CAB RIDES

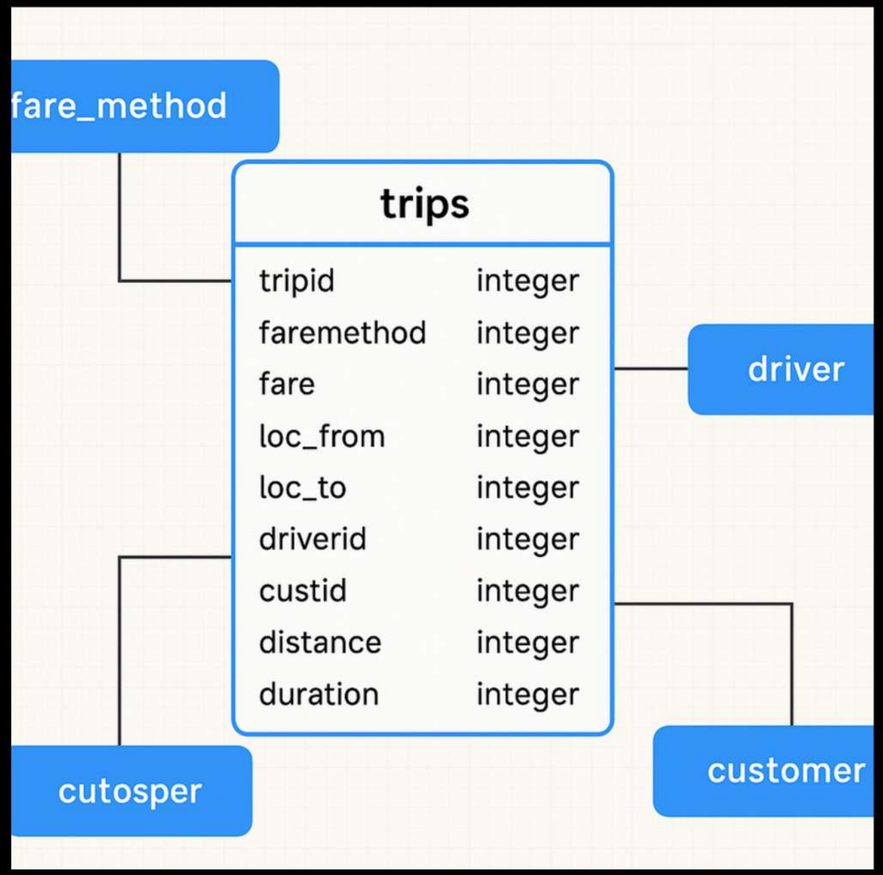
This project simulates the backend of a cab booking platform similar to Ola or Uber. It involves a structured SQL database that records trip details, including driver and customer IDs, trip distances, durations, pickup and drop locations, fare methods, and total fares. The dataset is designed to support analytical queries for performance monitoring, fare calculation, route optimization, and user behavior insights. It serves as a foundation for building data-driven solutions in the urban mobility domain.

Start Presentation

GOAL

To design and implement a relational database that captures and analyzes cab ride data, enabling insights into trip patterns, fare trends, and customer-driver interactions.

SCHEMA


fare_method
trips
tripid integer
faremethod integer
fare integer
loc_from integer
loc_to integer
driverid integer
custid integer
distance integer
duration integer
driver
cutosper
customer

TOTAL TRIPS

```
select count(distinct tripid) trips from trips_details4;
```

Results

	trips
1	2161

TOTAL DRIVERS

```sql
select count(distinct driverid) as total_drivers from trips;
```

Results | Mess

	total_drivers
1	30

TOTAL EARNINGS

```
select sum(fare) earning from trips;
```

Results

	earning
1	751343

TOTAL COMPLETED TRIPS

```
select sum(end_ride) as trips from trips_details4;
```

