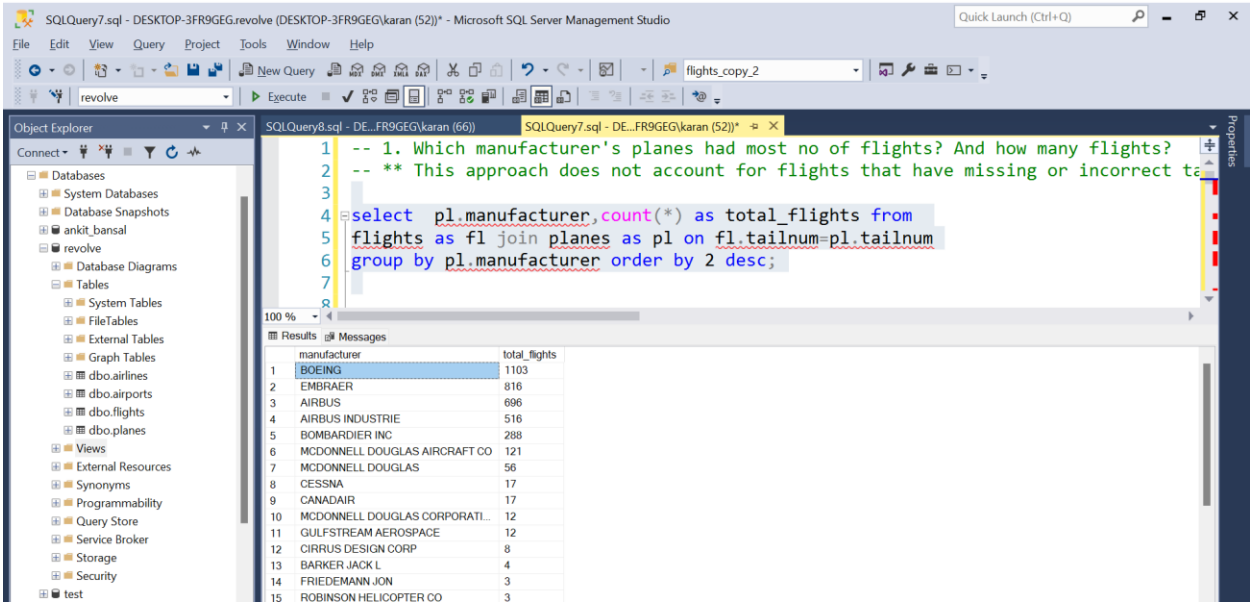
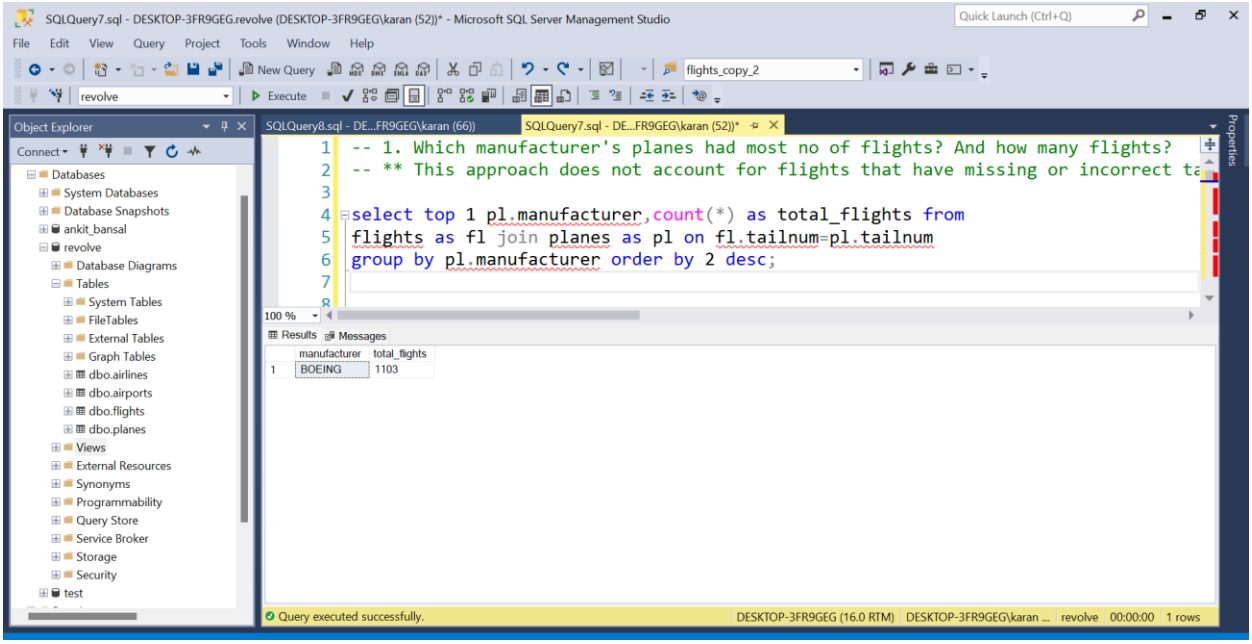
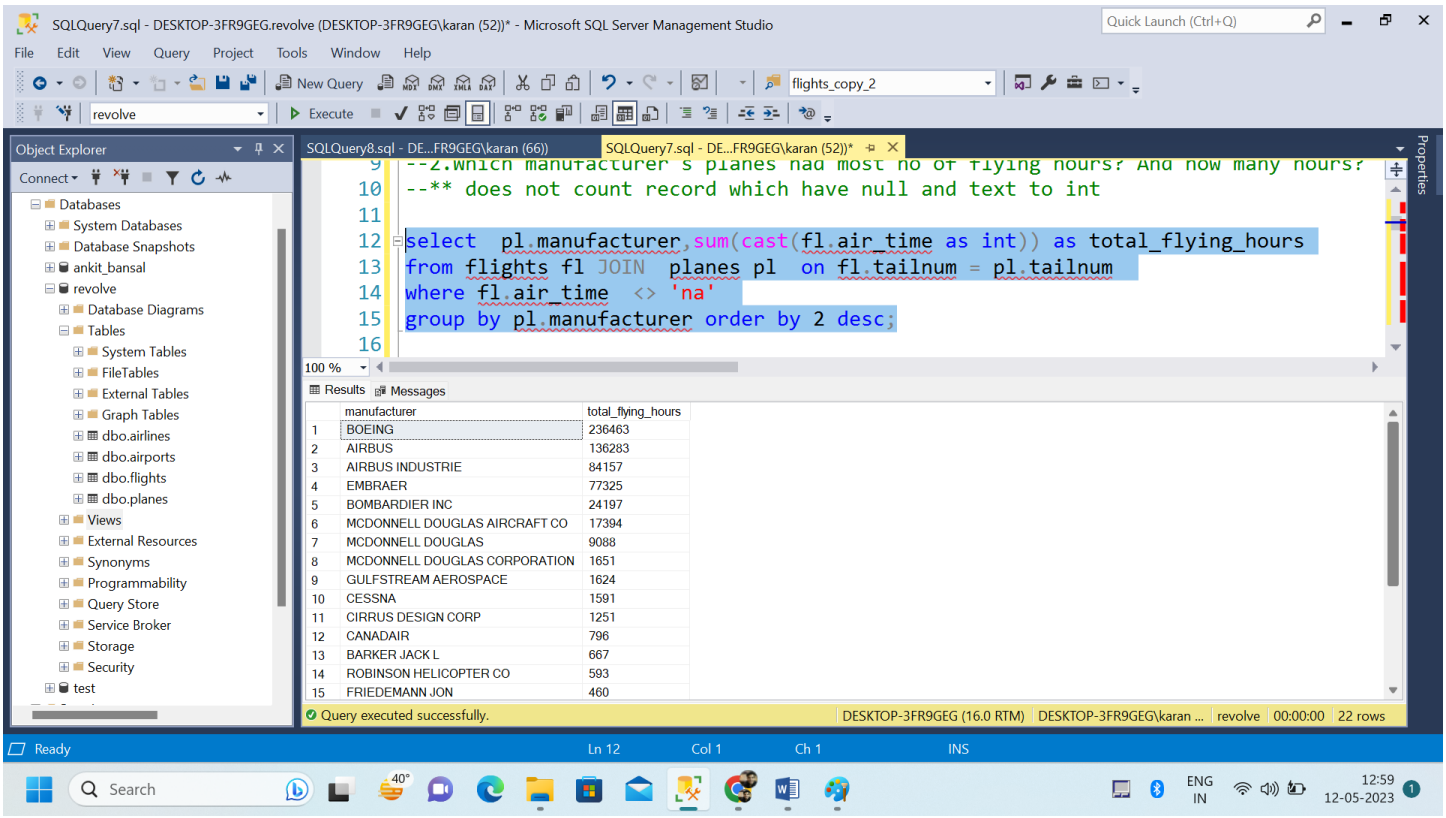
```
-- 1. Which manufacturer's planes had most no of flights? And how many flights?
