--1
--For Austin

-- to find the average of acceptance rate, response rate, host has profile pic and host identity verified of Host and super host in Austin

Select host_is_superhost, Round((AVG(host_acceptance_rate)),2) as AVG_of_AcceptanceRate,
Round((AVG(host_response_rate)),2) as AVG_of_ResponseRate,
count(case when host_has_profile_pic=1 then 1 end) as CNT_of_Host_has_Profile_Pic,
count(case when host_identity_verified=1 then 1 end) as CNT_of_Host_identity_verified
From [dbo].[host_austin_df]
where host_has_profile_pic is not null and host_identity_verified is not null
Group by host_is_superhost
Order by host_is_superhost

```
-- to find the average of acceptance rate, response rate, host has profile pic and host identity verified  of H

Select host_is_superhost, Round((AVG(host_acceptance_rate)),2) as AVG_of_AcceptanceRate,
Round((AVG(host_response_rate)),2) as AVG_of_ResponseRate,
count(case when host_has_profile_pic=1 then 1 end) as CNT_of_Host_has_Profile_Pic,
count(case when host_identity_verified=1 then 1 end) as CNT_of_Host_identity_verified
From [dbo].[host_austin_df]
where host_has_profile_pic is not null and host_identity_verified is not null
Group by host_is_superhost
Order by host_is_superhost
```

80 %

Results | Messages

	host_is_superhost	AVG_of_AcceptanceRate	AVG_of_ResponseRate	CNT_of_Host_has_Profile_Pic	CNT_of_Host_identity_verified
1	0	77.38	92.7	4925	3783
2	1	92.11	98.94	2358	2030

--to find the count of Instant booking and review scores values in Austin based on host and super host

Select host_is_superhost, Count(instant_bookable) as CNT_of_Instant_Booking , AVG(Distinct review_scores_value) as AVG_Rating
From [dbo].[listing_austin_df] as A
Inner join [dbo].[host_austin_df] as B on A.host_id = B.host_id
where host_acceptance_rate is not null
Group by host_is_superhost

```
--to find the count of Instant booking and review scores values in Austin

Select host_is_superhost, Count(instant_bookable) as CNT_of_Instant_Booki
From [dbo].[listing_austin_df] as A
Inner join [dbo].[host_austin_df] as B on A.host_id = B.host_id
where host_acceptance_rate is not null
Group by host_is_superhost
```

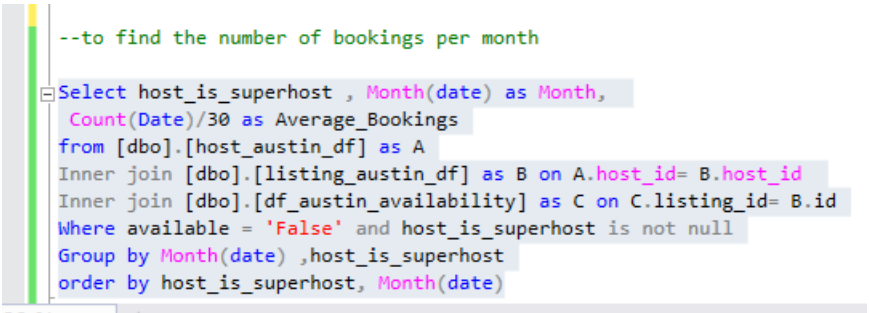
80 %

Results | Messages

	host_is_superhost	CNT_of_Instant_Booking	AVG_Rating
1	0	5457	4.29152542251652
2	1	3653	4.49815788394526

--to find the number of bookings per month

```
Select host_is_superhost , Month(date) as Month,
 Count(Date)/30 as Average_Bookings
from [dbo].[host_austin_df] as A
Inner join [dbo].[listing_austin_df] as B on A.host_id= B.host_id
Inner join [dbo].[df_austin_availability] as C on C.listing_id= B.id
Where available = 'False' and host_is_superhost is not null
Group by Month(date) ,host_is_superhost
order by host_is_superhost, Month(date)
```



	host_is_superhost	Month	Average_Bookings
1	0	1	5471
2	0	2	4902
3	0	3	5909
4	0	4	5085
5	0	5	4536
6	0	6	4444
7	0	7	4740
8	0	8	4669
9	0	9	4976
10	0	10	5390
11	0	11	5142
12	0	12	5454
13	1	1	2865
14	1	2	2581
15	1	3	3010
16	1	4	2450
17	1	5	1994
18	1	6	1929
19	1	7	2080
20	1	8	1991
21	1	9	2433
22	1	10	2749
23	1	11	2574
24	1	12	2807

-- for Dallas

-- to find the average of acceptance rate, response rate, host has profile pic and host identity verified of Host and super host in Dallas

