CAR24 DATASET MINI PROJECT L1

Insights

1. Which transmission cars have higher market value and how many of cars we have based on transmissions ?

   select transmission, count(*) from cars group by transmission;

   select transmission, avg(selling_price) from cars group by transmission;

```
85 •  select transmission, count(*) from cars group by transmission;
86 •  select transmission, avg(selling_price) from cars group by transmission;
87
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

transmission	avg(selling_price)
Automatic	1870827.6038
Manual	455425.8645

Result 34 | Result 35

Output

Action Output

#	Time	Action	Message
40	13:56:48	select name, avg(km_driven), avg(mileage) from cars where name like '%Maruti Alto...	6 row(s) returned
41	14:10:15	select case when `engine [cc]` between 100 and 500 then '100-500' when `engine...	5 row(s) returned
42	14:13:44	select transmission, count(*) from cars group by transmission LIMIT 0, 50000	2 row(s) returned
43	14:13:44	select transmission, avg(selling_price) from cars group by transmission LIMIT 0, 50000	2 row(s) returned

2. Which age group cars have highest count and Which age group car have higher market value ?

   select
   case
   when (2024-year) > 20 then 'very old model'
   when (2024-year) between 10 and 15 then 'old model'
   when (2024-year) between 5 and 10 then 'medium aged model'
   Else 'latest model' end as age_group,count(name) as countofcars , avg(selling_price) from cars group by age_group;

```
89  select
90  case
91  when (2024-year) > 20 then 'very old model'
92  when (2024-year) between 10 and 15 then 'old model'
93  when (2024-year) between 5 and 10 then 'medium aged model'
94  Else 'latest model' end as age_group,count(name) as countofcars , avg(selling_price) from cars
95  group by age_group;
96
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

age_group	countofcars	avg(selling_price)
latest model	754	243145.1538
medium aged model	4043	934534.9649
old model	3174	381902.5996
very old model	157	89541.9936

Result 36

Output

Action Output

#	Time	Action	Message
41	14:10:15	select case when `engine [cc]` between 100 and 500 then '100-500' when `engine...	5 row(s) returned
42	14:13:44	select transmission, count(*) from cars group by transmission LIMIT 0, 50000	2 row(s) returned
43	14:13:44	select transmission, avg(selling_price) from cars group by transmission LIMIT 0, 50000	2 row(s) returned
44	14:16:39	select case when (2024-year) > 20 then 'very old model' when (2024-year) betwe...	4 row(s) returned

3. Compare of Average Selling Price Across Seller Type.
   select seller_type, count(name), avg(selling_price) from cars group by seller_type;

```
97
98  select seller_type, count(name), avg(selling_price) from cars group by seller_type;
99
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

seller_type	count(name)	avg(selling_price)
Dealer	1126	1443493.7451
Individual	6766	498561.2320
Trustmark Dealer	236	801838.9831

Result 37

Output

Action Output

#	Time	Action	Message
42	14:13:44	select transmission, count(*) from cars group by transmission LIMIT 0, 50000	2 row(s) returned
43	14:13:44	select transmission, avg(selling_price) from cars group by transmission LIMIT 0, 50000	2 row(s) returned
44	14:16:39	select case when (2024-year) > 20 then 'very old model' when (2024-year) betwe...	4 row(s) returned
45	14:19:56	select seller_type, count(name), avg(selling_price) from cars group by seller_type LI...	3 row(s) returned

4. Which top 5 manufacturers have highest number of cars ?

select count(name) ,substring_index(name,' ',1) as manufacturer
from cars group by manufacturer order by count(name) desc limit 5 ;

```
101
102 •   select substring_index(name,' ',1) as manufacturer,count(name)
103     from cars group by manufacturer order by count(name) desc limit 5 ;
104
105
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

manufacturer	count(name)
Maruti	2448
Hyundai	1415
Mahindra	772
Tata	734
Toyota	488

Result 39

Output

Action Output

#	Time	Action	Message
44	14:16:39	select case when (2024-year) > 20 then 'very old model' when (2024-year) betwe...	4 row(s) returned
45	14:19:56	select seller_type, count(name), avg(selling_price) from cars group by seller_type LI...	3 row(s) returned
46	14:21:33	select count(name) ,substring_index(name,' ',1) as manufacturer from cars group by ...	5 row(s) returned
47	14:21:57	select substring_index(name,' ',1) as manufacturer,count(name) from cars group by ...	5 row(s) returned