-- ** This approach does not account for flights that have missing or incorrect tail number information, and may give different results than counting the actual number of flights operated by each manufacturer.

select top 1 pl.manufacturer,count(*) as total_flights from flights as fl join planes as pl on fl.tailnum=pl.tailnum
group by pl.manufacturer order by 2 desc;
```

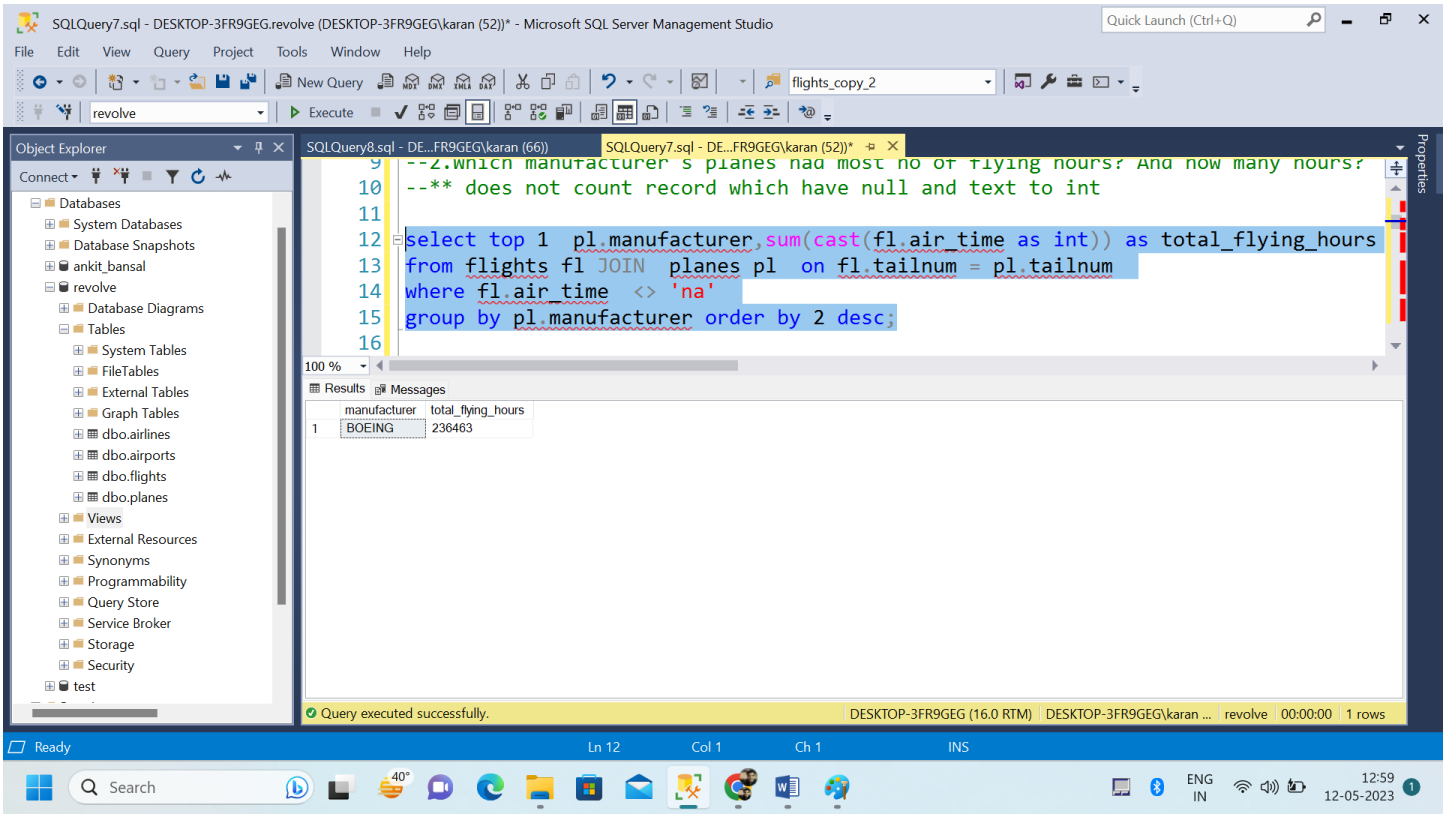




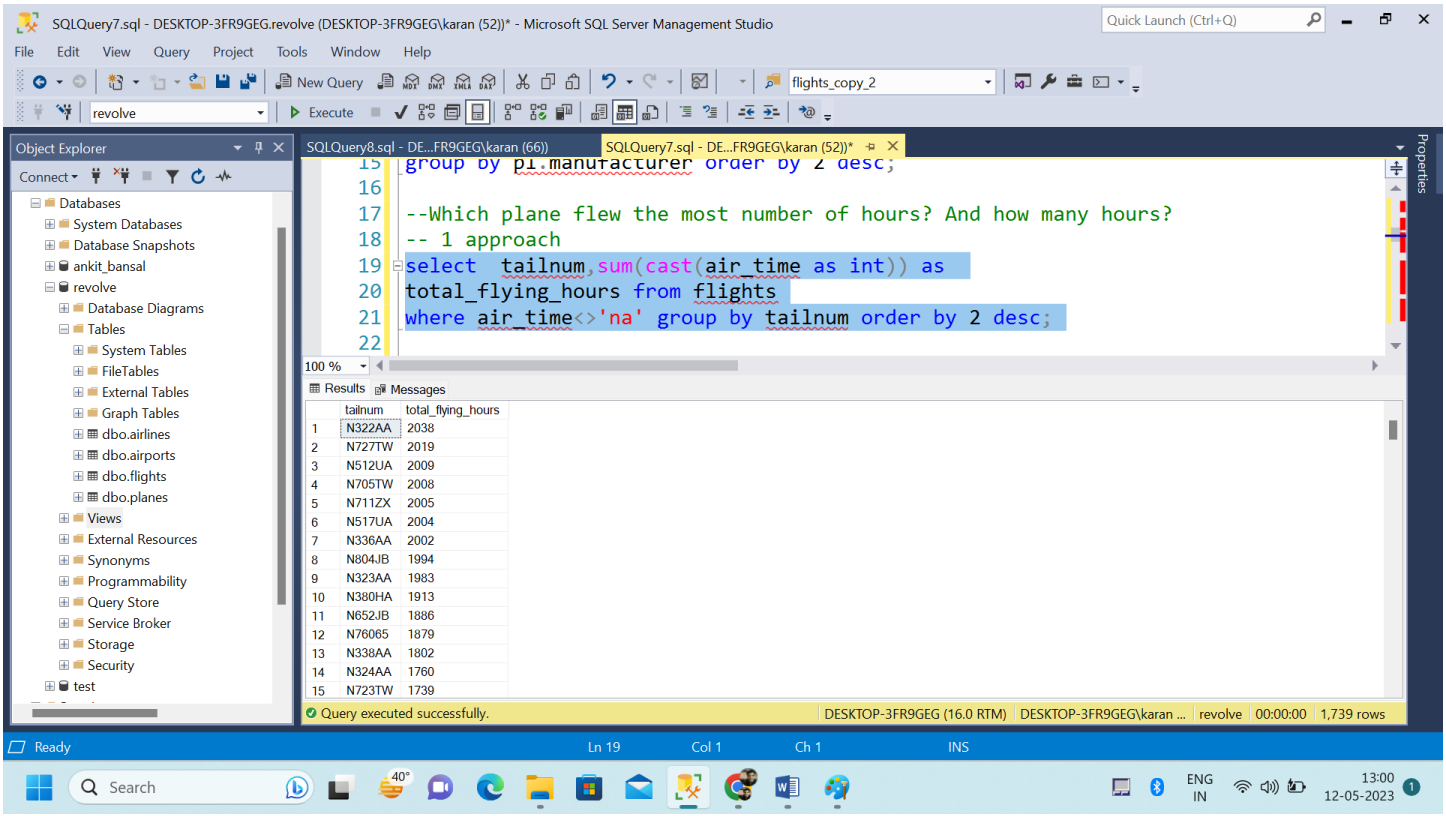
```sql
--2.Which manufacturer's planes had most no of flying hours? And how many hours?