Select host_is_superhost, Round((AVG(host_acceptance_rate)),2) as AVG_of_AcceptanceRate,
Round((AVG(host_response_rate)),2) as AVG_of_ResponseRate,
count(case when host_has_profile_pic=1 then 1 end) as CNT_of_Host_has_Profile_Pic,
count(case when host_identity_verified=1 then 1 end) as CNT_of_Host_identity_verified
From [dbo].[host_dallas_df]
where host_has_profile_pic is not null and host_identity_verified is not null
Group by host_is_superhost
Order by host_is_superhost

```
Select host_is_superhost, Round((AVG(host_acceptance_rate)),2) as AVG_of_AcceptanceRate,
Round((AVG(host_response_rate)),2) as AVG_of_ResponseRate,
count(case when host_has_profile_pic=1 then 1 end) as CNT_of_Host_has_Profile_Pic,
count(case when host_identity_verified=1 then 1 end) as CNT_of_Host_identity_verified
From [dbo].[host_dallas_df]
where host_has_profile_pic is not null and host_identity_verified is not null
Group by host_is_superhost
Order by host_is_superhost
```

Results | Messages

	host_is_superhost	AVG_of_AcceptanceRate	AVG_of_ResponseRate	CNT_of_Host_has_Profile_Pic	CNT_of_Host_identity_verified
1	0	86.85	93.99	1533	1296
2	1	95.46	98.58	772	666

--to find the count of Instant booking and review scores values in Austin based on host and super host in Dallas

Select host_is_superhost, Count(instant_bookable) as CNT_of_Instant_Booking , AVG(Distinct review_scores_value) as AVG_Rating
From [dbo].[listing_dallas_df] as A
Inner join [dbo].[host_dallas_df] as B on A.host_id = B.host_id
where host_acceptance_rate is not null
Group by host_is_superhost

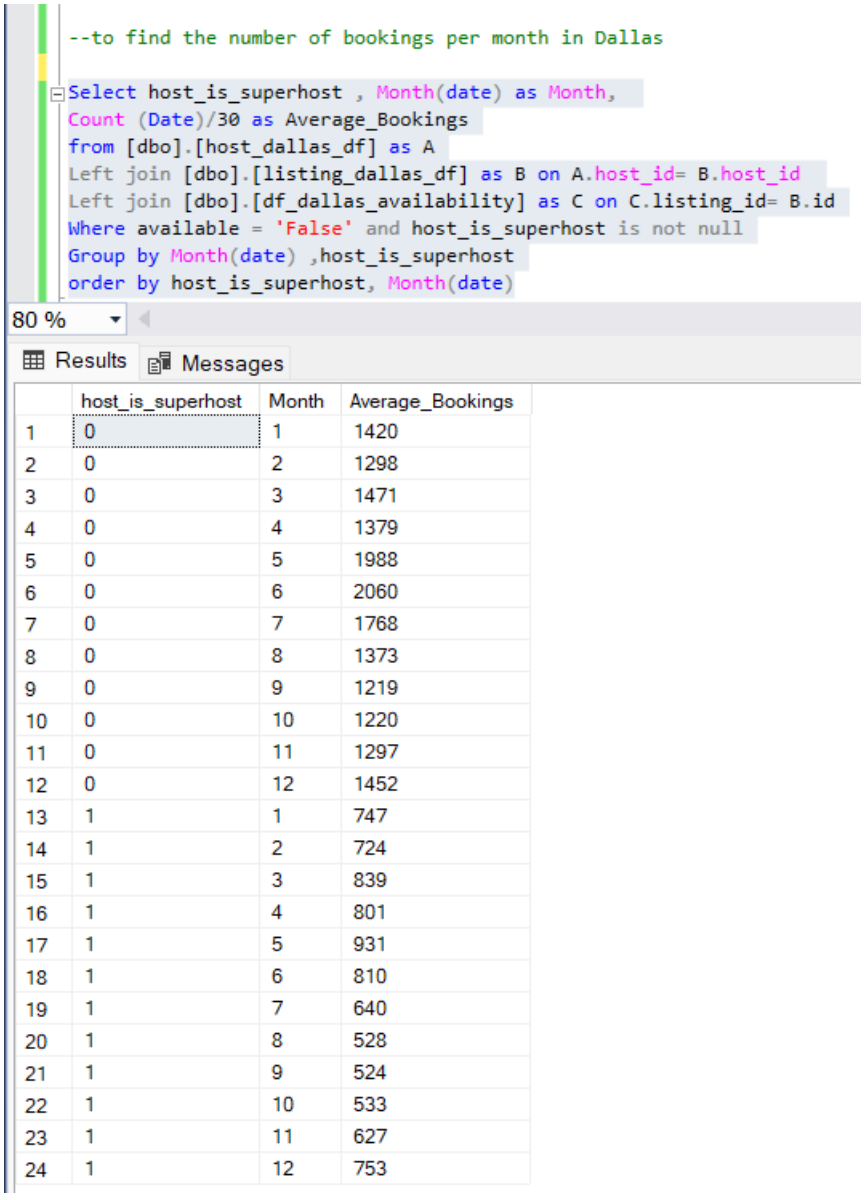
```
--to find the count of Instant booking and review scores values in Austin based on host and super host in Dallas

Select host_is_superhost, Count(instant_bookable) as CNT_of_Instant_Booking , AVG(Distinct review_scores_value) as AVG_Rating
From [dbo].[listing_dallas_df] as A
Inner join [dbo].[host_dallas_df] as B on A.host_id = B.host_id
where host_acceptance_rate is not null
Group by host_is_superhost
```