Results

	trips
1	983

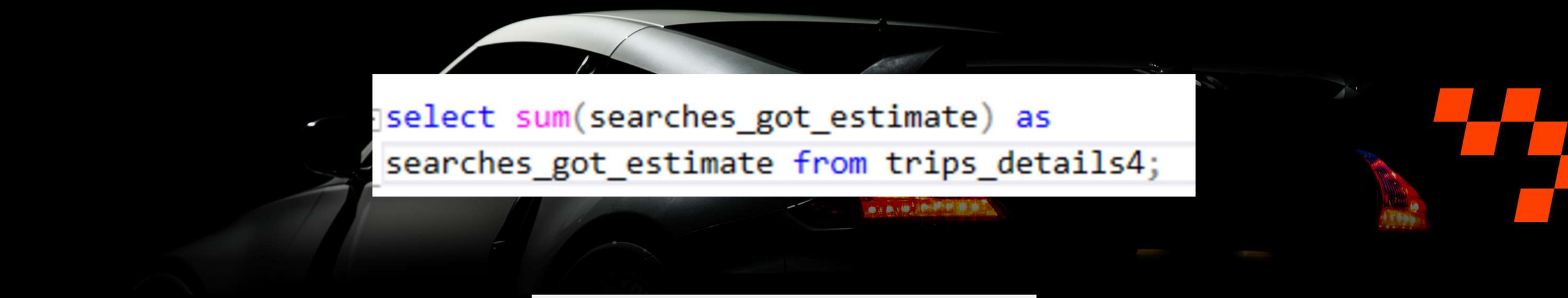
TOTAL SEARCHES

```
select sum(searches) as searches from trips_details4;
```

Results

	searches
1	2161

TOTAL SEARCHES WHICH GOT ESTIMATE



```sql
select sum(searches_got_estimate) as
searches_got_estimate from trips_details4;
```

Results | Messages

	searches_got_estimate
1	1758

TOTAL SEARCHES FOR QUOTES

```
select sum(searches_for_quotes) as searches_for_quotes from trips_details4;
```

Results | Messages

	searches_for_quotes
1	1455

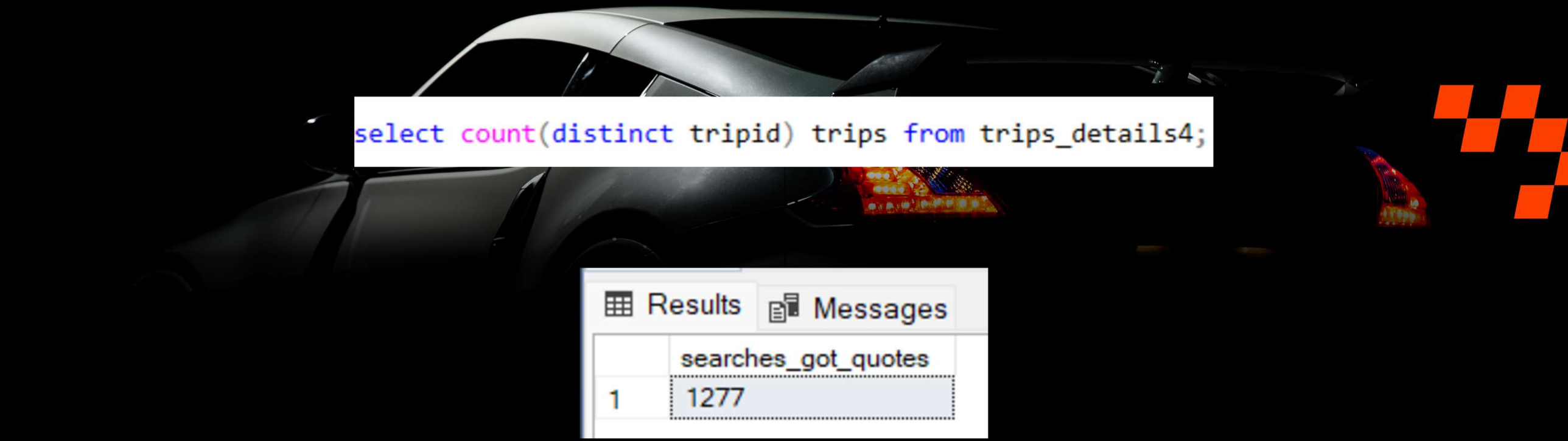
TOTAL TRIPS

```
select count(distinct tripid) trips from trips_details4;
```