--** does not count record which have null and text to int

select top 1  pl.manufacturer,sum(cast(fl.air_time as int)) as total_flying_hours
from flights fl JOIN  planes pl  on fl.tailnum = pl.tailnum
where fl.air_time  <> 'na'
group by pl.manufacturer order by 2 desc;
```

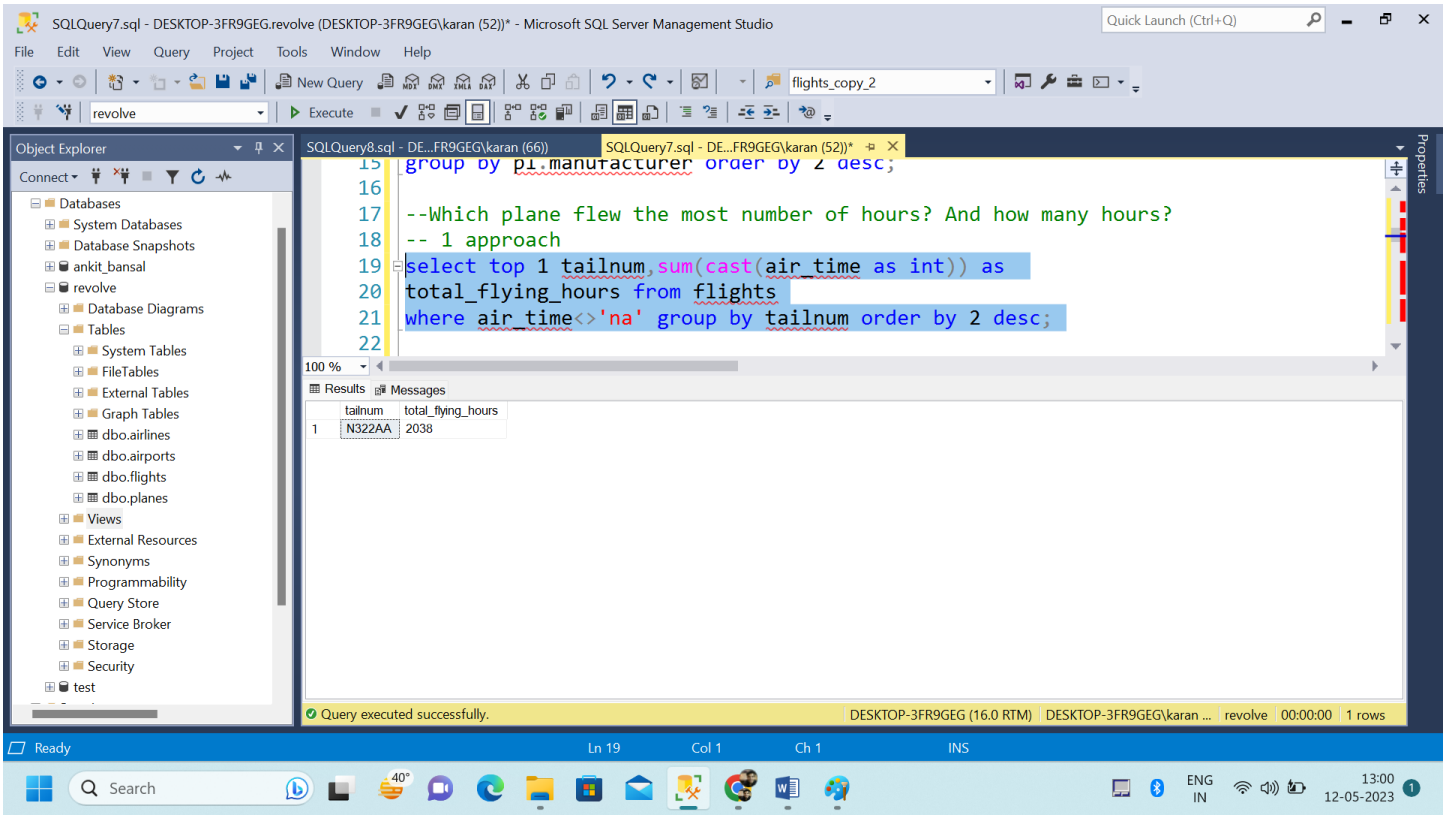


Top 1



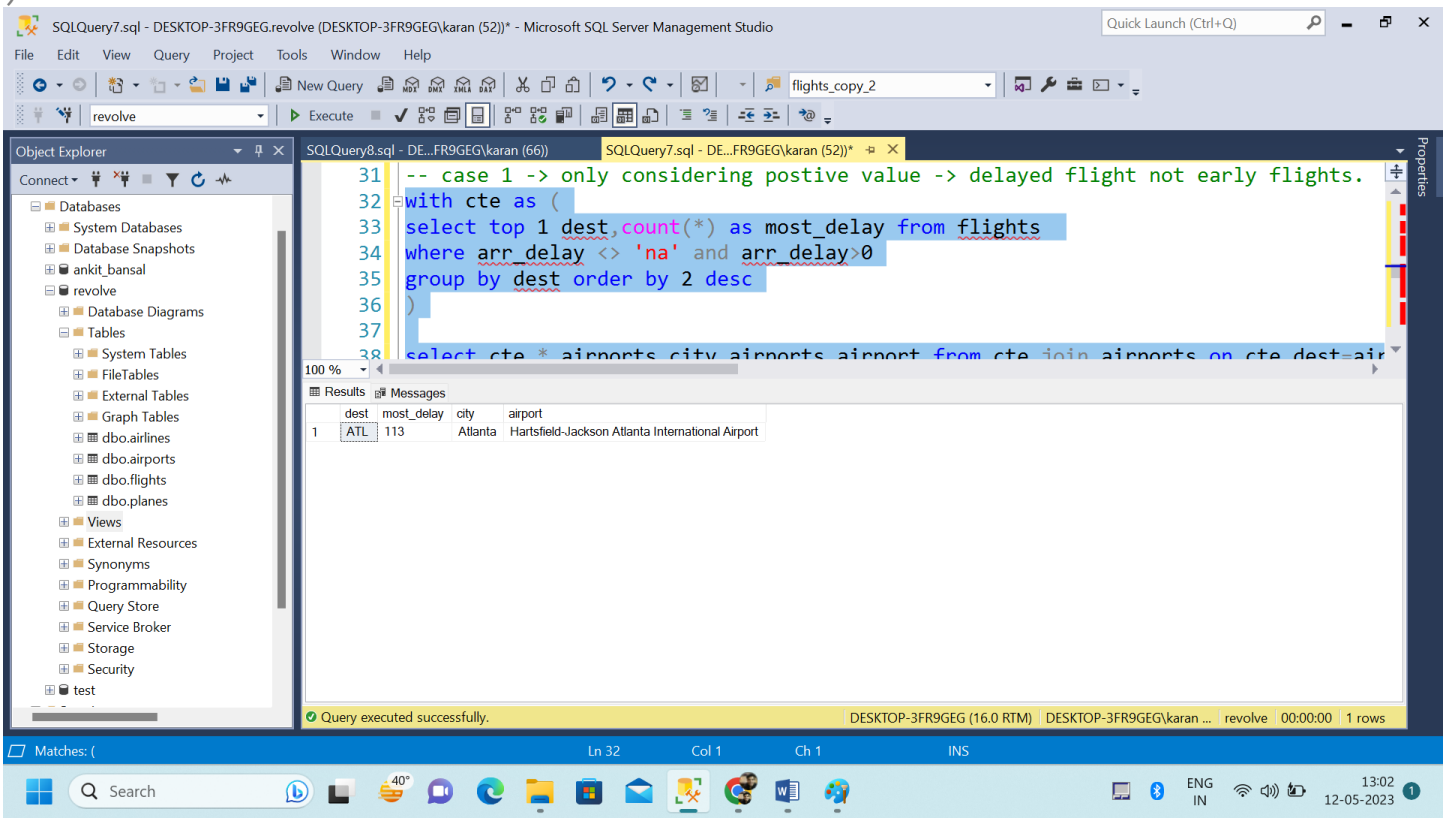

```
--Which plane flew the most number of hours? And how many hours?
-- 1 approach

select top 1 tailnum,sum(cast(air_time as int)) as
total_flying_hours from flights
where air_time<>'na' group by tailnum order by 2 desc;

--2 approach
SELECT top 1 tailnum, SUM(CASE WHEN ISNUMERIC(air_time) = 1 THEN CAST(air_time AS
FLOAT) ELSE 0 END) AS total_flying_hours
FROM flights
GROUP BY tailnum