5. Which fuel type cars have higher mileage and good selling price ?

   select fuel , avg(selling_price), avg(mileage) from cars group by fuel;

```
106 •  select fuel , avg(selling_price), avg(mileage) from cars group by fuel;
107
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

fuel	avg(selling_price)	avg(mileage)
CNG	301017.4912	23.8596
Diesel	791452.9216	19.6395
LPG	200421.0526	18.4211
Petrol	462441.0617	19.1270

Result 40

Output

Action Output

#	Time	Action	Message
45	14:19:56	select seller_type, count(name), avg(selling_price) from cars group by seller_type LI...	3 row(s) returned
46	14:21:33	select count(name) ,substring_index(name,' ',1) as manufacturer from cars group by ...	5 row(s) returned
47	14:21:57	select substring_index(name,' ',1) as manufacturer,count(name) from cars group by ...	5 row(s) returned
48	14:23:09	select fuel , avg(selling_price), avg(mileage) from cars group by fuel LIMIT 0, 50000	4 row(s) returned

6. Impact of Ownership On Car Fuel Efficiency ?

   select owner ,avg(mileage) from cars group by owner order by avg(mileage) desc;

```
108
109 •  select owner ,avg(mileage) from cars group by owner order by avg(mileage) desc;
110
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

owner	avg(mileage)
First Owner	19.9111
Second Owner	18.7610
Third Owner	18.0559
Fourth & Above Owner	17.5632
Test Drive Car	16.8000