Results

	trips
1	2161

TOTAL SEARCHES WHICH GOT QUOTES



```
select count(distinct tripid) trips from trips_details4;
```

Results | Messages

	searches_got_quotes
1	1277

TOTAL DRIVER CANCELLED

```
select count(*) select SUM(driver_not_cancelled) AS
trips_cancelled_by_driver from trips_details4;
```

	trips_cancelled_by_driver
1	1140

TOTAL OTP ENTERED

```sql
select sum(otp_entered) as otp_entered from trips_details4;
```

Results | Mess

	otp_entered
1	983

TOTAL END RIDE

```
select sum(end_ride) as end_ride from trips_details4;
```

Results | M

	end_ride
1	983

AVERAGE DISTANCE PER TRIP

```
select avg(distance) dist from trips;
```

Results

	dist
1	14

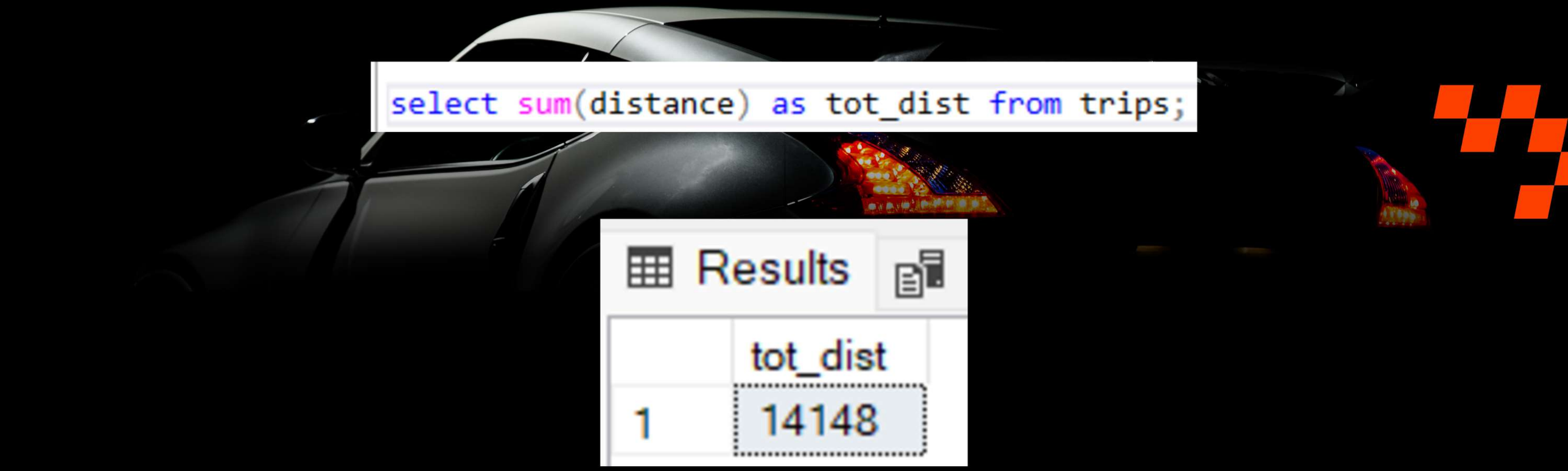
AVERAGE FARE PER TRIP

```
select sum(fare)/count(*) as avg_fare from trips;
```

Results

	avg_fare
1	764

DISTANCE TRAVELLED



```sql
select sum(distance) as tot_dist from trips;
```

Results

	tot_dist
1	14148

WHICH IS THE MOST USED PAYMENT METHOD ?

```
select a.method from payment a inner join
(select top 1 faremethod, count(faremethod) cnt from trips
group by faremethod
order by count(distinct tripid) desc)b
on a.id=b.faremethod;
```