ORDER BY 2 DESC
```





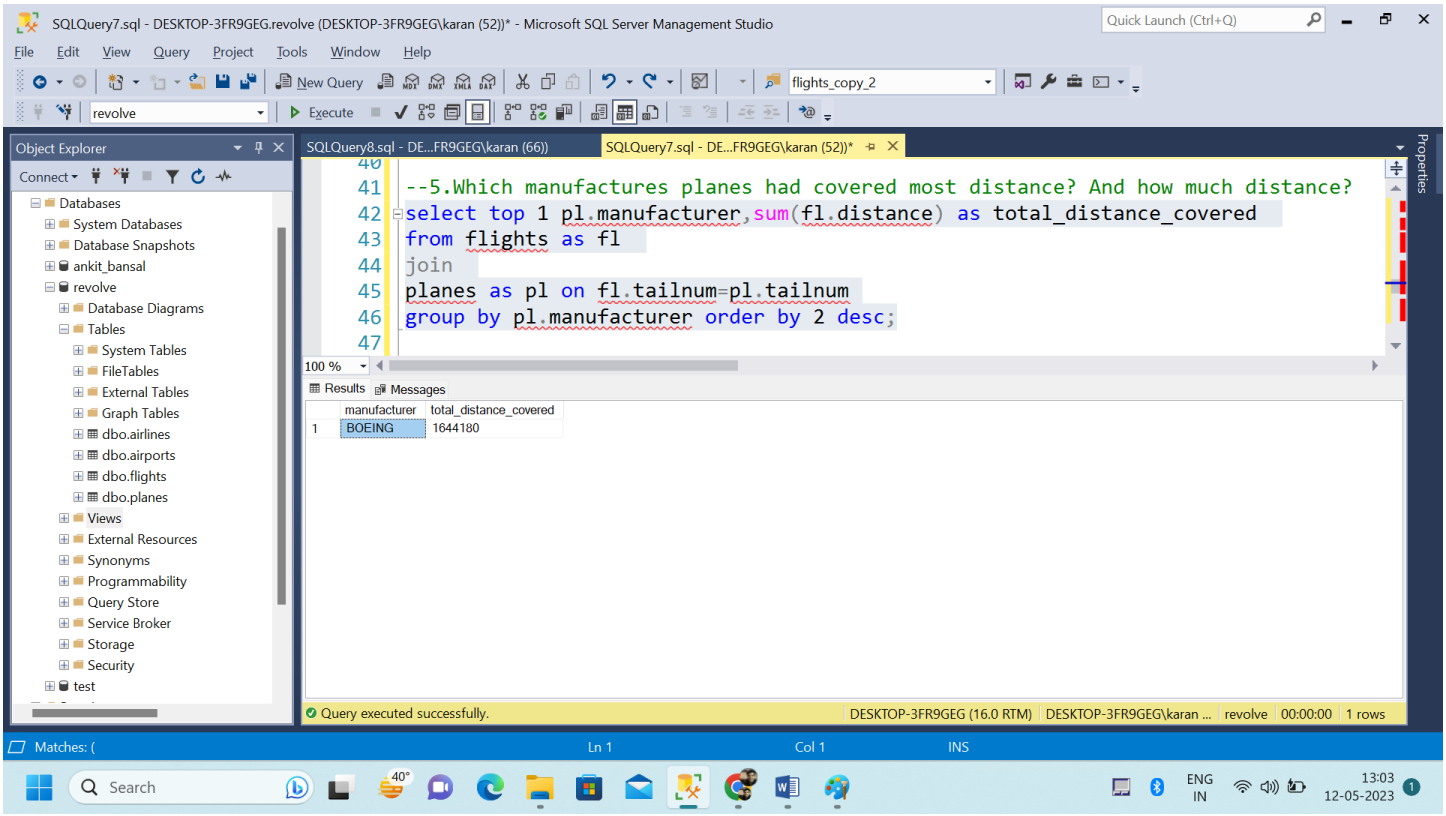

```
-- 4.Which destination had most delay in flights?
-- case 1 -> only considering postive value -> delayed flight not early flights.
```

```sql
with cte as (
select top 1 dest,count(*) as most_delay from flights
where arr_delay <> 'na' and arr_delay>0
group by dest order by 2 desc
)
```



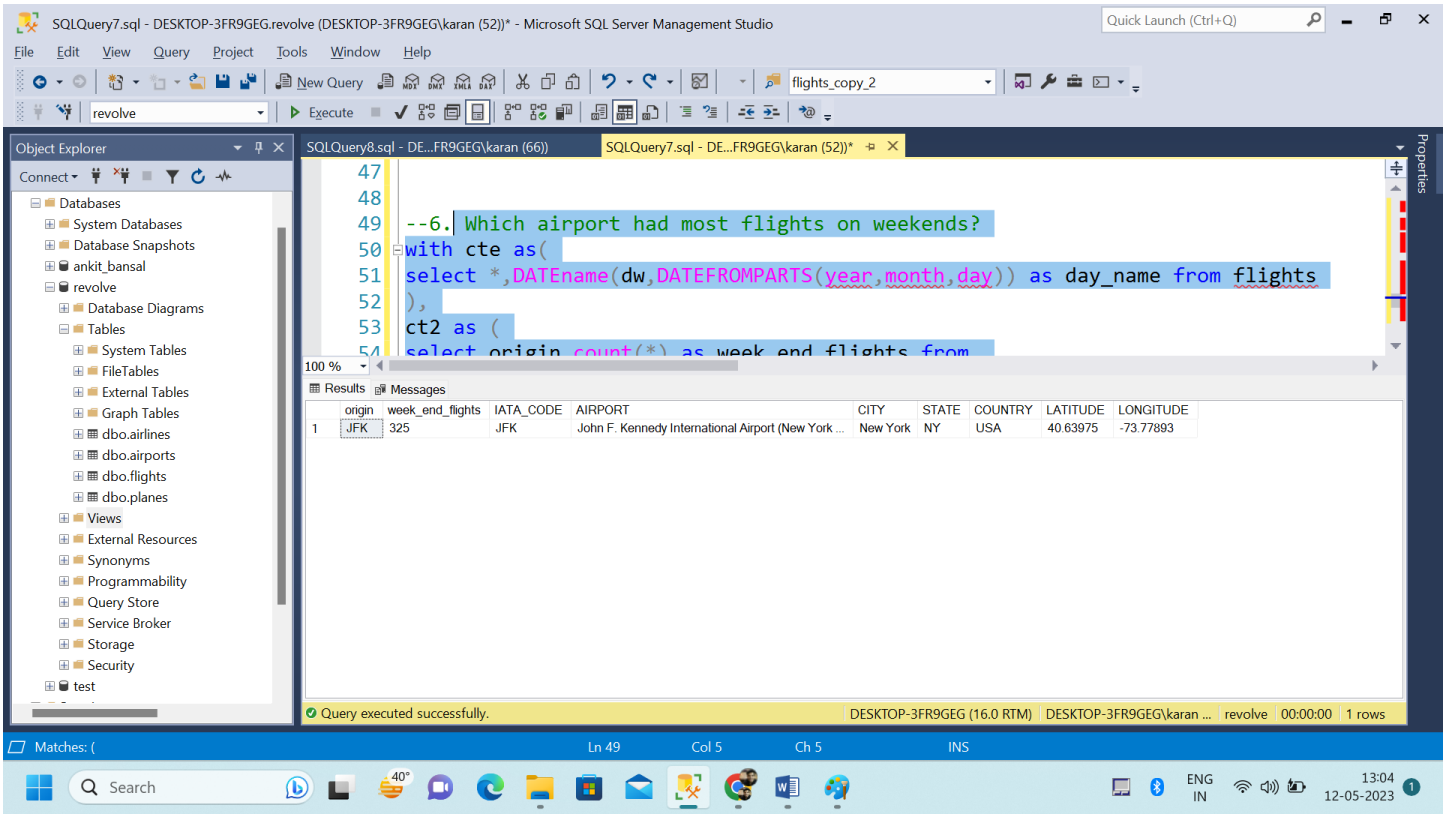
Which manufactures planes had covered most distance? And how much distance?

```sql
select top 1 pl.manufacturer,sum(fl.distance) as total_distance_covered
from flights as fl
join
planes as pl on fl.tailnum=pl.tailnum
group by pl.manufacturer order by 2 desc;
```



Which airport had most flights on weekends?

```
with cte as(