Results | Messages

	host_is_superhost	CNT_of_Instant_Booking	AVG_Rating
1	0	3703	4.15229629675547
2	1	1517	4.52742856570653

--to find the number of bookings per month in Dallas

```
Select host_is_superhost , Month(date) as Month,
Count (Date)/30 as Average_Bookings
from [dbo].[host_dallas_df] as A
Left join [dbo].[listing_dallas_df] as B on A.host_id= B.host_id
Left join [dbo].[df_dallas_availability] as C on C.listing_id= B.id
Where available = 'False' and host_is_superhost is not null
Group by Month(date) ,host_is_superhost
order by host_is_superhost, Month(date)
```



```
--to find the number of bookings per month in Dallas

Select host_is_superhost , Month(date) as Month,
Count (Date)/30 as Average_Bookings
from [dbo].[host_dallas_df] as A
Left join [dbo].[listing_dallas_df] as B on A.host_id= B.host_id
Left join [dbo].[df_dallas_availability] as C on C.listing_id= B.id
Where available = 'False' and host_is_superhost is not null
Group by Month(date) ,host_is_superhost
order by host_is_superhost, Month(date)
```

80 %

Results | Messages

	host_is_superhost	Month	Average_Bookings
1	0	1	1420
2	0	2	1298
3	0	3	1471
4	0	4	1379
5	0	5	1988
6	0	6	2060
7	0	7	1768
8	0	8	1373
9	0	9	1219
10	0	10	1220
11	0	11	1297
12	0	12	1452
13	1	1	747
14	1	2	724
15	1	3	839
16	1	4	801
17	1	5	931
18	1	6	810
19	1	7	640
20	1	8	528
21	1	9	524
22	1	10	533
23	1	11	627
24	1	12	753

--2

--For Austin

--to find the find the criteria to become super host and the average of them in Dallas

```
Select host_is_superhost, Round((AVG(host_acceptance_rate)),2) as AVG_of_AcceptanceRate,
Round((AVG(host_response_rate)),2) as AVG_of_ResponseRate,
AVG(review_scores_value) as AVG_Rating
From [dbo].[host_austin_df] As A
Inner join [dbo].[listing_austin_df] as B on A.host_id= B.host_id
where host_acceptance_rate is not null
Group by host_is_superhost
order by host_is_superhost  desc;
```

--For Dallas

----to find the find the criteria to become super host and the average of them in Dallas

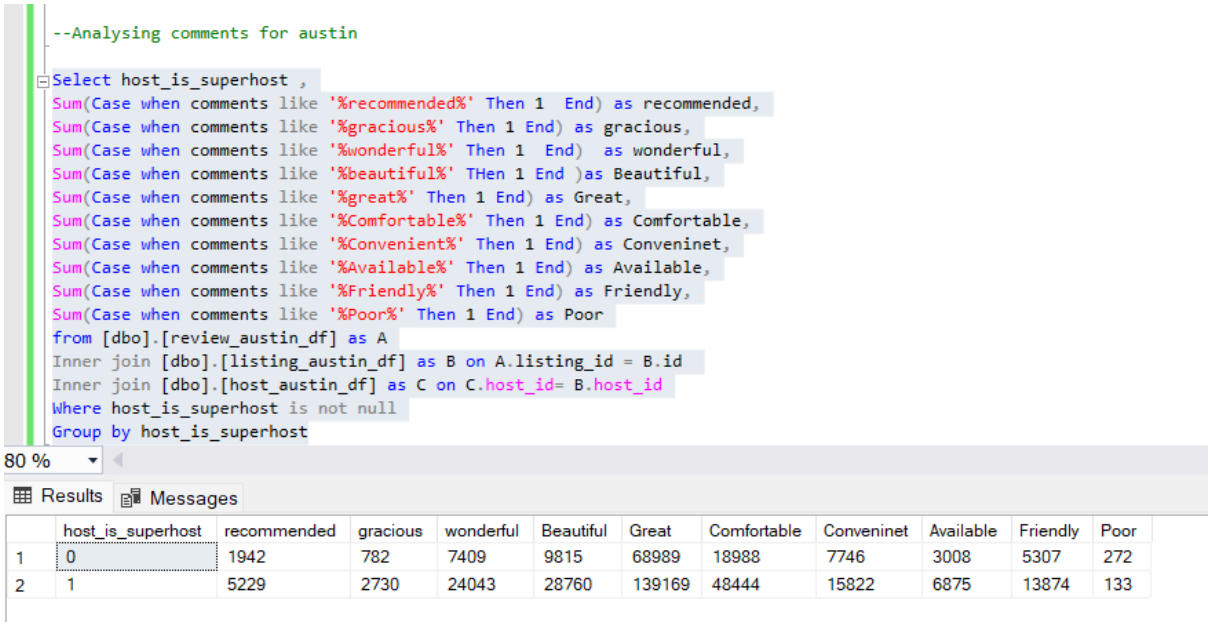
```
Select host_is_superhost, Round((AVG(host_acceptance_rate)),2) as AVG_of_AcceptanceRate,
Round((AVG(host_response_rate)),2) as AVG_of_ResponseRate,
AVG(review_scores_value) as AVG_Rating
From [dbo].[host_dallas_df] As A
Inner join [dbo].[listing_dallas_df] as B on A.host_id= B.host_id
where host_acceptance_rate is not null
Group by host_is_superhost
order by host_is_superhost  desc;
```

