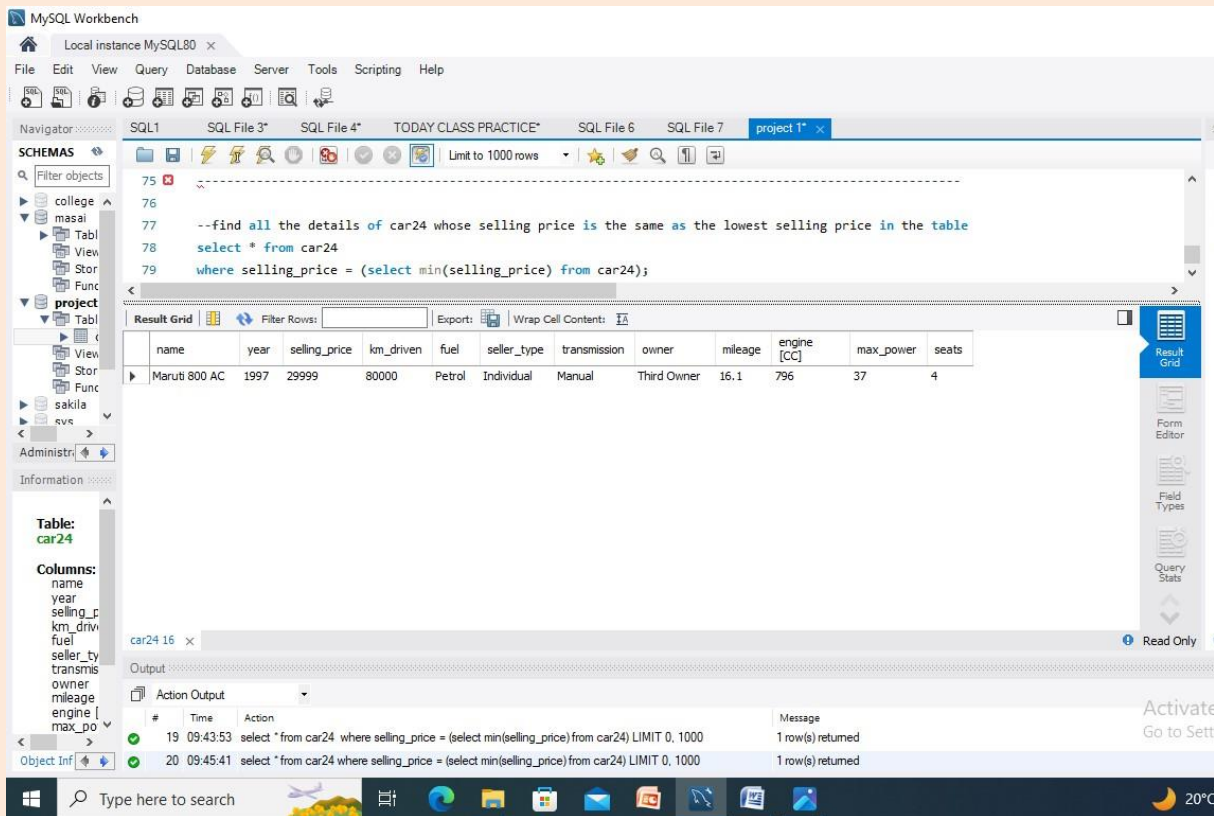
The left sidebar shows the Schemas pane with a tree view of the database structure. The bottom status bar shows the output of the query execution:

```
16 09:23:34 SELECT name, selling_price, 'engine [CC]' FROM car24 WHERE mileage = 25.17 LIMIT 0, 1000 64 row(s) returned  
17 09:36:30 SELECT * FROM car24 WHERE transmission = "Manual" AND max_power = 198.25 LIMIT 0, 1000 3 row(s) returned
```

--find all the details of car24 whose selling price is the same as the lowest selling price in the table

```
select * from car24
```

```
where selling_price = (select min(selling_price) from car24);
```



The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
--find all the details of car24 whose selling price is the same as the lowest selling price in the table
select * from car24
where selling_price = (select min(selling_price) from car24);
```

The query results are displayed in the Result Grid, showing a single row for the car with the lowest selling price:

name	year	selling_price	km_driven	fuel	seller_type	transmission	owner	mileage	engine [CC]	max_power	seats
Maruti 800 AC	1997	29999	80000	Petrol	Individual	Manual	Third Owner	16.1	796	37	4

The left sidebar shows the Schemas pane with the 'project' database selected. The bottom pane shows the Action Output, indicating that the query returned 1 row(s).

----read the average selling price

```
select avg(selling_price)
```

```
from car24;
```

The screenshot shows a SQL IDE interface with a query editor and a result grid. The query editor contains the following SQL code:

```
83  
84 ----read the average selling price  
85  
86 select avg(selling_price)  
87 from car24;
```

The result grid displays the output of the query:

avg(selling_price)
638271.8077

The IDE interface includes a toolbar with various icons, a tab bar with tabs for SQL1, SQL File 3*, SQL File 4*, TODAY CLASS PRACTICE*, SQL File 6, SQL File 7, and project 1*. The result grid has a filter row and an export button. The right sidebar contains a 'Result Grid' button and a 'Form Editor' button.

----read the maximum seats

select max(seats)

from car24;

The screenshot shows a database management tool interface. On the left, a tree view displays the database structure, including tables, views, stored procedures, and functions. The 'car24' table is selected. The main area shows a SQL query editor with the following code:

```
91 -----  
92 ----read the maximum seats  
93 select max(seats)  
94 from car24;
```

Below the query editor, the 'Result Grid' shows the output of the query:

max(seats)
14

The 'Output' pane shows the execution details of the query:

#	Time	Action	Message	Duration / Fetch
4	07:55:52	select max(seats) from car24 LIMIT 0, 1000	1 row(s) returned	0.016 sec / 0.000 s
5	07:57:26	select max(seats) from car24 LIMIT 0, 1000	1 row(s) returned	0.032 sec / 0.000 s

The bottom status bar indicates the query is completed. The Windows taskbar at the bottom shows the system clock as 7:57 AM on 2/24/2024, with a temperature of 21°C and a weather condition of Haze.

--read the sum km driven

select sum(km_driven)

from car24;

The screenshot shows a SQL IDE interface with multiple tabs at the top: SQL1, SQL File 3*, SQL File 4*, TODAY CLASS PRACTICE*, SQL File 6, SQL File 7, and project 1*. The active tab is 'project 1*'. The main editor area contains the following SQL query:

```
99
100
101 select sum(km_driven)
102 from car24;
103 -----
104
105
106
107
108
109
```

Below the editor, the 'Result Grid' is displayed, showing a single row of results:

sum(km_driven)
567492984

Below the result grid, the 'Output' pane shows a list of actions and their messages:

#	Time	Action	Message
6	08:03:48	select sum(engine[cc]) from car24	Error Code: 1064. You have an error in your SQL syntax; check the manual that comes with the MySQL server on how to use the correct SQL statement
7	08:04:41	select sum(km_driven) from car24 LIMIT 0, 1000	1 row(s) returned

The Windows taskbar is visible at the bottom, showing the search bar, task view button, and several application icons including Edge, File Explorer, Mail, and Chrome. The system tray shows the date and time as 21°C Haz.