select *,DATEname(dw,DATEFROMPARTS(year,month,day)) as day_name from flights
),
ct2 as (
select origin,count(*) as week_end_flights from
cte where day_name in ('saturday','sunday')
group by
origin
)
select top 1* from ct2 join airports ap on ct2.origin=ap.iata_code order by
week_end_flights desc;
```


SQLQuery7.sql - DESKTOP-3FR9GEG.revolve (DESKTOP-3FR9GEG\karan (52))* - Microsoft SQL Server Management Studio
Quick Launch (Ctrl+Q)
File Edit View Query Project Tools Window Help
New Query
flights_copy_2
Execute
revolve
Object Explorer
Connect
Databases
System Databases
Database Snapshots
ankit_bansal
revolve
Database Diagrams
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.airlines
dbo.airports
dbo.flights
dbo.planes
Views
External Resources
Synonyms
Programmability
Query Store
Service Broker
Storage
Security
test
SQLQuery8.sql - DE...FR9GEG\karan (66))
SQLQuery7.sql - DE...FR9GEG\karan (52))*
47
48
49 --6. Which airport had most flights on weekends?
50 with cte as(
51 select *,DATEname(dw,DATEFROMPARTS(year,month,day)) as day_name from flights
52),
53 ct2 as (
54 select origin count(*) as week_end_flights from
100 %
Results
Messages
origin week_end_flights IATA_CODE AIRPORT CITY STATE COUNTRY LATITUDE LONGITUDE
1 JFK 325 JFK John F. Kennedy International Airport (New York ... New York NY USA 40.63975 -73.77893
Query executed successfully.
DESKTOP-3FR9GEG (16.0 RTM)
DESKTOP-3FR9GEG\karan ...
revolve
00:00:00
1 rows
Properties
Matches: (
Ln 49
Col 5
Ch 5
INS
Search
40°
ENG
IN
13:04
12-05-2023