--To become superhost AVG acceptance rate should be > 91%
--To become superhost AVG response rate should be > 98%
--To become superhost AVG rating should be > 4.81

--3

--Analysing comments for austin

```
Select host_is_superhost ,
Sum(Case when comments like '%recommended%' Then 1  End) as recommended,
Sum(Case when comments like '%gracious%' Then 1 End) as gracious,
Sum(Case when comments like '%wonderful%' Then 1  End)  as wonderful,
Sum(Case when comments like '%beautiful%' Then 1 End )as Beautiful,
Sum(Case when comments like '%great%' Then 1 End) as Great,
Sum(Case when comments like '%Comfortable%' Then 1 End) as Comfortable,
Sum(Case when comments like '%Convenient%' Then 1 End) as Convenient,
Sum(Case when comments like '%Available%' Then 1 End) as Available,
Sum(Case when comments like '%Friendly%' Then 1 End) as Friendly,
Sum(Case when comments like '%Poor%' Then 1 End) as Poor
from [dbo].[review_austin_df] as A
Inner join [dbo].[listing_austin_df] as B on A.listing_id = B.id
Inner join [dbo].[host_austin_df] as C on C.host_id= B.host_id
Where host_is_superhost is not null
Group by host_is_superhost
```



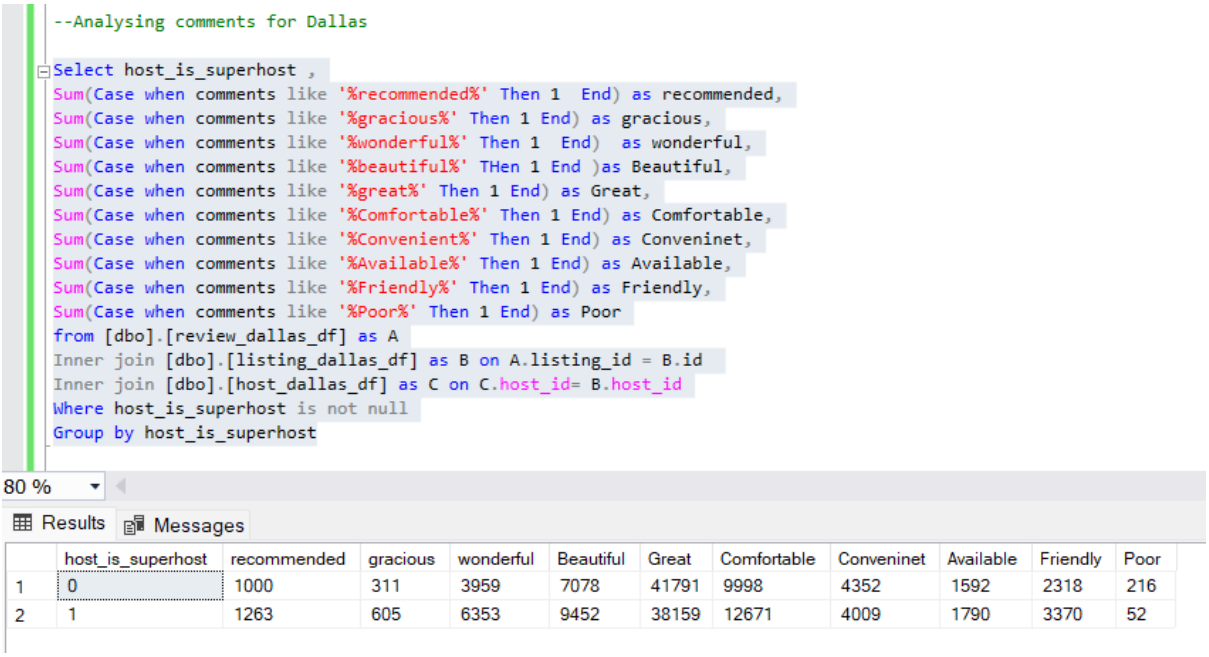
80 %

Results | Messages

	host_is_superhost	recommended	gracious	wonderful	Beautiful	Great	Comfortable	Conveninet	Available	Friendly	Poor
1	0	1942	782	7409	9815	68989	18988	7746	3008	5307	272
2	1	5229	2730	24043	28760	139169	48444	15822	6875	13874	133