Results Me

	method
1	credit card

WHICH TWO LOCATIONS HAD THE MOST TRIPS?

```
select * from
(select *, dense_rank() over(order by trip desc) rnk
from
(select  loc_from, loc_to, count(distinct tripid) trip from trips
group by loc_from, loc_to)a)b
where rnk = 1;
```

Results | Messages

	loc_from	loc_to	trip	rnk
1	35	5	5	1
2	16	21	5	1

TOP 5 EARNING DRIVERS

```
select * from
(select *, dense_rank() over(order by fare desc) rnk
from
(select driverid, sum(fare) fare from trips
group by driverid)b)c
where rnk<6
```

Results | Messages

	driverid	fare	rnk
1	12	36787	1
2	8	30101	2
3	21	29787	3
4	24	28870	4
5	30	28853	5

WHICH DURATION HAD MORE TRIPS?

```
select * from
(select *, rank() over (order by cnt desc) rnk from
(select duration, count(distinct tripid) cnt from trips
group by duration)b)c
where rnk=1;
```

Results | Messages

	duration	cnt	rnk
1	1	53	1

WHICH DRIVER , CUSTOMER PAIR HAD MORE ORDERS?

```
select * from
(select *, rank() over(order by cnt desc) rnk from
(select driverid, custid, count(distinct tripid) cnt from trips
group by driverid, custid)c)d
where rnk = 1;
```

Results | Messages

	driverid	custid	cnt	rnk
1	28	15	4	1
2	17	96	4	1

SEARCH TO ESTIMATE RATE

```
select sum(searches_got_estimate)*100.0/sum(searches)
as esti_rate from trips_details4;
```

Results | Message

	esti_rate
1	81.351226284127

WHICH AREA GOT HIGHEST TRIPS IN WHICH DURATION?

```
select * from
(select * ,rank() over(partition by loc_from order by cnt desc) rnk from
(select duration, loc_from, count(distinct tripid) cnt from trips
group by duration, loc_from)a)c
where rnk =1;
```

Results | Messages

	duration	loc_from	cnt	rnk
1	14	1	3	1
2	7	2	4	1
3	18	3	4	1
4	4	4	3	1
5	8	4	3	1
6	23	4	3	1
7	2	5	3	1
8	14	6	4	1
9	9	7	3	1

WHICH AREA GOT THE HIGHEST FARES, CANCELLATIONS,TRIPS?

```
select* from
(select*, rank() over(order by fare desc) rnk from
(select loc_from, sum(fare) fare from trips
group by loc_from)b)c
where rnk = 1;
```

Results | Messages

	loc_from	fare	rnk
1	6	30295	1

```
select* from
(select*, rank() over(order by cancelled desc) rnk from
(select loc_from, count(*) - sum(driver_not_cancelled) cancelled
from trips_details4 group by loc_from)b)c
where rnk = 1;
```

Results | Messages

	loc_from	cancelled	rnk
1	1	43	1

```
select* from
(select*, rank() over(order by cancelled desc) rnk from
(select loc_from, count(*) - sum(customer_not_cancelled) cancelled
from trips_details4 group by loc_from)b)c
where rnk = 1
```

Results | Messages

	loc_from	cancelled	rnk
1	4	40	1

WHICH DURATION GOT THE HIGHEST TRIPS AND FARES?

```
select* from
(select*, rank() over(order by fare desc) rnk from
(select duration, sum(fare) fare from trips
group by duration)b)c
where rnk = 1;
```

	duration	fare	rnk
1	1	45019	1

```
select* from
(select*, rank() over(order by fare desc) rnk from
(select duration, count(distinct tripid) fare from trips
group by duration)b)c
where rnk = 1;
```

Results Messages

	duration	fare	rnk
1	1	53	1

CONCLUSION

The cab rides database provides a scalable structure for analyzing mobility data. It lays the groundwork for actionable business decisions in real-time ride allocation, pricing strategies, and customer satisfaction in a modern cab service platform.

THANK YOU

FOR YOUR ATTENTION

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