Result 41

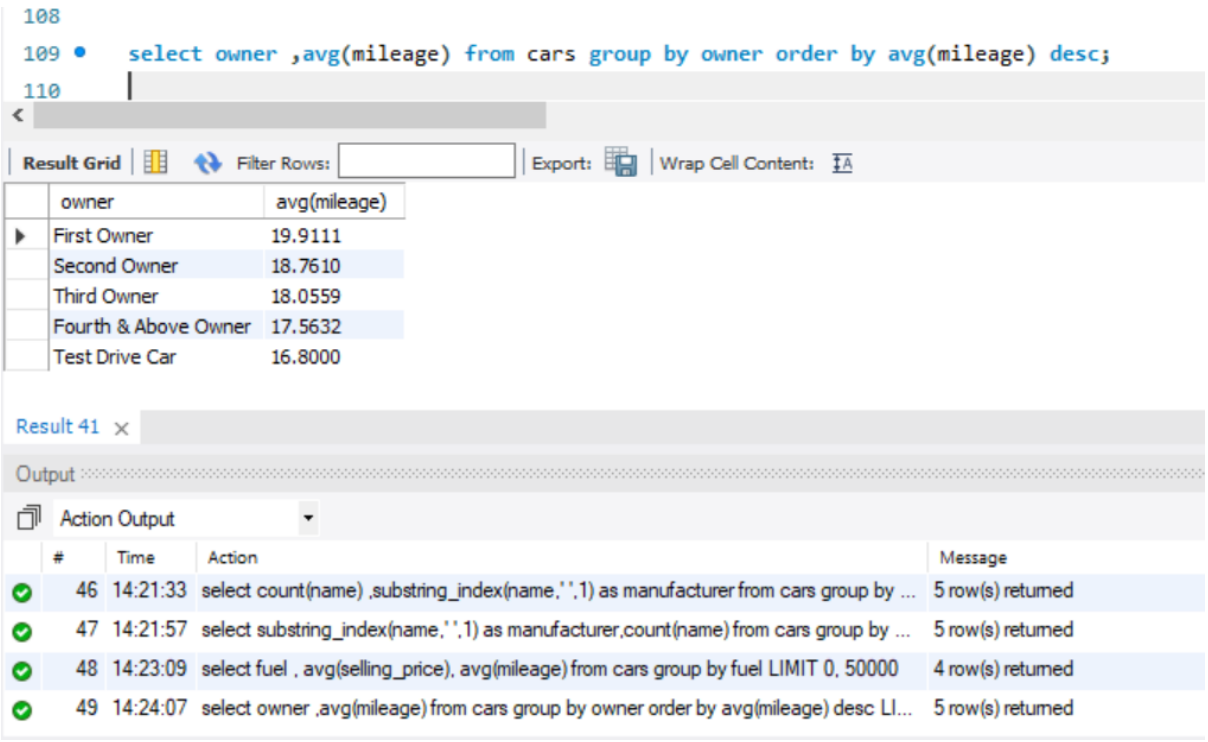
Output

Action Output

#	Time	Action	Message
46	14:21:33	select count(name) ,substring_index(name,' ',1) as manufacturer from cars group by ...	5 row(s) returned
47	14:21:57	select substring_index(name,' ',1) as manufacturer,count(name) from cars group by ...	5 row(s) returned
48	14:23:09	select fuel , avg(selling_price), avg(mileage) from cars group by fuel LIMIT 0, 50000	4 row(s) returned
49	14:24:07	select owner ,avg(mileage) from cars group by owner order by avg(mileage) desc LI...	5 row(s) returned

7. Impact of Car Year Manufacturing with Average Selling Price.

```
select year, avg(selling_price) as avgprice from cars group by year order by year desc;
```



8. Vehicle Type (gype/thar, hatchback/sedan, SUV) Distribution Of Car Based On Seats.

```
select count(seats),case
when seats between 1 and 5 then 'sadan/hatchback'
when seats > 5 and name not like '%gypsy%' and name not like '%thar%'then 'SUV'
when seats > 5 and name like '%gypsy%' or name like '%thar%' then 'gypsy/thar' end as vehicle_type
from cars group by vehicle_type;
```

```
114 • select count(seats),case
115   when seats between 1 and 5 then 'sadan/hatchback'
116   when seats > 5 and name not like '%gypsy%' and name not like '%thar%'then 'SUV'
117   when seats > 5 and name like '%gypsy%' or name like '%thar%' then 'gypsy/thar' end as vehicle_type
118   from cars group by vehicle_type;
119
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

count(seats)	vehicle_type
31	gypsy/thar
6610	sadan/hatchback
1487	SUV

Result 42

Output

Action Output

#	Time	Action	Message
47	14:21:57	select substring_index(name,' ',1) as manufacturer,count(name) from cars group by ...	5 row(s) returned
48	14:23:09	select fuel , avg(selling_price), avg(mileage) from cars group by fuel LIMIT 0, 50000	4 row(s) returned
49	14:24:07	select owner ,avg(mileage) from cars group by owner order by avg(mileage) desc LI...	5 row(s) returned
50	14:27:28	select count(seats),case when seats between 1 and 5 then 'sadan/hatchback' whe...	3 row(s) returned

9. Correlation Between Distance Traveled And Fuel Efficiency Of Car

select name, avg(km_driven), avg(mileage) from cars where name like '%Maruti Alto 800 LXI%'
group by name order by km_driven desc limit 6;

```
121 • select name, avg(km_driven), avg( mileage) from cars where name like '%Maruti Alto 800 LXI%'
122   group by name  order by km_driven desc limit 6;
123
124
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