--Analysing comments for Dallas

```
Select host_is_superhost ,
Sum(Case when comments like '%recommended%' Then 1  End) as recommended,
Sum(Case when comments like '%gracious%' Then 1 End) as gracious,
Sum(Case when comments like '%wonderful%' Then 1  End)  as wonderful,
Sum(Case when comments like '%beautiful%' THen 1 End )as Beautiful,
Sum(Case when comments like '%great%' Then 1 End) as Great,
Sum(Case when comments like '%Comfortable%' Then 1 End) as Comfortable,
Sum(Case when comments like '%Convenient%' Then 1 End) as Conveninet,
Sum(Case when comments like '%Available%' Then 1 End) as Available,
Sum(Case when comments like '%Friendly%' Then 1 End) as Friendly,
Sum(Case when comments like '%Poor%' Then 1 End) as Poor
from [dbo].[review_dallas_df] as A
Inner join [dbo].[listing_dallas_df] as B on A.listing_id = B.id
Inner join [dbo].[host_dallas_df] as C on C.host_id= B.host_id
Where host_is_superhost is not null
Group by host_is_superhost
```



80 %

Results | Messages

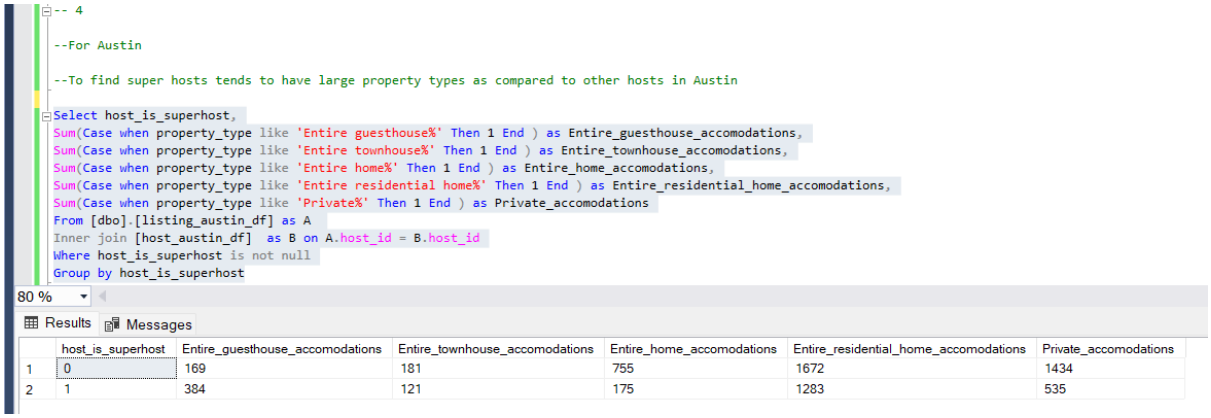
	host_is_superhost	recommended	gracious	wonderful	Beautiful	Great	Comfortable	Conveninet	Available	Friendly	Poor
1	0	1000	311	3959	7078	41791	9998	4352	1592	2318	216
2	1	1263	605	6353	9452	38159	12671	4009	1790	3370	52

-- 4

--For Austin

--To find super hosts tends to have large property types as compared to other hosts in Austin

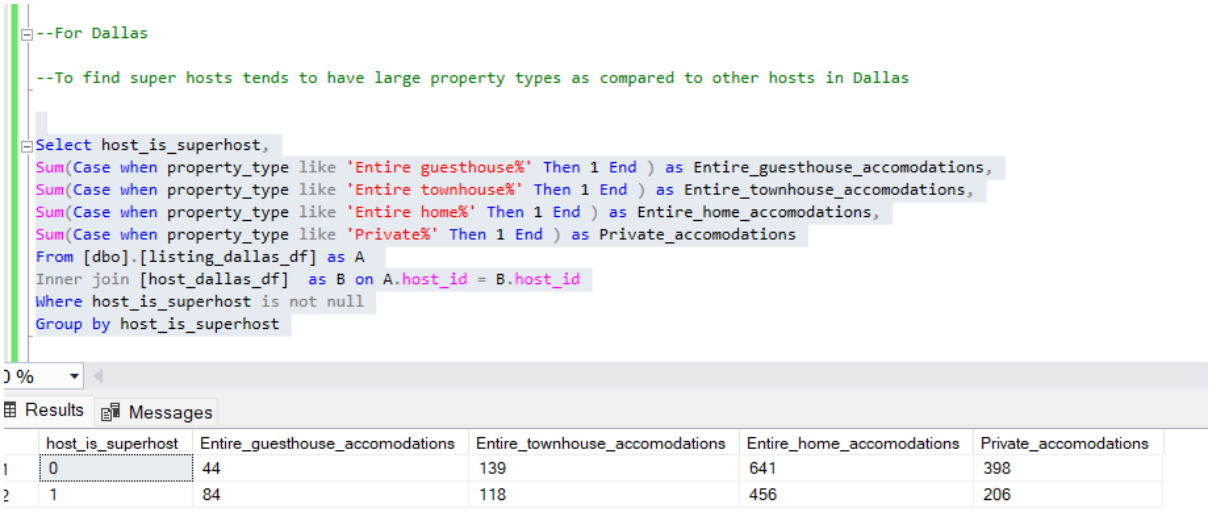
```
Select host_is_superhost,
Sum(Case when property_type like 'Entire guesthouse%' Then 1 End ) as
Entire_guesthouse_accomodations,
Sum(Case when property_type like 'Entire townhouse%' Then 1 End ) as
Entire_townhouse_accomodations,
Sum(Case when property_type like 'Entire home%' Then 1 End ) as Entire_home_accomodations,
Sum(Case when property_type like 'Entire residential home%' Then 1 End ) as
Entire_residential_home_accomodations,
Sum(Case when property_type like 'Private%' Then 1 End ) as Private_accomodations
From [dbo].[listing_austin_df] as A
Inner join [host_austin_df]  as B on A.host_id = B.host_id
Where host_is_superhost is not null
Group by host_is_superhost
```



--For Dallas

--To find super hosts tends to have large property types as compared to other hosts in Dallas

```
Select host_is_superhost,
Sum(Case when property_type like 'Entire guesthouse%' Then 1 End ) as
Entire_guesthouse_accomodations,
Sum(Case when property_type like 'Entire townhouse%' Then 1 End ) as
Entire_townhouse_accomodations,
Sum(Case when property_type like 'Entire home%' Then 1 End ) as Entire_home_accomodations,
Sum(Case when property_type like 'Private%' Then 1 End ) as Private_accomodations
From [dbo].[listing_dallas_df] as A
Inner join [host_dallas_df]  as B on A.host_id = B.host_id
Where host_is_superhost is not null
Group by host_is_superhost
```



Results | Messages

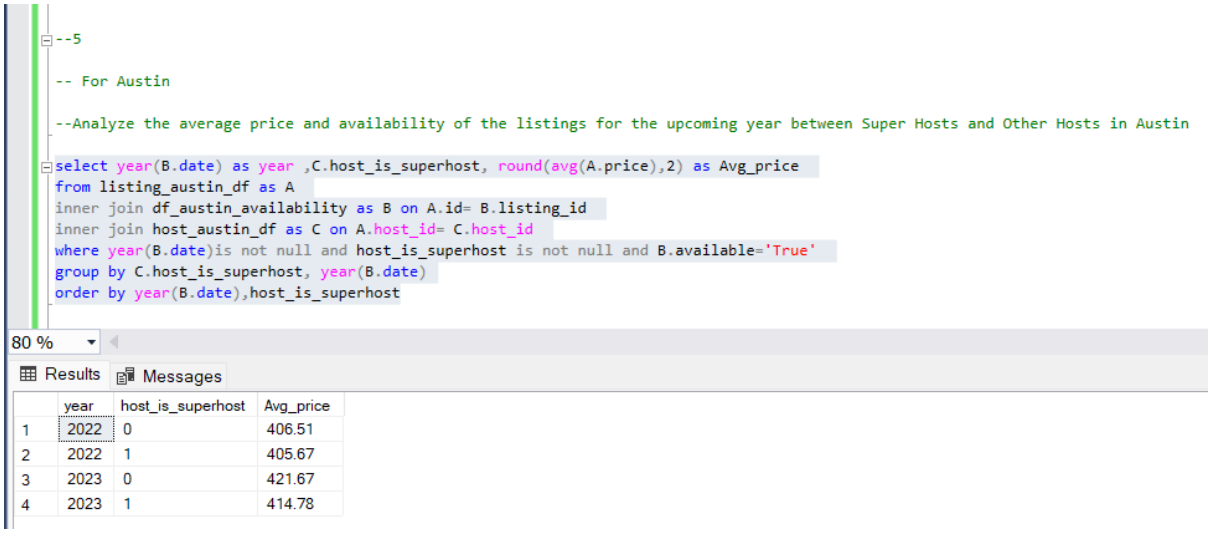
	host_is_superhost	Entire_guesthouse_accomodations	Entire_townhouse_accomodations	Entire_home_accomodations	Private_accomodations
1	0	44	139	641	398
2	1	84	118	456	206

--5

-- For Austin

--Analyze the average price and availability of the listings for the upcoming year between Super Hosts and Other Hosts in Austin

```
select year(B.date) as year ,C.host_is_superhost, round(avg(A.price),2) as Avg_price
from listing_austin_df as A
inner join df_austin_availability as B on A.id= B.listing_id
inner join host_austin_df as C on A.host_id= C.host_id
where year(B.date)is not null and host_is_superhost is not null and B.available='True'
group by C.host_is_superhost, year(B.date)
order by year(B.date),host_is_superhost
```



	year	host_is_superhost	Avg_price
1	2022	0	406.51
2	2022	1	405.67
3	2023	0	421.67
4	2023	1	414.78