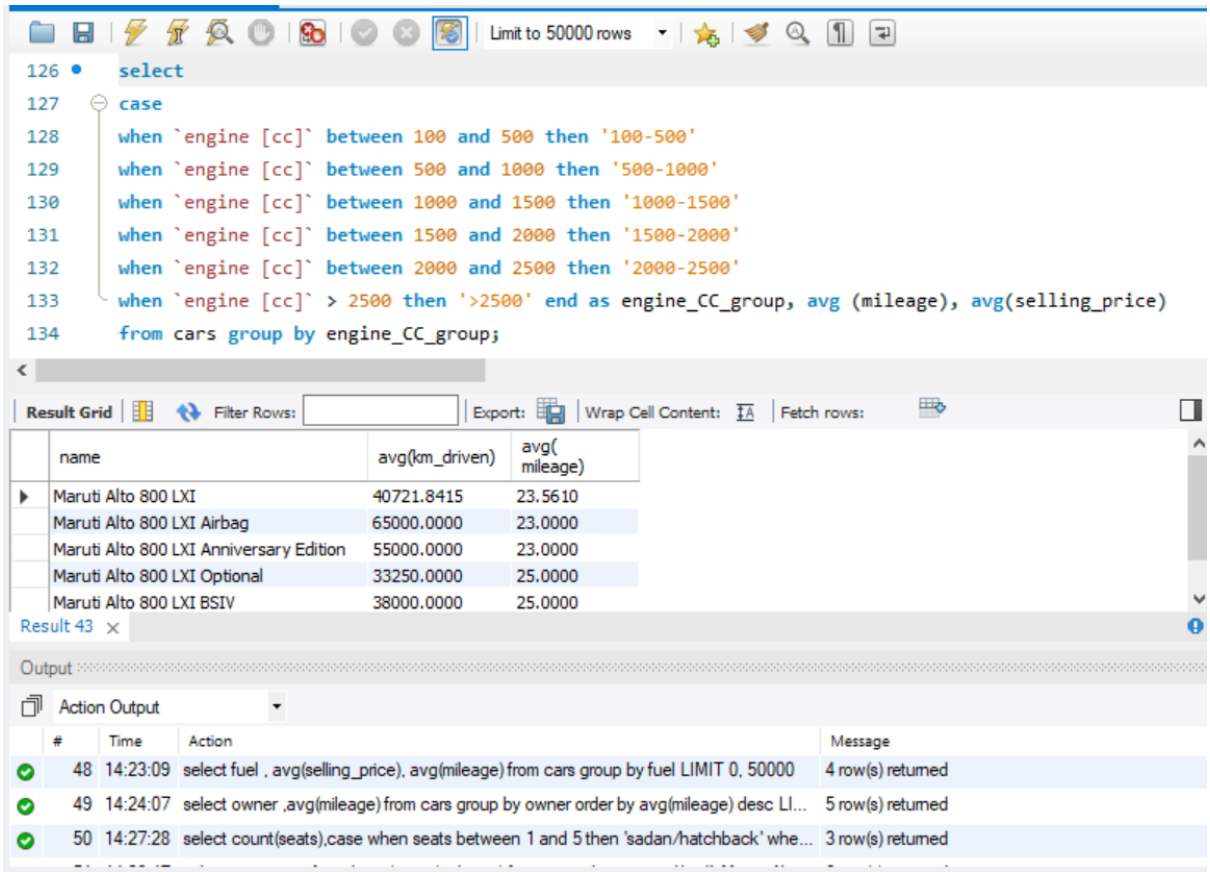
name	avg(km_driven)	avg(mileage)
Maruti Alto 800 LXI	40721.8415	23.5610
Maruti Alto 800 LXI Airbag	65000.0000	23.0000
Maruti Alto 800 LXI Anniversary Edition	55000.0000	23.0000
Maruti Alto 800 LXI Optional	33250.0000	25.0000
Maruti Alto 800 LXI BSIV	38000.0000	25.0000

Result 43

Output

Action Output

#	Time	Action	Message
48	14:23:09	select fuel , avg(selling_price), avg(mileage) from cars group by fuel LIMIT 0, 50000	4 row(s) returned
49	14:24:07	select owner ,avg(mileage) from cars group by owner order by avg(mileage) desc LI...	5 row(s) returned
50	14:27:28	select count(seats),case when seats between 1 and 5 then 'sadan/hatchback' whe...	3 row(s) returned
51	14:28:47	select name, avg(km_driven), avg(mileage) from cars where name like '%Maruti Alto...	6 row(s) returned

10. Influence Of Engine Displacement On Both Resale Value Of Car and Their Fuel Efficiency

```
select
case
when `engine [cc]` between 100 and 500 then '100-500'
when `engine [cc]` between 500 and 1000 then '500-1000'
when `engine [cc]` between 1000 and 1500 then '1000-1500'
when `engine [cc]` between 1500 and 2000 then '1500-2000'
when `engine [cc]` between 2000 and 2500 then '2000-2500'
when `engine [cc]` > 2500 then '>2500' end as engine_CC_group, avg (mileage), avg(selling_price)
from cars group by engine_CC_group;
```