-- For Dallas

--Analyze the average price and availability of the listings for the upcoming year between Super Hosts and Other Hosts in Dallas

```
select year(B.date) as year ,C.host_is_superhost, round(avg(A.price),2) as Avg_price
from listing_dallas_df as A
inner join df_dallas_availability as B on A.id= B.listing_id
inner join host_dallas_df as C on A.host_id= C.host_id
where year(B.date)is not null and host_is_superhost is not null and B.available='True'
group by C.host_is_superhost, year(B.date)
order by year(B.date),host_is_superhost
```

```sql
-- For Dallas

--Analyze the average price and availability of the listings for the upcoming year between Super Hosts and Other Hosts in Dallas

select year(B.date) as year ,C.host_is_superhost, round(avg(A.price),2) as Avg_price
from listing_dallas_df as A
inner join df_dallas_availability as B on A.id= B.listing_id
inner join host_dallas_df as C on A.host_id= C.host_id
where year(B.date)is not null and host_is_superhost is not null and B.available='True'
group by C.host_is_superhost, year(B.date)
order by year(B.date),host_is_superhost
```

80 %

Results | Messages

	year	host_is_superhost	Avg_price
1	2022	0	162.4
2	2022	1	198.54
3	2023	0	155.74
4	2023	1	201.68

-- 6

--For Austin

--Analyze if there is some difference in above mentioned trends between Local Hosts or Hosts residing in other locations (in Austin)

--a

Select Case when host_location like 'Austin%' Then 'Local_Host' Else 'Foreign_Host' End as Host_Location1,
Round((AVG(host_acceptance_rate)),2) as AVG_of_AcceptanceRate,
Round((AVG(host_response_rate)),2) as AVG_of_ResponseRate,
count(case when host_has_profile_pic=1 then 1 end) as CNT_of_Host_has_Profile_Pic,
count(case when host_identity_verified=1 then 1 end) as CNT_of_Host_identity_verified
From [dbo].[host_austin_df]
where host_has_profile_pic is not null and host_identity_verified is not null
Group by Case when host_location like 'Austin%' Then 'Local_Host' Else 'Foreign_Host' End

```sql
-- 6

--For Austin

--Analyze if there is some difference in above mentioned trends between Local Hosts or Hosts residing in other locations (in Austin)
--a
Select Case when host_location like 'Austin%' Then 'Local_Host' Else 'Foreign_Host' End as Host_Location1,
Round((AVG(host_acceptance_rate)),2) as AVG_of_AcceptanceRate, Round((AVG(host_response_rate)),2) as AVG_of_ResponseRate,
count(case when host_has_profile_pic=1 then 1 end) as CNT_of_Host_has_Profile_Pic,
count(case when host_identity_verified=1 then 1 end) as CNT_of_Host_identity_verified
From [dbo].[host_austin_df]
where host_has_profile_pic is not null and host_identity_verified is not null
Group by Case when host_location like 'Austin%' Then 'Local_Host' Else 'Foreign_Host' End
```

80 %

Results | Messages

	Host_Location1	AVG_of_AcceptanceRate	AVG_of_ResponseRate	CNT_of_Host_has_Profile_Pic	CNT_of_Host_identity_verified
1	Foreign_Host	84.36	94.57	1943	1429
2	Local_Host	83.95	96.1	5340	4384

--b

Select Case when host_location like 'Austin%' Then 'Local_Host' Else 'Foreign_Host' End as Host_Location1,
Count(instant_bookable) as CNT_of_Booking , AVG(Distinct review_scores_value) as AVG_Rating
From [dbo].[listing_austin_df] as A
Inner join [dbo].[host_austin_df] as B on A.host_id = B.host_id
where host_acceptance_rate is not null
Group by Case when host_location like 'Austin%' Then 'Local_Host' Else 'Foreign_Host' End

```
--b
Select Case when host_location like 'Austin%' Then 'Local_Host' Else 'Foreign_Host' End as Host_Location1,
Count(instant_bookable) as CNT_of_Booking , AVG(Distinct review_scores_value) as AVG_Rating
From [dbo].[listing_austin_df] as A
Inner join [dbo].[host_austin_df] as B on A.host_id = B.host_id
where host_acceptance_rate is not null
Group by Case when host_location like 'Austin%' Then 'Local_Host' Else 'Foreign_Host' End
```

80 %

Results | Messages

	Host_Location1	CNT_of_Booking	AVG_Rating
1	Foreign_Host	3074	4.31425925978908
2	Local_Host	6036	4.35798164682651

--For Dallas

--Analyze if there is some difference in above mentioned trends between Local Hosts or Hosts residing in other locations (in Dallas)

--a

Select Case when host_location like 'Dallas%' Then 'Local_Host' Else 'Foreign_Host' End as Host_Location1,
Round((AVG(host_acceptance_rate)),2) as AVG_of_AcceptanceRate,
Round((AVG(host_response_rate)),2) as AVG_of_ResponseRate,
count(case when host_has_profile_pic=1 then 1 end) as CNT_of_Host_has_Profile_Pic,
count(case when host_identity_verified=1 then 1 end) as CNT_of_Host_identity_verified
From [dbo].[host_dallas_df]
where host_has_profile_pic is not null and host_identity_verified is not null
Group by Case when host_location like 'Dallas%' Then 'Local_Host' Else 'Foreign_Host' End

```
--For Dallas

--Analyze if there is some difference in above mentioned trends between Local Hosts or Hosts residing in other locations (in Dallas)
--a
Select Case when host_location like 'Dallas%' Then 'Local_Host' Else 'Foreign_Host' End as Host_Location1,
Round((AVG(host_acceptance_rate)),2) as AVG_of_AcceptanceRate, Round((AVG(host_response_rate)),2) as AVG_of_ResponseRate,
count(case when host_has_profile_pic=1 then 1 end) as CNT_of_Host_has_Profile_Pic,
count(case when host_identity_verified=1 then 1 end) as CNT_of_Host_identity_verified
From [dbo].[host_dallas_df]
where host_has_profile_pic is not null and host_identity_verified is not null
Group by Case when host_location like 'Dallas%' Then 'Local_Host' Else 'Foreign_Host' End
```

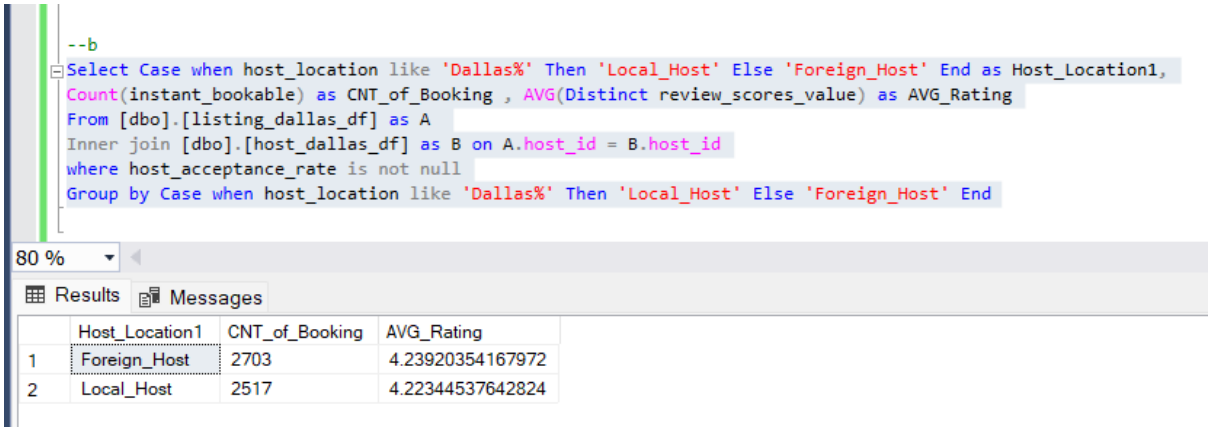
80 %

Results | Messages

	Host_Location1	AVG_of_AcceptanceRate	AVG_of_ResponseRate	CNT_of_Host_has_Profile_Pic	CNT_of_Host_identity_verified
1	Foreign_Host	90.36	95.56	1068	906
2	Local_Host	89.47	95.79	1237	1056

--b

```
Select Case when host_location like 'Dallas%' Then 'Local_Host' Else 'Foreign_Host' End as Host_Location1,
Count(instant_bookable) as CNT_of_Booking , AVG(Distinct review_scores_value) as AVG_Rating
From [dbo].[listing_dallas_df] as A
Inner join [dbo].[host_dallas_df] as B on A.host_id = B.host_id
where host_acceptance_rate is not null
Group by Case when host_location like 'Dallas%' Then 'Local_Host' Else 'Foreign_Host' End
```



```
--b
Select Case when host_location like 'Dallas%' Then 'Local_Host' Else 'Foreign_Host' End as Host_Location1,
Count(instant_bookable) as CNT_of_Booking , AVG(Distinct review_scores_value) as AVG_Rating
From [dbo].[listing_dallas_df] as A
Inner join [dbo].[host_dallas_df] as B on A.host_id = B.host_id
where host_acceptance_rate is not null
Group by Case when host_location like 'Dallas%' Then 'Local_Host' Else 'Foreign_Host' End
```

80 %

Results | Messages

	Host_Location1	CNT_of_Booking	AVG_Rating
1	Foreign_Host	2703	4.23920354167972
2	Local_Host	2517	4.22344537642824